MICROFILM

START
OF
ROLL

CONSTRUCTION CONTRACTS

ROLL NO. 227

CONTRACT. 9361
NUMBER · (1980)

CONTINUED

1981 Glencoe Rd. & W. Union Rd. 936
(N. Plains) Sec. of FAS Rts. A685
& A686. (Grad., pav. & struc.) #1

CONTINUED

Smead®
No. 2-152-5L
HASTINGS, MN-LOS ANGELES
LOGAN, OH-McGREGOR, TX U. S. A.

C+a 6469 September 6, 1978

CONTINUED

9361

Don Adams
Project Development Manager

July 6, 1978

Gerald W. Wimer Gerald Wimer
Local Government Manager

Glencoe Road-West Union Road Section
Washington County FAS-C Project

This office has considered your June 6, 1978 letter on the subject matter. We will proceed to commit construction based on the 1977 Agreement with the Association of Oregon Counties (AOC). This reverts Preliminary Engineering (PE) to State expense. Our State Federal Aid Secondary (FAS) and full State match will be utilized.

Basis for change from my March 7 and 29, 1978 letters is:

1) The combined McKay Creek Bridge and Glencoe Road RR X'ing project could have and likely would have increased in cost possibly to the $630,000 estimate of the subject project without loss of State paying PE.

2) Actually the current proposal is a practical alternative to the original pair of projects.

3) Numbers 1 and 2 above allows for a simple reidentification of the revised project application July 28, 1977 instead of treating it as a totally new project. The PE would then be at State, not County expense.

4) The State advice (apparently by your office and not ours) that project consolidation and reidentification would not "materially affect our State participation in project funding."

Bill Penhollow of AOC and I discussed this matter July 7. He concurs.

This office will make every effort to get this matter to the July 18 Oregon Transportation Commission (OTC) meeting. Time is tight, so you'll understand if we don't make it.

By a copy of this letter Mainor Holmes is instructed to proceed with a new agreement based on the anticipated OTC concurrance.

5

You'll find attached a copy of the current Washington County status report based on the above action.

GWW:dmc
attachment

cc: Bill Penhollow
    Mainor Holmes
    Hal Reynoldson

W

NOTED
W. H. TEBEAU

Don H.

WASHINGTON COUNTY

Glencoe Rd - West Union Rd.
FAS A686

Allocated Funds (Fed.)	$3,485,383
Committed Funds (Fed.)	$3,415,692
Balance (Fed.)	$ 69,691

Balance in Total Funds	$ 80,000
Glencoe Rd.-W. Union Rd. Constr.	$ 570,000
Balance	$- 490,000
1-Year's Allocation (131,000/.87)	$ 152,000
Years to Advance	- 3.2 yrs.

7/5/78

9361 7-6-78

To Don Adams Project Development Manager
From Gerald Wimer Local Government Manager
Subject Glencoe Road – West Union Road Section
Washington County FAS-C Project

This office has considered your June 6, 1978 letter on the subject matter. We will proceed to commit construction based on the 1977 agreement with the Association of Oregon Counties (AOC). This ~~makes~~ ~~[illegible]~~ ~~[illegible]~~ reverts Preliminary Engineering ~~[illegible]~~ (PE) at State expense. Our State Federal Aid Secondary (FAS) and full State match will be utilized.

Basis for change from ~~our~~ my March 7 and 29, 1978 letters is:

1) The combined McKay Creek Bridge and Glencoe Road R.R. X'ing project could have and likely would have increased in cost possibly to the $630,000 estimate of the subject project without loss of State paying PE.

2) Actually the current proposal is ~~[illegible]~~ a practical alternative to the original pair of projects

3) Number 1 and 2 above allows ~~for~~ a simple reidentification of the revised project application July 28, 1977 instead of treating it as a totally new project.

~~The PE would then be at State, (not County, expense~~

4) The State advice (apparently by your office and not ours) project consolidation and reidentification would not "materially affect our State participation in project funding."

7

9361.

July 6, 1978

TO: OREGON TRANSPORTATION COMMISSION

FROM: H.S. Coulter
State Highway Engineer

SUBJECT: FAS-C Project Requests

On the Consent Calendar for the July 18 meeting will be requests for approval of 2 FAS-C Preliminary Engineering Projects and one FAS-C Construction Project.

Lake County's request is for 4 structures on the Hart Lake Section on FAS B 329. The estimated cost of the PE for this project is $10,000.

The request by Malheur County is for a bridge over the Malheur River on Airport Road FAS B 495. The estimated cost of the PE for this project is $10,000.

Washington County is requesting a grading, paving, and structure project on Glencoe Road FAS A 685 and on West Union Road FAS A 686. The PE is to be at State costs. The estimated cost of the project is $630,000.

FAS-C funds for these preliminary engineering and construction projects are estimated to be $559,000 with State providing approximately $45,500 in matching funds, and a like amount being contributed by the Counties.

These projects have been investigated and are eligible for funding under the FAS-C Program. I recommend your approval and request authorization to sign the project agreements for and on your behalf.

HR:cw
Attachment

bc: R.A. Burco
F.B. Klaboe
C.W. Head
E.S. Hunter
D.H. Moehring
R.N. Bothman
V.E. Skoog
J.H. Versteeg
Dale D. Allen, Reg. 4
Ed Hardt, Reg. 1
W.E. Schwartz, Reg. 5
D.N. Harwell
George Bell

WASHINGTON COUNTY
Proposed FAS-C Project

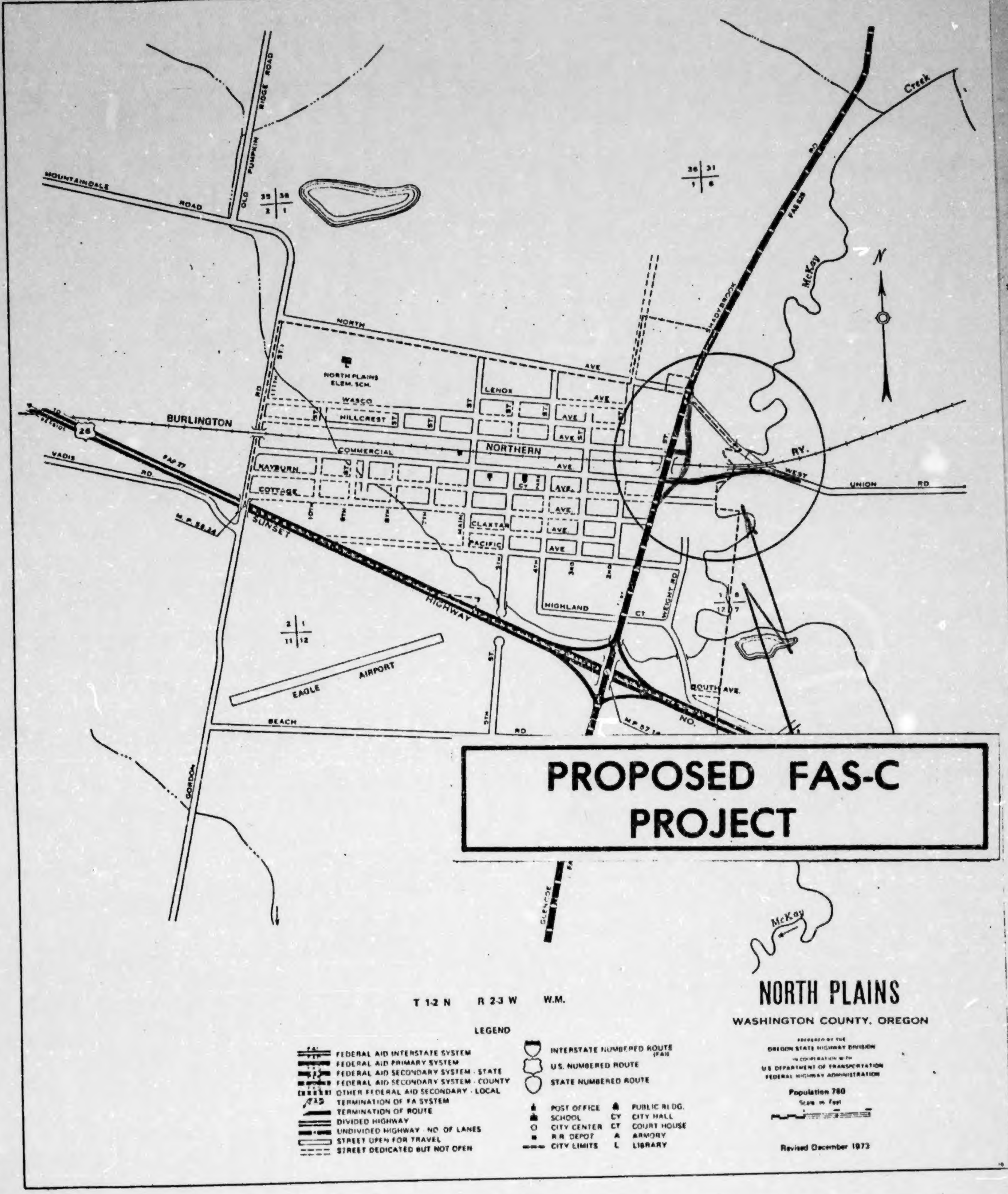
Glencoe Road-West Union Road Section
Glencoe and West Union Roads
FAS A 685 and A 686
Grade, Pave, RR Signals, and Structure
$630,000

This project will relocate a portion of Glencoe and West Union Roads, and will construct a bridge over McKay Creek, replace an existing RR separation structure with a signalized grade crossing at another location. Grade and pave the relocated portion of these two routes. Permanent signing is part of project. Striping by County as part of project. Detour on existing roads. State will acquire additional right-of-way in County's name. Utilities are involved.

The PE cost is to be at State expense, and not at County expense as indicated by the PE project approved on January 24, 1978 Commission Meeting.

Engineering by State.

PROPOSED FAS-C PROJECT


OLD PUMPKIN RIDGE ROAD
MOUNTAINDALE ROAD
35 36
2 1
36 31
1 6
Creek
McKay
FAS 25
GLENCOE RD
N
NORTH AVE
NORTH PLAINS ELEM. SCH.
LENOX AVE
WASCO
HILLCREST
BURLINGTON
26
COMMERCIAL
NORTHERN AVE
RAYBURN
COTTAGE AVE
CLAXTAR AVE
PACIFIC AVE
MAIN
RY.
WEST UNION RD
VADIS RD.
FAP 77
M.P. 56.34
SUNSET HIGHWAY
HIGHLAND CT
WEIGHT RD
2 1
11 12
EAGLE AIRPORT
BEACH RD
SOUTH AVE.
M.P. 57.14
NO.
GORDON RD
McKay
T 1-2 N R 2-3 W W.M.
LEGEND
FEDERAL AID INTERSTATE SYSTEM
FEDERAL AID PRIMARY SYSTEM
FEDERAL AID SECONDARY SYSTEM - STATE
FEDERAL AID SECONDARY SYSTEM - COUNTY
OTHER FEDERAL AID SECONDARY - LOCAL
TERMINATION OF FA SYSTEM
TERMINATION OF ROUTE
DIVIDED HIGHWAY
UNDIVIDED HIGHWAY - NO. OF LANES
STREET OPEN FOR TRAVEL
STREET DEDICATED BUT NOT OPEN
INTERSTATE NUMBERED ROUTE (FAI)
U.S. NUMBERED ROUTE
STATE NUMBERED ROUTE
POST OFFICE
SCHOOL
CITY CENTER
R.R. DEPOT
CITY LIMITS
PUBLIC BLDG.
CY CITY HALL
CT COURT HOUSE
A ARMORY
L LIBRARY
NORTH PLAINS
WASHINGTON COUNTY, OREGON
PREPARED BY THE
OREGON STATE HIGHWAY DIVISION
IN COOPERATION WITH
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
Population 780
Scale in Feet
Revised December 1973

9361

OREGON STATE HIGHWAY DIVISION
Location Section
Surfacing Design Unit

Section: Glencoe Road-West Union Road (North Plains)

Highway: F.A.S. A685 (Glencoe Rd.) & F.A.S. A686 (West Union Rd.)

County: Washington

Prefix: 534-1970

Res. Engr. E. Purdy

Date July 5, 1978

Ten Year Traffic Coefficient (1) 6.6 (2) 5.6

18 kip s.a. per day (1) 19 (2) 5

R value 9

Frost Penetration ----

CBE Total Requirement (1) 21.5" (2) 18.0"

STRUCTURAL SECTION
NEW WORK

ACTUAL THICKNESS	COMPONENT	CREDIT
	(1) Glencoe Road	
1.5"	A.C. (Final Stage)	3.0
3.5"	A.C. (Cl. B)	7.0
11.0"	A.B.	11.0
16.0"		21.0"
	(2) West Union Road	
1.5"	A.C. (Final Stage)	3.0
3.5"	A.C. (Cl. B)	7.0
8.0"	A.B.	8.0
12.5"		18.0"

1.0" Asphaltic Concrete Wearing Surface & Base = 2.0" Aggregate Base
1.0" Cement Treated Base = 1.8" Aggregate Base
1.0" Plant Mix Bituminous Base = 1.8" Aggregate Base
1.0" Emulsion Treated Wearing Surface & Base = 1.8" Aggregate Base
1.0" Soil Cement (Existing Roadway Material) = 1.5" Aggregate Base
1.0" Oil Mat = 1.1" Aggregate Base
1.0" Lime or Cement Treated Subgrade = 1.0" Aggregate Base
1.0" Aggregate Subbase = 0.8" Aggregate Base

Above Factors apply to materials that comply with Standard Specifications and Special Provisions.

F.H.W.A.
Location Engineer
Construction Engineer
Materials
Region Engineer
Resident Engineer
Specifications Engineer
Final Design Engineer
Regional Geologist
Local Government Programs
Project Coordinator

Page

SECTION: Glencoe Road-
West Union Road (North Plains)

HIGHWAY: F.A.S. A685 (Glencoe Rd.) &
F.A.S. A686 (West Union Rd.)

COUNTY: Washington

"OTHER ROADS"

Traffic Coefficient	*A.C. Wearing Surface*	*Aggregate Base*	*Aggregate Base*	*"CBE" Total Requirement*	*Actual Thickness*
Cul-de-sac					
Cars Only	2.0"	---	9.0"	13.0"	11.0"

9361

STATE OF OREGON

INTEROFFICE MEMO

TO: GERRY WIMER
Local Government Programs Engineer

DATE: June 6, 1978

FROM: DONALD R. ADAMS DR Adams
Project Development Manager

SUBJECT: Glencoe Road-West Union Road
FAS-C Project
Washington County

PROJECT MANAGEMENT
PME ☐ CCE ☐ OM ☐
[✓ LGE ☐] FAE ☐ OPE ☐
JUN 7 1978
File: PM FA
LG OP
TAA Prange

Make up new status sheet for Wash Co & Statewide FAS-C following June 22 bid opening & lets discuss again *at* *that* *time*

Consider

This project, combined from two earlier projects, has been under consideration in one form or another since 1975 or earlier. It now appears to be bogged down again due to local match questions. Of particular concern is replacement of a bridge in critical condition.

① Estimate for this work could have increased to $600,000± without changing our paying for survey obligation

② We could have modified, not started over

Commission approval was granted for the McKay Creek Bridge on West Union Road in February of 1976 for an estimated cost of $200,000. Glencoe Road railroad crossing was approved July 30, 1975, at an estimated cost of $120,000. While working with PUC and the State to determine exactly what improvement would be possible to solve a difficult grade problem at the Glencoe Road crossing, the project came to a near standstill and in August, 1977, the County worked out a solution which involved consolidating the two projects to simplify both. The County submitted a new request in August to more clearly define work proposed and request modification of the project. ODOT then advised the County that the proper way to handle this would be to cancel the two previous projects and resubmit as a new project. On October 21, the County was sent the cancellation forms, which were signed on November 8 and returned November 21. During discussions on this, the County was aware of pending changes in the AOC agreement and asked what effect these might have on the match money ratios. We advised the County that the consolidation of these projects into a single job would not materially affect our State participation in project funding. The AOC working agreement was printed in final form on November 22, 1977, and executed in early December. The Transportation Commission took action on the cancellation of the two single projects and approval of the combined project on January 24. Although the two previously approved single projects and the County's request for the combined project included construction, the OTC approval of the combined project was for preliminary engineering only.

③ Metro ?

④ Shouldn't affect matter

⑤ Good point. Metro shares this thought

It is the County's opinion that, since the State was prepared to perform preliminary engineering on the two projects without cost to the County, the consolidation of the two into a single project should not alter this position.

⑥ Emphasis is ⓑ not ⓐ. See last two sentences of this letter

We have discussed means of consolidating these projects legitimately. I believe you indicated that the two projects, initially identified, can reasonably be defined as a part of the same route and, therefore, could be considered a single project under the old projects' authorizations. Perhaps, this is the direction to take, ⓐ I'm not sure. ⓑ If it is, I am unsure of the specific steps needed to accomplish it. I need your help.

This project has been dragging on for at least two years. The bridge over McKay Creek is in critical condition and should be replaced as soon as possible. I feel we have made a commitment to the County and that there is merit in their request that we honor that commitment.

⑨ Metro?

I request you reconsider your current position requiring a local match of 7% on PE.

DRA/ldo

9361

2.

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

4 - 6 - 78

FEDERAL AID PROJECT NO.
R[illegible]685(1) & RS-A686(1)

STATE PROJECT NO.
See Below

COUNTY NAME
Washington

PROGRAM STAGE (Check)
☐ 1. ☐ 2.

FROM:
G. L. Green, Division Administrator
Salem, Oregon

PROGRAM NO.

ITEM NO.
80233 & 80234

TO:

Mr. F. B. Klaboe
Chief Of Operations, ODOT
Salem, Oregon

DATE PS & E APPROVED

DATE AUTHORIZATION EFFECTIVE
4-6-78

FEDERAL ROUTE NUMBER
Secondary A685 & A 686

STATE ROUTE NUMBER
County Roads

GENERAL LOCATION:

"Glencoe Road - West Union Road Section"

GENERAL DESCRIPTION OF WORK:

Preliminary Engineering

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

PRELIMINARY ENGINEERING TO DETERMINE
☐ LOCATION ONLY
PRLIMINARY ENGINEERING FOR SURVEY AND PLAN
☐ PREPARATION
☒ OTHER (Specify) All phases of Preliminary Engineering including archeology salvage, necessary to obtain and approved Negative Declaration
TEC NTE $45,500 - F. F. $39,039.

☐ ACQUISITION OF RIGHT-OF-WAY
CONTRUCTION - ADVERTISE FOR RECEIPT
☐ OF BIDS
☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of March 29, 1978.

Swan
4-13

DATE
4-6-78

SIGNATURE OF APPROVING OFFICIAL

TITLE
for Division Administrator

FORM PR-1240 (REV. 8-70)
EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U.S. GOVERNMENT PRINTING OFFICE: 1976—626-707

9361

March 29, 1978

Don Adams
Project Development Mgr. (Metro)

G. W. Wimer, Manager
Local Government Section

Glencoe Road-West Union Road Section
Washington County FAS-C Project

On March 17 and 24, you questioned our March 7, 1978 letter to Jon Rose about using County FAS-C funds for preliminary engineering. You are correct. Even with the construction of this project, Washington County would not need a full five-year fund advancement if the adjacent projects were cancelled.

It would have taken an additional 1.4 years advancement last October when this office considered committing this project. They were also overrunning their Sherwood project. We were over-committed Statewide by three quarters of a million dollars. Because of these three factors, it was not appropriate to commit this construction. We were agreeable to committing, at that time, the preliminary engineering only. The State-AOC agreement, in effect at that time, clearly stated:

> "Counties may elect to program FAS funds for...a... preliminary engineering project...by the State on the same cost sharing basis as any other FAS-C project."

Washington County revised their applications accordingly.

This office has not previously authorized FAS-C over-committments, except for:

1) Project overruns,
2) Counties about to lose FAS-C funds, or
3) Preliminary engineering.

None of these items are specifically authorized in the State-AOC agreement, but are reasonable.

If you see some basis for treating Washington County otherwise, please advise.

For your guidance, this office would be agreeable to using State FAS funds for this preliminary engineering, if this project could be authorized for a construction commitment when the application was first received. We don't believe it can be.

GWW:lml

/ 9361

3-17-78

Fed. Funds

Mc Kay Cr. Br. -- $156,000

N. Plains RR Xing -- 120,000

$ 276,000 (Status Sheets)

$60,000 Survey --- $55,000

Credit ---- $221,000

Current status -- $ -11,000

Proposed Status -- $210,000 (for future Consti

Fed Funds per year - $130,000

Est. Proj. Cost --- $550,000

Amount to borrow - $340,000 (2.6 years)

cc Don Adams
3/17/78

9361

March 7, 1978

Jon Rose
Federal Aid Coordinator

Gerald Wimer Gerald Wimer
Local Government Manager

State/County Participation
Preliminary Engineering
Glencoe Road-West Union Road
FAS-C Project
Washington County

Washington County's minute Order No. 77-552 canceled the two previously approved FAS-C projects and authorized preliminary engineering on a combined project. The total cost of the project was estimated at $630,000. This cost combined with the cost of other ongoing projects exceeded the allowable 5-year advancement to the county.

We suggested to you and County authorized proceeding with a preliminary engineering project. A P. E. project requested by County is programmed from County FAS funds and the match is shared by State and County.

Please inform the County.

GZ:dpy

Discussed w/ Don Adams 3-17-78

9361

2

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

RECEIVED
STATE HWY ENGR
MAR 15 '78
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

STATE CLEARINGHOUSE

Intergovernmental Relations Division
Room 306, State Library Building
Salem, Oregon 97310, Phone: 378-3732

STATE A-95 REVIEW CONCLUSIONS

APPLICANT: Oregon DOT Highway Division

PROJECT TITLE: FAS-A685 -Glencoe Rd. - West Union Rd. WASH.

DATE: March 7, 1978

The state has reviewed your project and reached the following conclusions:

☒ No significant conflict with the plans, policies or programs of state government have been identified [illegible].

NOTED
H.S.COULTER

☒ Relevant comments of state agencies are attached and should be considered in the final design of your proposal.

☐ Potential conflicts with the plans and programs of the state agency(s) have been satisfactorily resolved. No significant issues remain.

☐ Significant conflicts with the plans, policies or programs of state government have been identified and remain unresolved. The final proposal has been reviewed and the final comments and recommendations of the state are attached.

cc: G. L. Green
H. S. Coulter ✓
F. E. Terpin
J. B. Boyd
J. H. Versteeg
Gary Potter
W. J. Hart
R. N. Bothman, Metro
E. L. Hardt, Reg. 1
W. W. Geibel, Dis. 2
Aeronautics Division
Paul Hartwig, Parks
Gerald Wimer
B. L. Gifford
D. E. Swan

NOTICE TO FEDERAL AGENCY

The following is the officially assigned State Identifier Number:

7802 2 030

This number should be used on all correspondence and particularly on SF 240 as required by OMB A-98.

BEN GIFFORD
1-30-78

A copy of this notification and attachments, if any, must accompany your application to the federal agency as required by OMB A-95. Comments of the appropriate local reviewing agencies must also be included.

PNRS #2

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

DEPARTMENT OF
LAND CONSERVATION
AND DEVELOPMENT
FEB 3 1978
SALEM

Intergovernmental Relations Division
Room 306, State Library Building
Salem, Oregon 97310, Phone: 378-3732

PNRS STATE REVIEW

Project #: 7802 2 080 Due Date: MAR 03 1978

To Agency Addressed: If you intend to comment but cannot respond by the return date, please notify us immediately. If no response is received by the due date, it will be assumed that you have no comment and the file will be closed.

PROGRAM REVIEW AND COMMENT

To State Clearinghouse: We have reviewed the subject Notice and have reached the following conclusions on its relationship to our plans and programs:

( ) It has no adverse effect.

( ) We have no comment.

(✓) Effects, although measurable, would be acceptable.

( ) It has adverse effects.

( ) We are interested but require more information to evaluate the proposal.

( ) Please coordinate the implementation of the proposal with us.

( ) Additional comments for project improvement. (Attach if necessary)

- - - - - - - - - - -

REMARKS (Please type or print legibly)

Agency LCDC By

I. Area Has a Plan and Approved Compliance Schedule

This project and its related land use implications must be coordinated and consistent with the Washington County comprehensive plan and efforts to update the plan (i.e. the County's compliance schedule and work program for reaching compliance with the statewide land use goals). Consideration of the relationship between the statewide land use goals #2 Land Use Planning and #12 Transportation and the project should receive special attention. In addition, the applicant should make every effort to insure that the project makes use of recognized citizen and agency involvement programs established by the local jurisdiction in accordance with the statewide land use goals.

2/15/78
ph

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

Intergovernmental Relations Division
Room 306, State Library Building
Salem, Oregon 97310, Phone: 378-3732

RECEIVED
FEB - 3 1978
DIVISION OF STATE LANDS

PNRS STATE REVIEW

Project #: 7802 2 080 Due Date: MAR 03 1978

To Agency Addressed: If you intend to comment but cannot respond by the return date, please notify us immediately. If no response is received by the due date, it will be assumed that you have no comment and the file **will be closed.**

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( ) Please coordinate the implementation of the proposal with us.

( ) Additional comments for project improvement. (Attach if necessary)

- - - - - - - - - - -

If the project would require the removal, fill or alteration of 50 cubic yards or more of material within the banks of the waterway(s), we urge the applicant to apply for state fill or removal permits well in advance of construction deadlines to prevent unnecessary project delays. Specific information on the need for permits may be obtained from the Division of State Lands' office at 1445 State Street, Salem, OR 97310. Phone 378-3805.

Thank you for the opportunity to comment on this project.

Agency Lands By MA

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

Intergovernmental Relations Division
Room 306, State Library Building
Salem, Oregon 97310, Phone: 378-3732

PNRS STATE REVIEW

Project #: 7802 2 080 Due Date: MAR 03 1978

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( ) It has adverse effects.

( ) We are interested but require more information to evaluate the proposal.

(X) Please coordinate the implementation of the proposal with us.

( ) Additional comments for project improvement. (Attach if necessary)

- - - - - - - - - - -

REMARKS (Please type or print legibly)

A CULTURAL RESOURCE SURVEY SHOULD BE CONDUCTED ON THIS GLENCOE ROAD - WEST UNION ROAD PROJECT IN WASHINGTON COUNTY TO ASSESS IMPACT TO HISTORIC RESOURCES SUCH AS THE OLD BLACKSMITH SHOP.

Agency HISTORIC PRESERVATION OFFICE
STATE PARKS & RECREATION BRANCH
525 TRADE STREET SE
SALEM, OREGON 97310

By David G Talbot

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

Intergovernmental Relations Division
Room 306, State Library Building
Salem, Oregon 97310, Phone: 378-3732

PNRS STATE REVIEW

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( ) Additional comments for project improvement. (Attach if necessary)

- - - - - - - - - - -

REMARKS (Please type or print legibly)

Agency Fish & Wildlife By William E. Pitney
ENVIRONMENTAL MANAGEMENT SECTION 3/3/78

936

STATE OF OREGON **INTEROFFICE MEMO**

February 27, 1978

TO:

J. B. Boyd (3)
L. E. George
W. J. Hart
C. T. Keasey
J. H. Versteeg (4)
F. E. Terpin (3)
G. A. Potter (2)
George Bell
Surfacing Design - Lab Bldg.
Region 1 : E. L. Hardt
District 2 : C. O. Fredrickson
Region 1 Geologist: Dan Gano
Gerald Wimer (1)
B. L. Gifford

D. H. Moehring by

FROM: D. H. Moehring, Manager
Office of Project Management

NOTED
E. S. HUNTER

SUBJECT: PROJECT ASSESSMENT
A685 Glencoe & West Union Roads A686
Washington County

Attached for your information is an assessment, concurred in by the Federal Highway Administration.

Project Management classifies this section as a Category 3 project of Major Non-Significant action.

BLG: dpy

Attachment

cc: E. S. Hunter

RECEIVED
TECHNICAL SERVICES

MAR 7 '78

REFER TO

FOR

Info	Invest	R/D	J/R	Sign	Act	File

81-128-1367

Form FHWA 121 (Rev. 5-73)

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
The Equitable Center, Suite 100
530 Center NE - Salem, OR 97301

DATE: February 15, 1978

In reply refer to: HA.1-OR

SUBJECT: Oregon Project RS-A685(-) & RS-A686(-)
Glencoe (A-685) & West Union (A-686) Rds.
Project Assessment
Washington County

FROM : G. L. Green, Division Administrator

TO : Mr. Gary Potter, Mgr., Environmental Section
Oregon Department of Transportation

The subject project assessment submitted with Mr. Moehring's January 30, 1978, letter has been reviewed.

We concur with your finding that the proposed project constitutes a major action requiring the preparation of a negative declaration. We also agree that a noise study report should be prepared.

The proposed standards, design and other specific details contained in the assessment will be subject to future reviews at the appropriate stage during the project development.

Original Signed By
G. K. HOSSNER
Field Operations
Engineer

G. L. Green

cc:
D. H. Moehring, Project Mgt.
Region 1, Environmentalist

PROJECT MANAGEMENT
PME ☒ CCE ☐ OM ☐
LGE ☐ FAE ☒ OPE ☐
FEB 21 1978
File: PM LG FA OP
TAA ______
BEN GIFFORD

CATEGORY
3 PROJECT

MAJOR- NON SIG

RS-A685(-)
RS-A686(-)

OREGON STATE HIGHWAY DIVISION
PROJECT ASSESSMENT

ART 1. GENERAL INFORMATION

A. Project Identification:

Date October 17, 1977

Section Glencoe Rd.-West Union Rd.

Unit (if appl)

County Washington

City North Plains

Highway Glencoe & West Union Roads

State Hwy. No.

Termini: M.P.(if appl)

Length 4,200 ft.

Region 1

Construction Estimate $630,000
Program Amount

B. Purpose of Project: To eliminate three bridge problems, one vertical clearance problem and two degraded timber structures, by realigning both roads and constructing one new concrete bridge.

C. Origin & History of Project: This project was submitted as two separate projects in November, 1975 and September, 1976. The Glencoe Bridge was built in 1930 to span the Burlington Northern Railroad tracks. The West Union Rd. Bridge was built in 1936. Both bridges were built of untreated timber and, due to failure and rotting, are in need of replacement.

D. General Description of Project: Realign Glencoe Road between Cottage Ave. and Shadybrook Rd. to eliminate the structure and cross the railroad tracks, at grade, using gates for protection. Realign West Union Rd. between railroad trestle and Commercial Ave. to replace timber structure with concrete bridge and eliminate clearance problem with R/R trestle.

Alignment: New ______ Existing ______ Combined x

Typical Section: Existing: No. Lanes 2 ; Med. 0 ; Shldrs. 0-2' ; Parking *
Proposed: No. Lanes 2 ; Med. 0 ; Shldrs. 4-6' ; Parking *

Traffic: Existing Facility: Existing ADT 1750-Glencoe 650-W Union ; Projected ADT ______ ; Yr. ______
Existing Level of Service B-C

Proposed Facility: Projected ADT ______ ; Yr. ______
Projected Level of Service ______

*Glencoe Rd. between Cottage and Commercial only

734-3953 (10-75)

Right of Way: Additional anticipated Yes ; if yes, give approx. No. Parcels 5
Yes, No

Acres 4-1/2 ; Type of Relocation Req. Natural resource ; No. 1 acre

Commercial	1 acre
Agricultural	1/2 acre
Natural resource	1 acre
sgl-family residence	1 house
/Residential	2 acres

Materials Source, Borrow, Waste Disposal Requirements, if any:

County forces will remove timber structures. Fill material can be taken from approaches to Glencoe Rd. Bridge and W. Union Rd. Bridge.

Type of Structure(s):

Concrete Bridge

Brief Description of River or Stream and Type of Involvement, if any: The existing wood bridge crossing McKay Creek will be removed and a concrete bridge will be constructed further downstream.

Local City, County or COG priorities of project: Top priority for City of North Plains. Top priority for FAS projects in Washington County - bridge needs replacement NOW!

FHWA and/or OSHD approvals given, if any: Prior OSHD approval given on both projects.

Location or Design Alternatives (identify and describe):

A) Replace both structures in same location as existing. Glencoe Rd. has poor vertical alignment in present location. West Union Rd. would still have vertical clearance problem with railroad trestle.
B) No Build

Other Descriptive Information or Comments:

Existing West Union Rd. alignment would be cul-de-saced at the flood plain.

Existing Glencoe Rd. alignment would be vacated.

(Attach project sketch map.)

PART II. ENVIRONMENTAL ASSESSMENT

A. Brief Environmental Setting of Project Area:

1. Natural: The project's natural setting is a flat to gently rolling rural/agricultural area bisected by McKay Creek, a mature stream with its headwaters in the Tualatin Mountains several miles to the north. McKay Creek is a significant stream for Coho Salmon, Sea Run Cutthroat, Resident Cutthroat, and Winter Steelhead. Approximately a third of the proposed project lies in the stream's 100 year floodplain. A wooded area, dominated by Oregon Ash, White Oak, Big Leaf Maple, and Alder follow the stream course. Other isolated patches of wood and brush areas, as well as some remnant orchard land are evident. These natural areas in combination with fields and cropland offer a variety of habitat. The soils are predominantly silt/clay loams and have a high suitability for agricultural use.

2. Cultural: The project is located immediately west of the City of North Plains, a small rural agricultural town which is served by the Burlington Northern rail line involved in the proposed project. Glencoe and West Union roads connect the rural areas of Washington County with the urban areas of North Plains, Hillsboro, Beaverton, and Portland. The land use adjacent to the project is a mix of low density residential and agricultural. One small grocery store is located at Commercial Street and Glencoe Road in the southwest quadrant. A historic building, reputed to be the last remaining early vintage blacksmith shop in Washington County, is found on the north side of West Union Road, several buildings east of Glencoe Road. Transportation related noise and air quality impacts are not significantly generated by Glencoe and West Union roads.

B. Preliminary Assessment of Environmental Impacts:

1. Consequences and Significance of Right-of-Way Acquisition: Loss of some potential commercial and existing agricultural land. New alignment through flood plain will correspondingly eliminate old alignment through flood plain (No expected loss of flood plain). Some loss of habitat. One residence may be displaced.

2. Estimated Impact on Traffic Patterns: Allows truck traffic to by-pass North Plains. Load limits on existing bridges forces additional traffic on Commercial Ave., which is the main street of North Plains.

Consequences--Air Quality, Noise, Safety, etc.: Reduces noise, improves air quality and safety in North Plains. New alignment of Glencoe Road moves traffic farther away from critical receptors on west side of road.

3. Estimated Impact on Land Use: Removes 1 acre commercial, 1 acre flood plain, 1/2 acre agricultural and 2 acres residential land. Present land use trends for the area should not be affected.

Consequences: All land is presently vacant except for 1 residence in the agricultural area. Vacation of Glencoe Rd. will replace 1/2 acre of residential land and 1/2 acre of commercial land. All flood plain land will be replaced by eliminating the old bridge and fill.

4. Expected Impact on Natural Ecological Resources: Some existing wooded and brush areas along the creek and railroad will be removed.

Consequences: Approximately one half to one acre of habitat will be removed or adversely affected by the proposal. No unique qualities are evidently associated with this habitat.

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The historic blacksmith shop is located on the portion of West Union Road which will be cul-de-saced. This is not expected to adversely impact the structure and may in fact be a positive impact. A cultural survey will be required.

Consequences:

6. **Preliminary Identification of Areas of Critical Concern:** Will need flood plain alteration permit - County will handle this at time of final design.

7. Potential for Controversial Issues: Possible objection from the owner of a residence that may have to be displaced.

8. Potential for Consistency of Proposal With:

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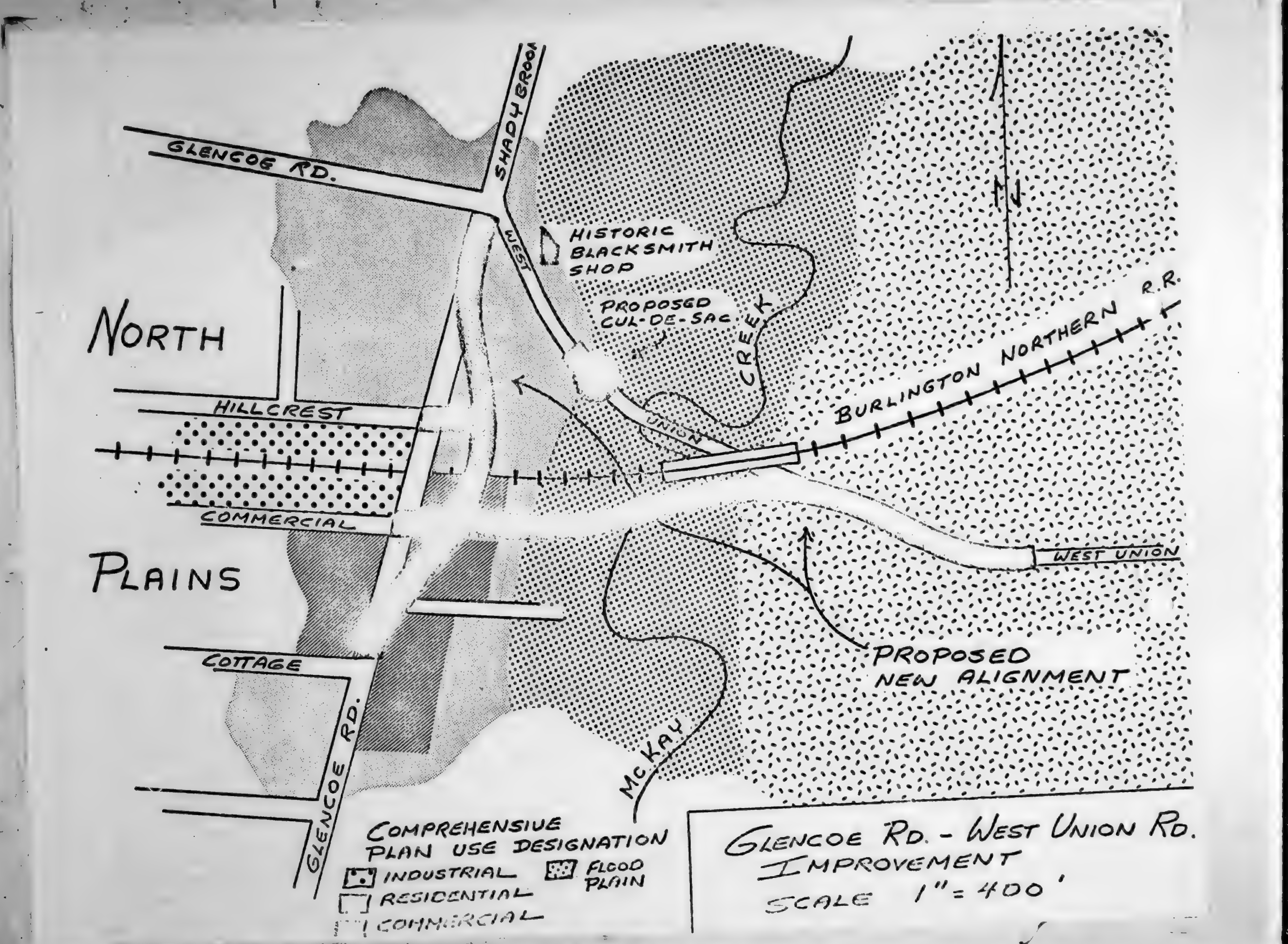
d. Area Land Use and Transportation Plans, and Zoning Consistent with Washington County Comprehensive Framework Plan.

C. Recommended Type of Action and Documentation:

-------------MAJOR ACTION-----------------		----NON-MAJOR ACTION-----
SIGNIFICANT:	NON-SIGNIFICANT:	
☐ D & FEIS	☒ D & F Neg.Dec.	☐ ASSESSMENT ONLY
☐ Section 4(f)	☐ Section 4(f)	☐ STATEWIDE ASSESSMENT

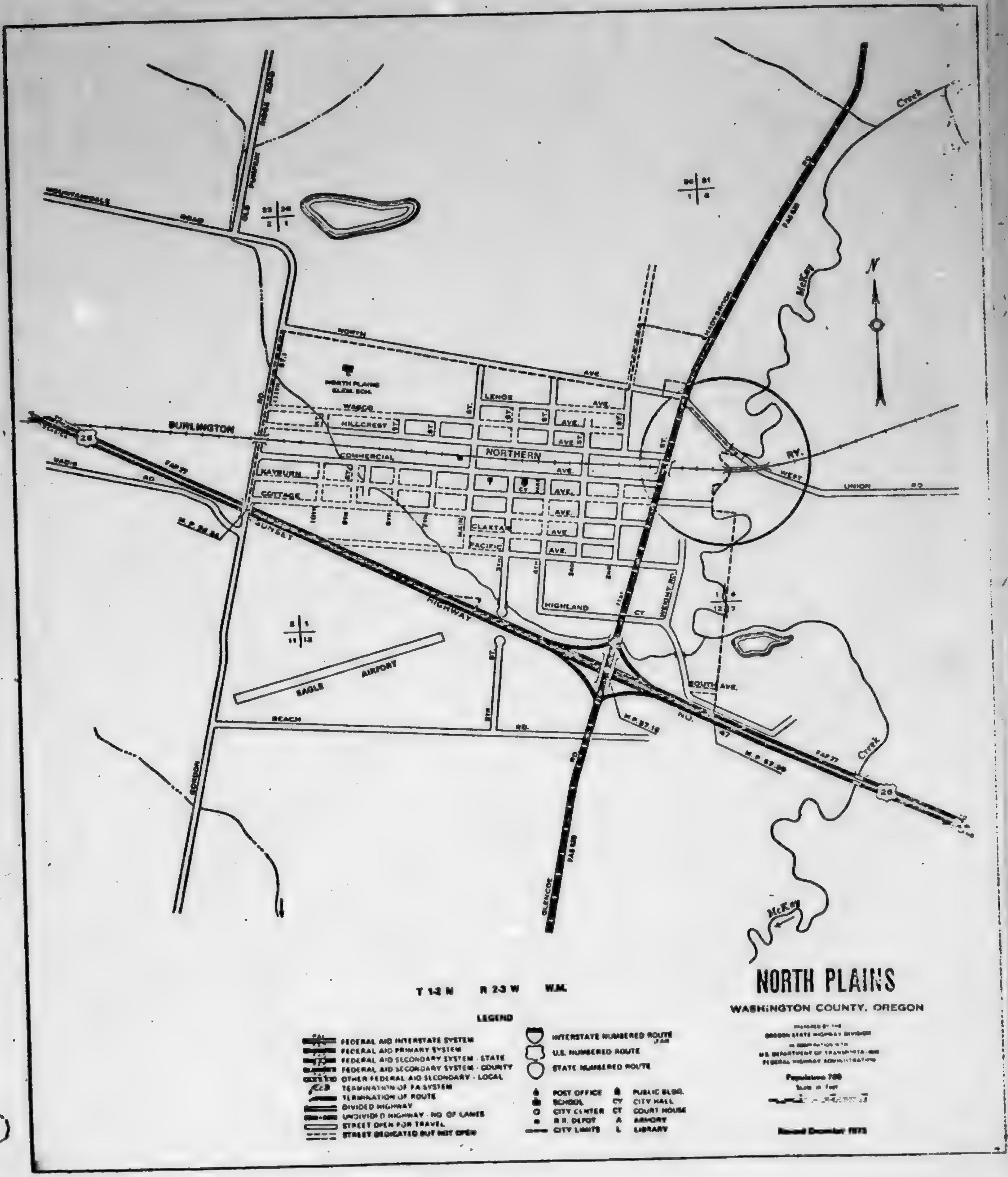
Basis for Type of Action and Documentation: The project is a major action with impacts which are not significant enough to warrant an E.I.S. treatment.

D. Recommended Project Category: ☐ 1 ☐ 2 ☒ 3 ☐ 4



GLENCOE RD. - WEST UNION RD.
IMPROVEMENT
SCALE 1" = 400'

NORTH
PLAINS
GLENCOE RD.
SHADY BROOK
WEST
HILLCREST
COMMERCIAL
COTTAGE
GLENCOE RD.
HISTORIC
BLACKSMITH
SHOP
PROPOSED
CUL-DE-SAC
CREEK
UNION
BURLINGTON NORTHERN R.R.
N
WEST UNION
PROPOSED
NEW ALIGNMENT
McKAY
COMPREHENSIVE
PLAN USE DESIGNATION
INDUSTRIAL
FLOOD
PLAIN
RESIDENTIAL
COMMERCIAL


MOUNTAINDALE ROAD
OLD PUMPKIN RIDGE ROAD
35 36
2 1
30 31
1 6
NORTH AVE.
NORTH PLAINS ELEM. SCH.
LENOX AVE.
WASCO
HILLCREST AVE.
BURLINGTON
NORTHERN RY.
COMMERCIAL
RAYBURN AVE.
COTTAGE AVE.
CLAXTAR AVE.
PACIFIC AVE.
MAIN
HIGHLAND CT
WEST UNION RD
VADIS RD
FAP 77
M.P. 56.56
SUNSET HIGHWAY NO. 47
US 26
2 1
11 12
EAGLE AIRPORT
BEACH RD.
GORDON RD
GLENCOE RD
FAS 120
SOUTH AVE.
M.P. 57.10
M.P. 57.90
McKay Creek
N
T 1-2 N R 2-3 W W.M.
LEGEND
FEDERAL AID INTERSTATE SYSTEM
FEDERAL AID PRIMARY SYSTEM
FEDERAL AID SECONDARY SYSTEM - STATE
FEDERAL AID SECONDARY SYSTEM - COUNTY
OTHER FEDERAL AID SECONDARY - LOCAL
TERMINATION OF FA SYSTEM
TERMINATION OF ROUTE
DIVIDED HIGHWAY
UNDIVIDED HIGHWAY - NO. OF LANES
STREET OPEN FOR TRAVEL
STREET DEDICATED BUT NOT OPEN
INTERSTATE NUMBERED ROUTE
U.S. NUMBERED ROUTE
STATE NUMBERED ROUTE
POST OFFICE
SCHOOL
CITY CENTER
R.R. DEPOT
CITY LIMITS
PUBLIC BLDG.
CT CITY HALL
CT COURT HOUSE
A ARMORY
L LIBRARY

NORTH PLAINS

WASHINGTON COUNTY, OREGON

PREPARED BY THE
OREGON STATE HIGHWAY DIVISION
IN COOPERATION WITH
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

Population 780
Scale in Feet

Revised December 1973

9361

STATE OF OREG[illegible]

INTERO[illegible]CE MEMO

TO: GERRY WIMER
Local Government Programs Engineer

DATE: February ~~21~~ 27, 1978

FROM: JON R. ROSE Jon Rose
Federal Aid Coordinator

SUBJECT: State Participation
Glencoe Road/West Union Road FASC Project
Preliminary Engineering
Washington County

The attached letter from Washington County questions the matching policy on the subject FASC project. This project is a consolidation of two projects, one for improvement to a Railroad Crossing on Glencoe Road originally approved by the Transportation Commission July 30, 1975 and the other a replacement of the West Union Road Bridge over McKay Creek approved by the Commission on February 24, 1976. After considerable difficulty in working out a project that would solve the railroad problem the county proposed that the two projects be combined into one and submitted a new project request in August of 1977. On October 21, I sent the county cancellation forms for the two original projects to allow programming the one consolidated project. These were signed by the county on November 8, returned to this office November 21, and forwarded to you November 23. During all this time the policy was for the state to perform preliminary engineering on FASC projects without the use of county matching money or county FASC funds.

The new AOC agreement has changed this policy and the county asked what effect this would have on the subject project. I told the county on the telephone advice from your office, that projects which had already been submitted could be expected to be processed under the old policy. Transportation Commission action on the Glencoe Road/West Union Road project calls for a 7% county match and the attached letter questions this requirement. Although no agreement was written for the two original projects there has been an implied committment and if there is a misunderstanding it should be cleared up. Please review the county's letter and advise what our response should be.

ls

attachment

Gerry
2-27-78
Note: As there was no previous committment, it seems that the PE should be programmed, as participating per AOC agree. Legal may wish to rule on this. What is cost estimate & pro-rata?
Don N.

PROJECT MANAGEMENT
PME ☒ CCE ☑ OM ☐
LGE ☑ FAE ☐ OPE ☐
FEB 23 1978
File: PM FA
LG OP
TAA ______

81-123-1387

77-130

WASHINGTON COUNTY
ADMINISTRATION BUILDING — 150 N. FIRST AVENUE
HILLSBORO, OREGON 97123

BOARD OF COMMISSIONERS
MILLER M. DURIS, Chairman
BILL BLOOM
VIRGINIA DAGG
RICHARD C. HEISLER
RAY MILLER

DEPT. OF PUBLIC WORKS
JOHN F. CROCKETT, Director
ROOM 201
(503) 648-8886

February 13, 1978

Jon Rose
Federal Aid Engineer
Oregon Department of Transportation
5821 N.E. Glisan Street
Portland, Oregon 97213

Dear Jon:

There seems to be a mix-up on the intent of our Glencoe Road/West Union Road project. A separate project request for each road was submitted in March, 1975, and each one was approved by the Transportation Commission in February, 1976.

During our appraisal of the two projects, we found it more advisable to combine the two and realign the road in order to eliminate one overcrossing. We submitted the new project request on August 16, 1977. The assessment was sent by Metro to Gary Potter on September 26, 1977 and the full packet by Metro to Salem on October 20, 1977. The Washington County Board of Commissioners requested cancellation of the other two projects on November 8, 1977.

In your letter dated February 8, 1978, you enclosed the funding breakdown for preliminary engineering on this project, which showed the county picking up 7% match. ✓ Prior to the new AOC agreement, the full amount of preliminary engineering match was to be funded by the state. As all we did was combine the two previously submitted projects, and since we also submitted the new request prior to the new AOC agreement, I feel we should not be asked to pay a 7% match on this project. I might also add that in December, 1977, I inquired about new agreement and the status of this project and was ✓ told that projects submitted prior to the effective date of the agreement would be processed under the old agreement.

I would appreciate your looking into this matter as soon as possible so that no delays will occur in starting the preliminary engineering.

Sincerely,

Mike

Michael A. Borresen
Civil Engineer

MAB:pj

9361

72)

DEPARTMENT OF TRANSPORTATION

STATE HIGHWAY BUILDING • • SALEM, OREGON • • 97310

January 30, 1978

TO **Executive Department**
Federal Aid Coordination Unit

Columbia Region Association of Governments
527 S.W. Hall Street
University Center Bldg.
Portland, OR 97201

FROM **D. E. Swan**
Federal Aid Engineer

SUBJECT **Notice of Intent for Federal Aid Funds**
State Admin. Dist. No. 2
Section: Glencoe Rd.-West Union Rd.
Highway: FAS-A685
County: Washington

In accordance with Executive Memorandum 02-270-20, attached are copies of the Notices of Intent for the subject project.

Early programing of this project for advance planning in anticipation of future construction is necessary; therefore, your prompt attention to this proposal will be appreciated.

Allowing time for your review, we estimate the date of filing for federal aid funds on this project to be February 28, 1978.

COULTER

BLG: dmc

Attachment

cc: G. L. Green ✓
H. S. Coulter ✓
F. E. Terpin
J. B. Boyd
J. H. Versteeg
Gary Potter
W. J. Hart

Region 1: E. L. Hardt
District 2: W. W. Geibel
Aeronautics Division
Paul Hartwig, Parks
Gerald Wimer
B. L. Gifford
R. N. Bothman, Metro

RECEIVED
STATE HWY ENGR
JAN 31 '78
REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

NOTIFICATION OF INTENT TO APPLY FOR FEDERAL AID

For Internal Use Only — 1-8] PNRS # — Page One

02	12] APPLICANT [45: Department of Transportation	46] DIVISION [79: Highway
03	12] APPLICANT ADDRESS STREET [45: O'DOT Building	46] CITY [60: Salem — 76] ZIP [80: 97310
04	12] CONTACT PERSON [45: D. H. Moehring	46] AREA CODE [48: 503 — 49] PHONE [55: 378 — 56] EXTENSION [59: 6563
01	12] PROJECT TITLE [71: Glencoe Rd.-West Union Rd.	
11	12] PROJECT LOCATION—CITY: FAS-A685	PROJECT LOCATION—COUNTY: Washington — PROJECT LOCATION SEC: T: R:

SUMMARY PROJECT DESCRIPTION (ATTACH SUPPORTING DOCUMENTS AS NECESSARY—SEE INSTRUCTIONS ON BACK)

05 Realign Glencoe Road between Cottage Ave. and Shadybrook Rd. to eliminate the [71

06 12] structure and cross the railroad tracks, at grade, using gates for protection. [71

07 12] Realign West Union Rd. between railroad trestle and Commercial Ave. to replace [71

08 12] timber structure with concrete bridge and eliminate clearance problem with [71

09 12] R/R trestle. [71

10 12]

12	AMOUNT REQUESTED—FEDERAL FUNDS		NON-FEDERAL MATCHING FUNDS		OTHER	TOTAL
	12] (A) Grant [19	20] (B) Other [27	28] (C) State [35	36] (D) Local [43	44] (E) FUNDS [51	52] (F) FUNDS [60
	541,800	--	44,100	44,100	--	630,000

13 12] TYPE OF OTHER FEDERAL FUNDS (See 12B) [45 — 46] TYPE OF OTHER NON-FEDERAL FUNDS (See 12E) [79 — [71

14 12] FEDERAL PROGRAM TITLE: Title 23 USC Highways [79

15 12] FEDERAL AGENCY NAME [45: U. S. Department of Transportation — 46] FEDERAL SUB-AGENCY NAME: FHWA

17 **(A) TYPE OF APPLICANT:** (Check (×) the single most applicable box)

STATE ☒ 12 — INTER-STATE ☐ 13 — COUNTY ☐ 14 — CITY ☐ 15 — SCHOOL DISTRICT ☐ 16 — SPECIAL DISTRICT ☐ 17 — COMMUNITY ACTION ☐ 18 — SPONSORED ORGANIZATION ☐ 19 — OTHER ☐ 20

(B) TYPE OF ACTION: (Check (×) as many boxes as apply to this action)

NEW GRANT ☒ 21 — CONT. GRANT ☐ 22 — SUPPL'T GRANT ☐ 23 — INCREASE DURATION ☐ 24 — DECREASE DURATION ☐ 25 — CANCELLATION ☐ 26 — INCREASE DOLLARS ☐ 27 — DECREASE DOLLARS ☐ 28

(C) HAS DISTRICT CLEARINGHOUSE BEEN NOTIFIED? Yes ☒ 29 No ☐ 30 Date: January 30, 1978

(D) REVIEW REQUIRED by A-95: Yes ☒ 31 No ☐ 32

(E) ENVIRONMENTAL IMPACT: Yes ☒ 33 No ☐ 34

(F) HOUSING RELOCATION REQUIRED: Yes ☒ 35 No ☐ 36

(G) ESTIMATED APPLICATION FILING DATE: 41] MONTH [42: Feb. — 43] DAY [44: 28 — 45] YEAR [46: 1978

ADDITIONAL INFORMATION—ALL APPLICANTS

I. A. Is the project consistent with the city or county comprehensive plan, zoning and subdivision ordinance? No ☐ Yes ☒

I. B. Is the proposal consistent with statewide land use goals? No ☐ Yes ☒

I. C. Is the proposal consistent with state and regional plans? No ☐ Yes ☒

II. Will the project have an impact on a neighboring jurisdiction? No ☒ Yes ☐

If so, is the project consistent with the comprehensive plan for that jurisdiction? No ☐ Yes ☐

III. Explain deviations if any, from pertinent plans.

IV. Federal Catalog number (or Public Law no. and title) 20.205 Highway Planning & Construction

V. Has funding agency been notified? No ☐ Yes ☒ Date: Jan. 30, 1978

VI. If project includes state funds (12C), identify agency Highway

STATE AGENCIES ONLY

VIII. (a) IS PROGRAM BUDGETED ☐ NON-BUDGETED ☐

(b) STATE SHARE

GENERAL FUND CASH	OTHER FUND CASH	IN KIND
$	$	$

(c) FUNDING METHOD

	FEDERAL SHARE		STATE SHARE		TOTAL	
First Year	%	$	%	$	%	$
Second Year	%	$	%	$	%	$
Third Year	%	$	%	$	%	$

(d) WILL PROGRAM REQUIRE HIRING OF NEW STATE EMPLOYEES? No ☐ Yes ☐ Number

(e) Will accounting for this grant be administered by the Executive Dept. Accounting Division? Yes ☐ No ☐

PLEASE ATTACH ANY ADDITIONAL NARRATIVE OR REMARKS

This is a Category 3 Project of Major NonSignificant environmental impact under Oregon's Action Plan.

CATEGORY
3 PROJECT

MAJOR- NON SIG

RS-A685(-)
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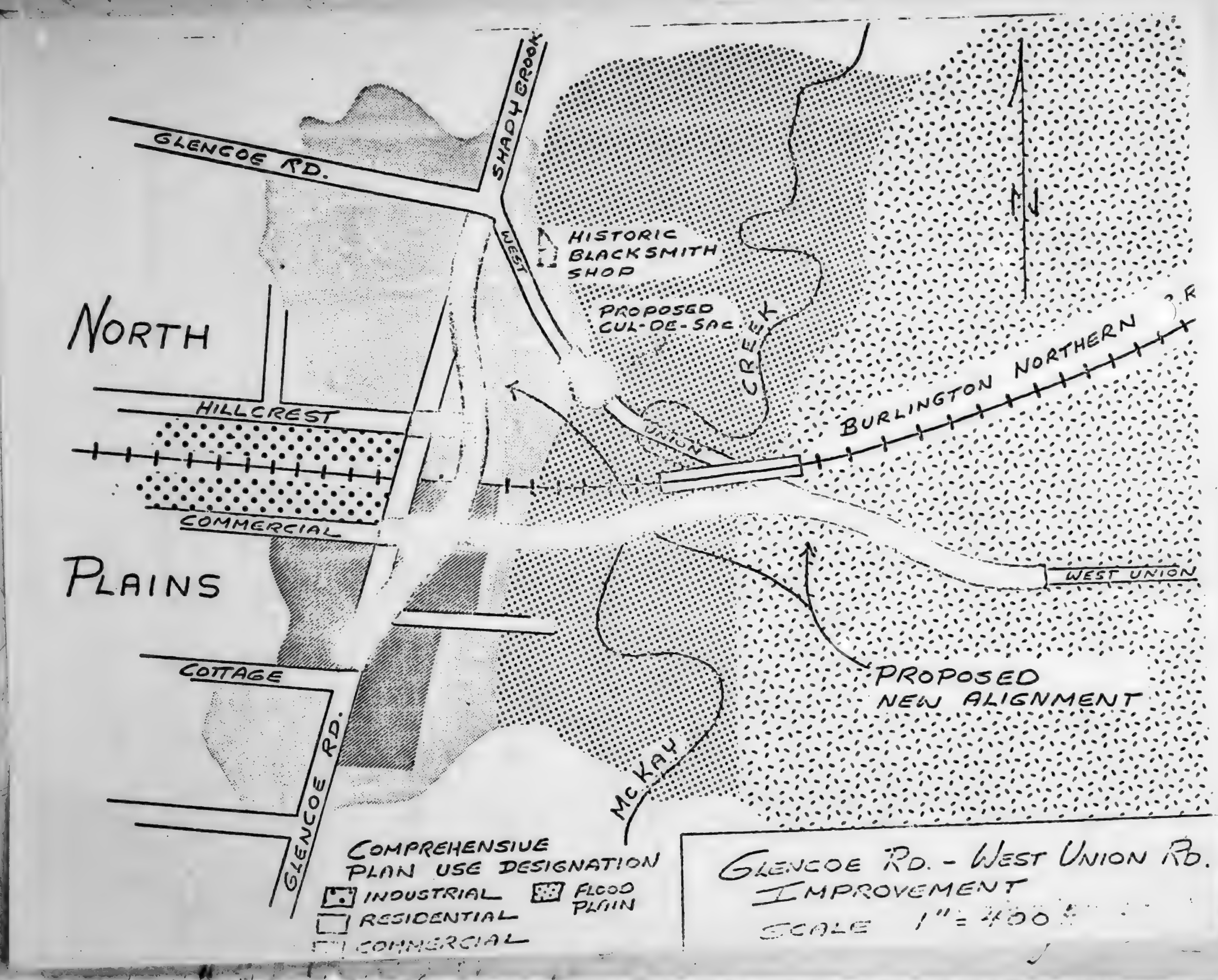
SIGNIFICANT:	NON-SIGNIFICANT:	
____ D & FEIS	_x_ D & F Neg.Dec.	____ ASSESSMENT ONLY
____ Section 4(f)	____ Section 4(f)	____ STATEWIDE ASSESSMENT

Basis for Type of Action and Documentation: The project is a major action with impacts which are not significant enough to warrant an E.I.S. treatment.

D. Recommended Project Category: ____ 1 ____ 2 _x_ 3 ____ 4


GLENCOE RD.
SHADY BROOK
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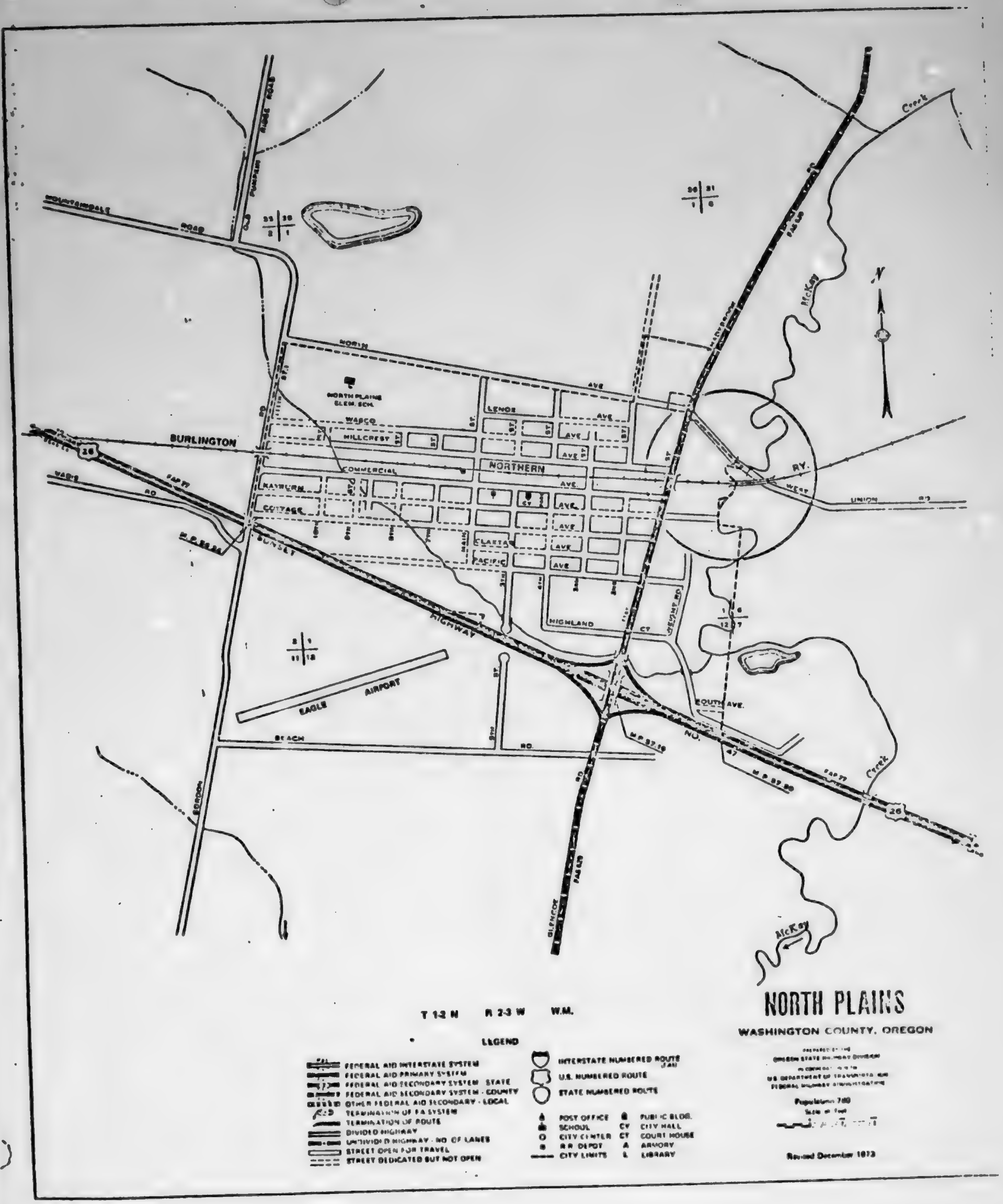
BLACKSMITH
SHOP
PROPOSED
CUL-DE-SAC
CREEK
BURLINGTON NORTHERN R.R.
NORTH
PLAINS
HILLCREST
COMMERCIAL
COTTAGE
GLENCOE RD.
WEST UNION
PROPOSED
NEW ALIGNMENT
McKAY
N
COMPREHENSIVE
PLAN USE DESIGNATION
INDUSTRIAL
RESIDENTIAL
COMMERCIAL
FLOOD
PLAIN

GLENCOE RD. - WEST UNION RD.
IMPROVEMENT
SCALE 1" = 400'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MOUNTAINDALE ROAD
NORTH AVE
NORTH PLAINS ELEM. SCH.
LENOX AVE
WASCO
HILLCREST
BURLINGTON
NORTHERN AVE.
COMMERCIAL
RAYBURN
COTTAGE
CLATSOP AVE
PACIFIC AVE
HIGHLAND CT
MAIN ST.
RY.
WEST UNION RD
SUNSET HIGHWAY NO. 47
FAP 77
FAS 520
26
M.P. 26.94
M.P. 27.18
M.P. 27.80
EAGLE AIRPORT
BEACH RD.
GORDON
GLENCOE RD.
SOUTH AVE.
McKay Creek
N
T 1-2 N R 2-3 W W.M.
LEGEND
FEDERAL AID INTERSTATE SYSTEM
FEDERAL AID PRIMARY SYSTEM
FEDERAL AID SECONDARY SYSTEM - STATE
FEDERAL AID SECONDARY SYSTEM - COUNTY
OTHER FEDERAL AID SECONDARY - LOCAL
TERMINATION OF FA SYSTEM
TERMINATION OF ROUTE
DIVIDED HIGHWAY
UNDIVIDED HIGHWAY - NO. OF LANES
STREET OPEN FOR TRAVEL
STREET DEDICATED BUT NOT OPEN
INTERSTATE NUMBERED ROUTE
U.S. NUMBERED ROUTE
STATE NUMBERED ROUTE
POST OFFICE
SCHOOL
CITY CENTER
R.R. DEPOT
CITY LIMITS
PUBLIC BLDG.
CY CITY HALL
CT COURT HOUSE
A ARMORY
L LIBRARY
Scale in Feet

NORTH PLAINS

WASHINGTON COUNTY, OREGON

Prepared by the
Oregon State Highway Division
in cooperation with
U.S. Department of Transportation
Federal Highway Administration

Population 780

Revised December 1973

9361

DATE January 12, 1978

TO OREGON TRANSPORTATION COMMISSION

FROM H. S. Coulter
State Highway Engineer

SUBJECT FAS-C Project Cancellations
and Project Request

On the consent calendar for the January 24 meeting will be requests from Washington County for cancellation of two previously approved FAS-C projects and for approval of an FAS-C project.

Washington County is requesting a $60,000 preliminary engineering project to prepare plans and contract documents for a project to realign Glencoe Road and West Union Road in North Plains. The realignment of these two roads necessitates cancellation of two previously approved projects.

FAS-C funds for this project are estimated at $51,600 with the State providing approximately $4,200 in match funds and a like amount being contributed by Washington County.

This project has been investigated and is eligible for funding under the FAS-C program. I recommend your approval and request authorization to sign the project agreement for and on your behalf.

Attachment

GEZ:lml

bc: R. A. Burco
F. B. Klaboe
C. W. Head
D. H. Moehring
E. S. Hunter
George Bell
R. N. Bothman
V. E. Skoog
J. H. Versteeg
E. L. Hardt
D. N. Harwell

WASHINGTON COUNTY
Proposed FAS-C Project

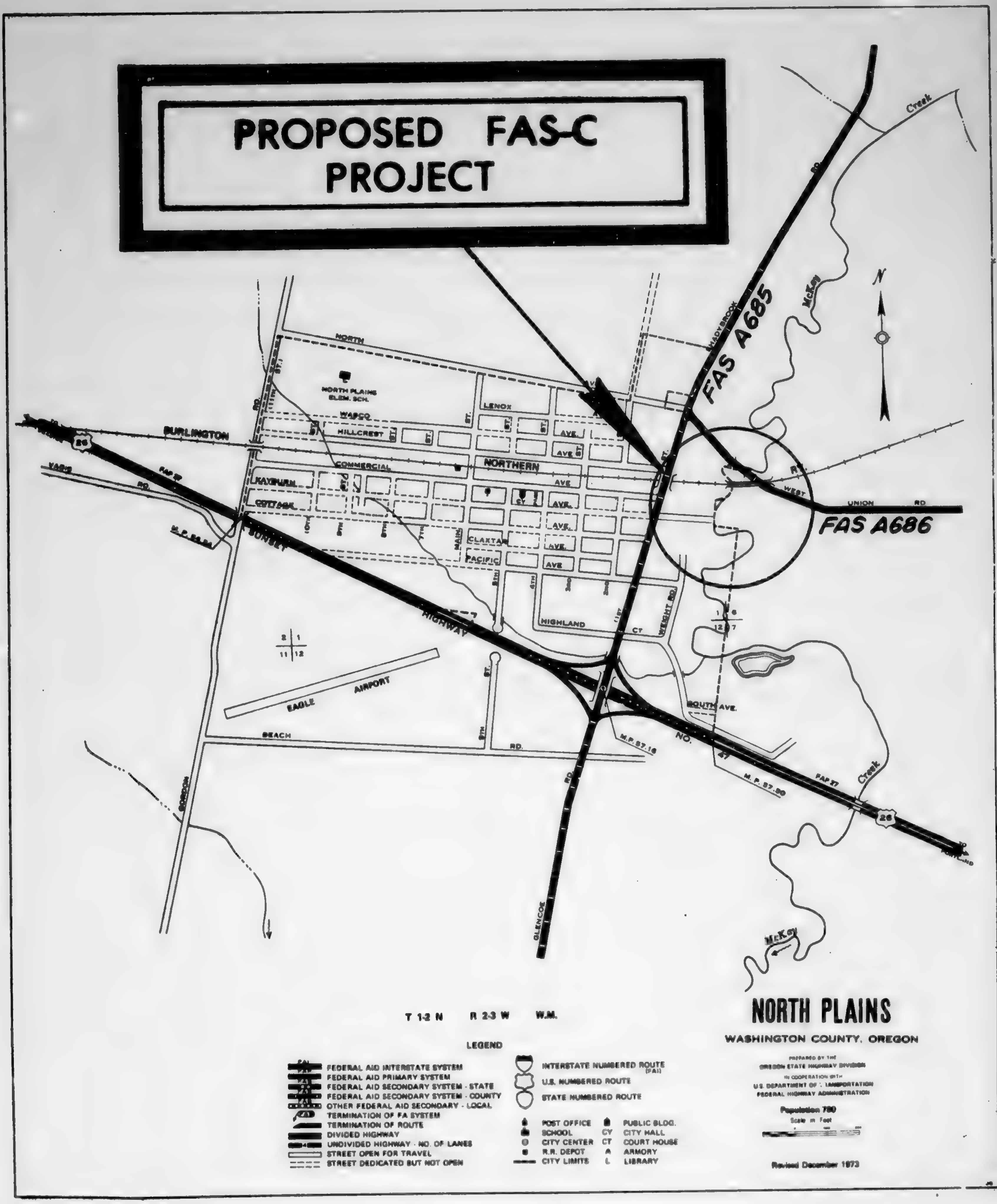
Glencoe Road-West Union Road (North Plains) Section
Glencoe Road, FAS A685 and West Union Road, FAS A686
Preliminary Engineering
$60,000

This project consists of all preliminary engineering work for a future construction project to relocate portions of Glencoe Road and West Union Road in North Plains. Glencoe Road will be realigned between Shadybrook Road and Cottage Avenue to eliminate the railroad crossing structure. Grade crossing protection will be provided on the new alignment. The realignment of West Union Road will eliminate the railroad trestle and will connect to Glencoe Road near Commercial Avenue which will require a new structure across McKay Creek.

State will perform all preliminary engineering for the project.

78-a
1-10-78

PROPOSED FAS-C PROJECT


FAS A685
FAS A686
NORTH
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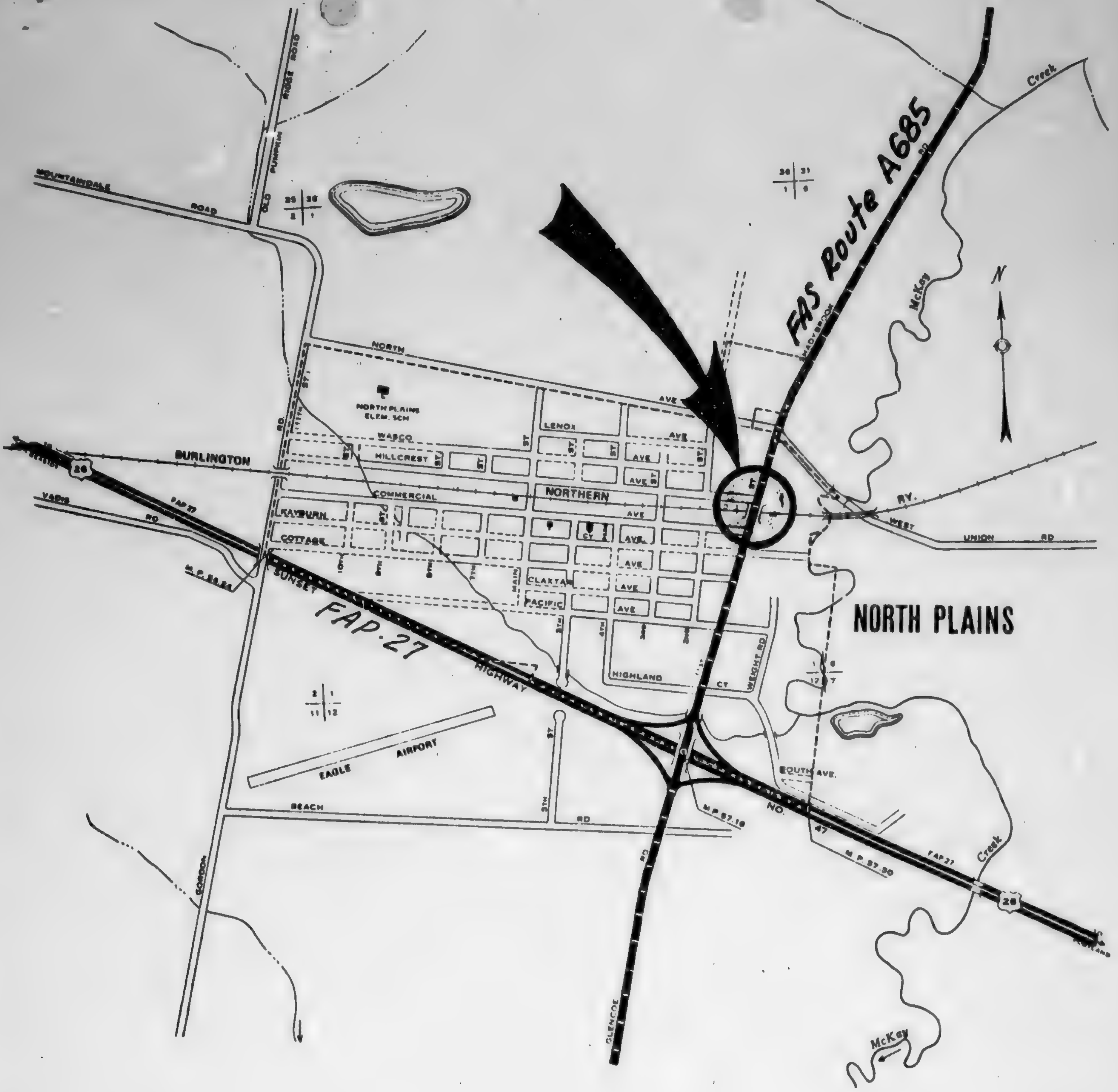
NORTH PLAINS
WASHINGTON COUNTY, OREGON
PREPARED BY THE OREGON STATE HIGHWAY DIVISION
IN COOPERATION WITH
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
Population 780
Scale in Feet
Revised December 1973

WASHINGTON COUNTY
FAS-C Project Cancellation

Burlington Northern Railroad Crossing
Glencoe Road (North Plains) Section, FAS A685
Automatic Railroad Signals
$120,000

This project was approved by the Transportation Commission on July 30, 1975. Washington County has requested that the project be cancelled. This crossing will be relocated and the work will be combined with a project to realign West Union Road.

78-a
1-10-78


MOUNTAINDALE ROAD
OLD PUMPKIN RIDGE ROAD
FAS Route A685
SHADYBROOK RD
McKay Creek
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NORTH AVE
NORTH PLAINS ELEM. SCH
LENOX AVE
WASCO
HILLCREST
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COMMERCIAL
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COTTAGE
AVE
CLAXTAR
PACIFIC
MAIN
HIGHLAND CT
WEIGHT RD
WEST UNION RD
NORTH PLAINS
VADIS RD
FAP 27
M.P. 25.24
SUNSET HIGHWAY NO. 47
FAP-27
EAGLE AIRPORT
BEACH RD
SOUTH AVE.
M.P. 27.10
M.P. 27.50
GORDON
GLENCOE RD
26
McKay

CANCELLATION

B.N. RY. XING (GLENCOE RD.-N PLAINS) SEC.

FAS Route A685 Washington County

9361

WASHINGTON COUNTY

Inter-Department Correspondence

Date November 2, 1977
For Meeting of: November 8, 19

To : Honorable Board of County Commissioners

From : Director of Public Works

Subject : FAS-C Projects (McKay Creek Bridge and Glencoe Road Railroad Crossing)

You may remember that we have previously applied for two separate projects as listed above. However, as we further investigated the feasibility of these two projects, we found that it was more advisable to combine the two into one project and include some road realignment as well as reducing the overcrossing to a gate protected grade crossing.

In order to achieve this, there is certain paper work that has to be done. The State has presented us with the process that must be followed, which is as follow The two projects listed above, McKay Creek Bridge and Glencoe Road Railroad Crossing must be released and authorization requested for preliminary engineering project for the combined project. This has been discussed with and meets with the State's capabilities and our funding capabilities under the Federal Aid Secondary Funding.

RECOMMENDATION: Your Board authorize executing the forms which will cancel the two separate projects referred to, and authorize application for a combined project to do the work previously covered by the two projects.

Respectfully submitted,

John F. Crockett

JFC:pj

APPROVED WASHINGTON COUNTY
BOARD OF COMMISSIONERS
MINUTE ORDER # 77-552
DATE 11-8-77
BY Jo Ann Johansen
CLERK OF THE BOARD

cc Don Adams
3/17/78

9361

: 10-31-77

PROJECT MANAGEMENT OFFICE MEMO

oject Proposed Wash. Co. FAS-C Project File No.

Received (call) (visit) from

Address METRO

Made (call) ~~(visit)~~ to Jon Rose Phone 238-8250

Reason for contact and general discussion: Washington Co. will have to cancel two existing projects (McKay Cr. Br. & BN RR X'ing) Cancellation forms are on the way. We don't have enough FAS-C funds for county's $630,000 project. County should request P.E. project only for $60,000.

N. Plain
Glencoe P

C.C. R.N. Bothman
Jon Rose
10/26 DMP

Signature MAPrange

10-31-77 Prange - Please follow up
J Wein

File ( ) ( ) (✓) ( ) ( ) ( ) ( ) ( )
Circulate: PME LGE OPE FAE CCE OM Other

cc Don Adams
3/17/78

. 9361 GWROO01 2

Form E-30 (Rev. 9-71)

OREGON STATE HIGHWAY DIVISION

AUTHORITY FOR SURVEY

on Glencoe Road-West Union Road
Date September 27, 1977
Highway Glencoe and West Union Road
Authorization No. 1
County Washington
Survey Prefix 534-1970

Description of termini, route, length, etc.:

On West Union Road the westerly end is located at the intersection of Commercial Street and Glencoe Road in the city of North Plains. The easterly end is located 2,500 feet east of Glencoe Road. On Glencoe Road the northerly terminus is at the intersection of Glencoe Road and old West Union Road. The southerly end of the survey is at the intersection of Glencoe Road and Cottage Street in the city of North Plains. The overall length is 0.82 mile.

Proposed:

Realign county roads, provide 32' to 36' road bed and new structure on McKay Creek

Purpose of survey:

Perform field survey, prepare plans, specifications, and estimate.

FAS-C
RS-A685(1)
RS-A686(1)
4-6-78

FASC
Category 3M

		Estimate of Cost
Field Survey	(901)	30,000
Citizen Participation	(902)	1,000
City or County	(903)	-
Consultant	(904)	-
Final Design	(905)	3,000
Bridge Design	(906)	6,000
Preliminary Design	(907)	-
R/W Descriptions	(909)	1,500
Soils & Geology	(910)	2,600
Traffic	(911)	500
Landscape	(912)	-
Liaison	(913)	600
Utility	(914)	200
Photogrammetry	(916)	-
Location Studies	(918)	300
Engr. Graphics	(919)	-
Office Engineer	(920)	-
Specifications	(921)	1,000
Environmental	(923)	8,000
Planning	(924)	300
Foundation Exploration	(926)	3,000
Seminars	(950)	-
Hearings	(980)	2,000
Equal Opportunity	(985)	-
Advisory Committees	(986)	-

Total estimated cost of survey	$60,000
Previous authorization	
Additional authorization requested	
Additional authorization approved (Salem)	
Total all authorizations approved (Salem)	

INSTRUCTIONS

Submit four copies to Salem. After approval by the Assistant State Highway Engineer, one copy will be sent to the Regional Engineer and one copy to the Resident Engineer.

This form does not constitute authority for making survey until approved and returned.

Submit separate order for each survey.

Requests made by:
Robert T Ewen
R. T. Ewen, Metro Location Engineer

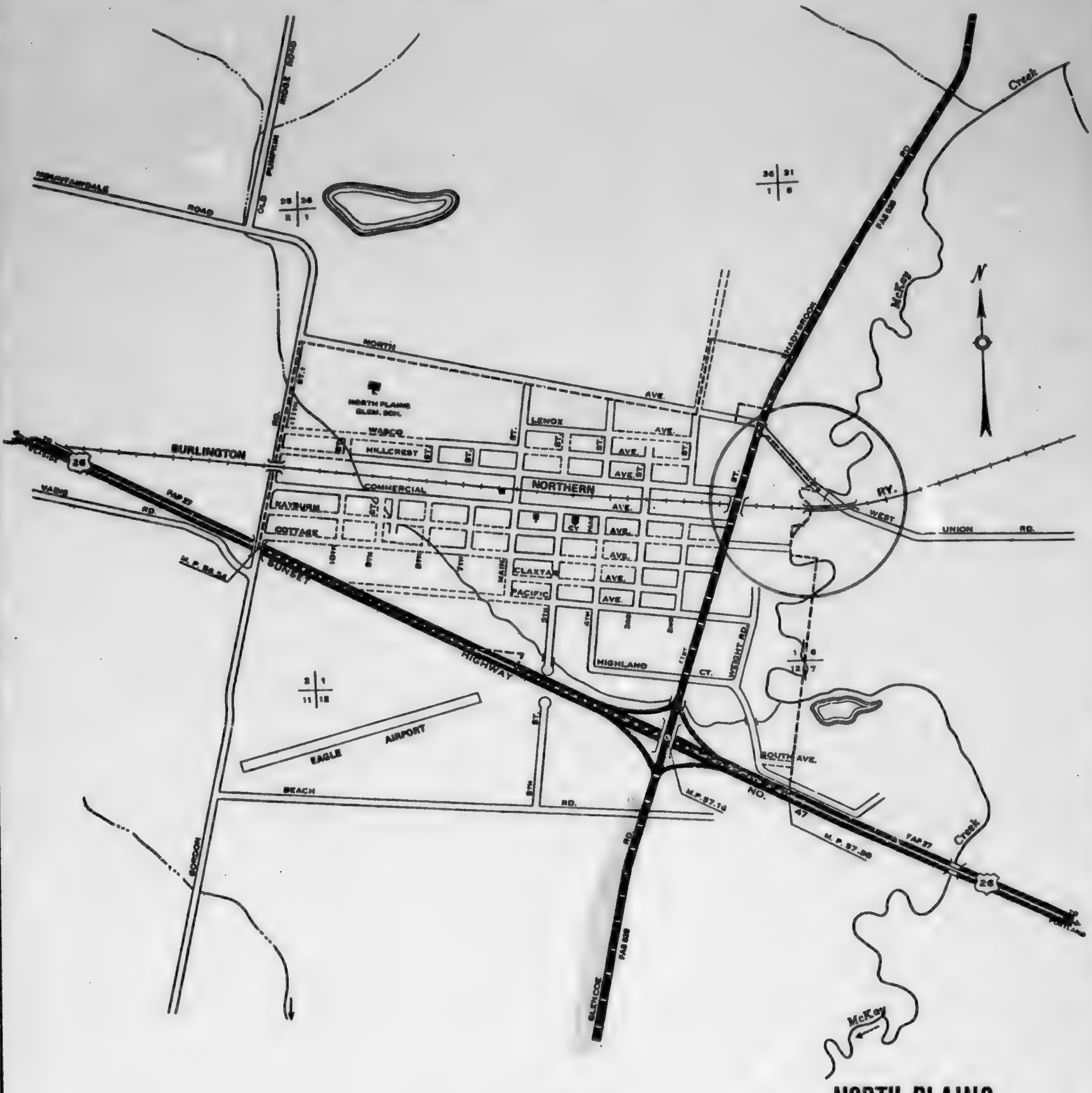
ommended for Approval:
M. J. Klotz, Metro Technical Services Engineer

Recommended for Approval:
Frank E. Pergin
Location Engineer

Approved:
Tech. Serv. Engr.xxxxxxxxxxxxxxx

SP*23604-734

N MB


MOUNTAINDALE
ROAD
OLD
PUMPKIN
RIDGE ROAD
Creek
McKay
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NORTH
AVE.
NORTH PLAINS
ELEM. SCH.
LENOX
WASCO
HILLCREST
BURLINGTON
NORTHERN
RY.
WEST
UNION
RD.
COMMERCIAL
RAYBURN
COTTAGE
CLAXTAR
PACIFIC
HIGHLAND
CT.
WRIGHT RD.
SOUTH AVE.
SUNSET
HIGHWAY
NO.
47
FAP 27
M.P. 57.18
M.P. 57.86
26
VADIS
RD.
EAGLE
AIRPORT
BEACH
RD.
GORDON
GLENCOE
RD
FAS 828
SHADYBROOK

T 1-2 N R 2-3 W W.M.

LEGEND

FEDERAL AID INTERSTATE SYSTEM
FEDERAL AID PRIMARY SYSTEM
FEDERAL AID SECONDARY SYSTEM - STATE
FEDERAL AID SECONDARY SYSTEM - COUNTY
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STREET OPEN FOR TRAVEL
STREET DEDICATED BUT NOT OPEN

INTERSTATE NUMBERED ROUTE (FAI)
U.S. NUMBERED ROUTE
STATE NUMBERED ROUTE

POST OFFICE
SCHOOL
CITY CENTER
R.R. DEPOT
CITY LIMITS

⌂	PUBLIC BLDG.
CY	CITY HALL
CT	COURT HOUSE
A	ARMORY
L	LIBRARY

NORTH PLAINS

WASHINGTON COUNTY, OREGON

PREPARED BY THE
OREGON STATE HIGHWAY DIVISION
IN COOPERATION WITH
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

Population 790

Scale in Feet

Revised December 1973

9361

OREGON STATE HIGHWAY DIVISION
PROJECT ASSESSMENT

PART 1. GENERAL INFORMATION

A. Project Identification:

Date August 16, 1977

Section Glencoe Rd.-West Union Rd.
Unit (if appl)

County Washington
City North Plains

Highway Glencoe & West Union Roads
State Hwy. No.

Termini: M.P.(if appl)
Length 4,200 ft.

Region 1
Construction Estimate $630,000
Program Amount

B. Purpose of Project:

To eliminate three bridge problems, one vertical clearance problem and two degraded timber structures, by realigning both roads and constructing one new concrete bridge.

C. Origin & History of Project:

This project was submitted as two separate projects in November, 1975 and September, 1976. The Glencoe Bridge was built in 1930 to span the Burlington Northern Railroad tracks. The West Union Rd. Bridge was built in 1936. Both bridges were built of untreated timber and, due to failure and rotting, are in need of replacement.

D. General Description of Project:

Realign Glencoe Road between Cottage Ave. and Shadybrook Rd. to eliminate the structure and cross the railroad tracks, at grade, using gates for protection. Realign West Union Rd. between railroad trestle and Commercial Ave. to replace timber structure with concrete bridge and eliminate clearance problem with R/R trestle.

Alignment: New ______ Existing ______ Combined x

Typical Section: Existing: No. Lanes 2 ; Med. 0 ; Shldrs. 0-2' ; Parking *
Proposed: No. Lanes 2 ; Med. 0 ; Shldrs. 4-6' ; Parking *

Traffic: Existing Facility: Existing ADT 1750-Glencoe
650-W Union Projected ADT ______ ; Yr. ______
Existing Level of Service B-C

Proposed Facility: Projected ADT ______ ; Yr. ______
Projected Level of Service ______

*Glencoe Rd. between Cottage and Commercial only

734-3953 (10-75)

Right of Way: Additional anticipated Yes ; if yes, give approx. No. Parcels 5
Yes, No

Commercial	1 acre
Agricultural	1/2 acre
Natural resource	1 acre
sgl-family residence	1 house
/Residential	2 acres

Acres 4-1/2 ; Type of Relocation Req Natural resource ; No. 1 acre

Materials Source, Borrow, Waste Disposal Requirements, if any:

County forces will remove timber structures. Fill material can be taken from approaches to Glencoe Rd. Bridge and W. Union Rd. Bridge.

Type of Structure(s):

Concrete Bridge

Brief Description of River or Stream and Type of Involvement, if any: The existing wood bridge crossing McKay Creek will be removed and a concrete bridge will be constructed further downstream.

Local City, County or COG priorities of project: Top priority for City of North Plains. Top priority for FAS projects in Washington County - bridge needs replacement NOW!

FHWA and/or OSHD approvals given, if any: Prior OSHD approval given on both projects.

Location or Design Alternatives (identify and describe):

A) Replace both structures in same location as existing. Glencoe Rd. has poor vertical alignment in present location. West Union Rd. would still have vertical clearance problem with railroad trestle.
B) No Build

Other Descriptive Information or Comments:

Existing West Union Rd. alignment would be cul-de-saced at the flood plain.

Existing Glencoe Rd. alignment would be vacated.

(Attach project sketch map.)

PART II. ENVIRONMENTAL ASSESSMENT

A. Brief Environmental Setting of Project Area:

1. Natural: The project's natural setting is a flat to gently rolling rural/agricultural area bisected by McKay Creek, a mature stream with its headwaters in the Tualatin Mountains several miles to the north. McKay Creek is a significant stream for Coho Salmon, Sea Run Cutthroat, Resident Cutthroat, and Winter Steelhead. Approximately a third of the proposed project lies in the stream's 100 year floodplain. A wooded area, dominated by Oregon Ash, White Oak, Big Leaf Maple, and Alder follow the stream course. Other isolated patches of wood and brush areas, as well as some remnant orchard land are evident. These natural areas in combination with fields and cropland offer a variety of habitat. The soils are predominantly silt/clay loams and have a high suitability for agricultural use.

2. Cultural: The project is located immediately west of the City of North Plains, a small rural agricultural town which is served by the Burlington Northern rail line involved in the proposed project. Glencoe and West Union roads connect the rural areas of Washington County with the urban areas of North Plains, Hillsboro, Beaverton, and Portland. The land use adjacent to the project is a mix of low density residential and agricultural. One small grocery store is located at Commercial Street and Glencoe Road in the southwest quadrant. A historic building, reputed to be the last remaining early vintage blacksmith shop in Washington County, is found on the north side of West Union Road, several buildings east of Glencoe Road. Transportation related noise and air quality impacts are not significantly generated by Glencoe and West Union roads.

B. Preliminary Assessment of Environmental Impacts:

1. Consequences and Significance of Right-of-Way Acquisition: Loss of some potential commercial and existing agricultural land. New alignment through flood plain will correspondingly eliminate old alignment through flood plain (No expected loss of flood plain). Some loss of habitat. One residence may be displaced.

2. Estimated Impact on Traffic Patterns: Allows truck traffic to by-pass North Plains. Load limits on existing bridges forces additional traffic on Commercial Ave., which is the main street of North Plains.

Consequences--Air Quality, Noise, Safety, etc.: Reduces noise, improves air quality and safety in North Plains. New alignment of Glencoe Road moves traffic farther away from critical receptors on west side of road.

3. Estimated Impact on Land Use: Removes 1 acre commercial, 1 acre flood plain, 1/2 acre agricultural and 2 acres residential land. Present land use trends for the area should not be affected.

Consequences: All land is presently vacant except for 1 residence in the agricultural area. Vacation of Glencoe Rd. will replace 1/2 acre of residential land and 1/2 acre of commercial land. All flood plain land will be replaced by eliminating the old bridge and fill.

4. Expected Impact on Natural Ecological Resources: Some existing wooded and brush areas along the creek and railroad will be removed.

Consequences: Approximately one half to one acre of habitat will be removed or adversely affected by the proposal. No unique qualities are evidently associated with this habitat.

5. Expected Impact on Cultural and Scenic Resources: Loss of some trees along West Union Road realignment will have a minor scenic impact.
The historic blacksmith shop is located on the portion of West Union Road which will be cul-de-saced. This is not expected to adversely impact the structure and may in fact be a positive impact. A cultural survey will be required.

Consequences:

6. Preliminary Identification of Areas of Critical Concern: Will need flood plain alteration permit - County will handle this at time of final design.

7. Potential for Controversial Issues: Possible objection from the owner of a residence that may have to be displaced.

8. Potential for Consistency of Proposal With:

a. Clean Air Implementation Plans Allows traffic to use the arterials as they were intended, thus decreasing by-pass traffic through city of North Plains. Improve air quality in city. An indirect source permit is not required.

b. Noise Standards As above, no violation of federal noise standards are presently occurring, or are expected to occur in the construction project area.

c. Water Quality Standards Removes one structure and fill from flood plain and replaces with same in new location downstream. Normal construction procedures will be followed in preserving stream quality.

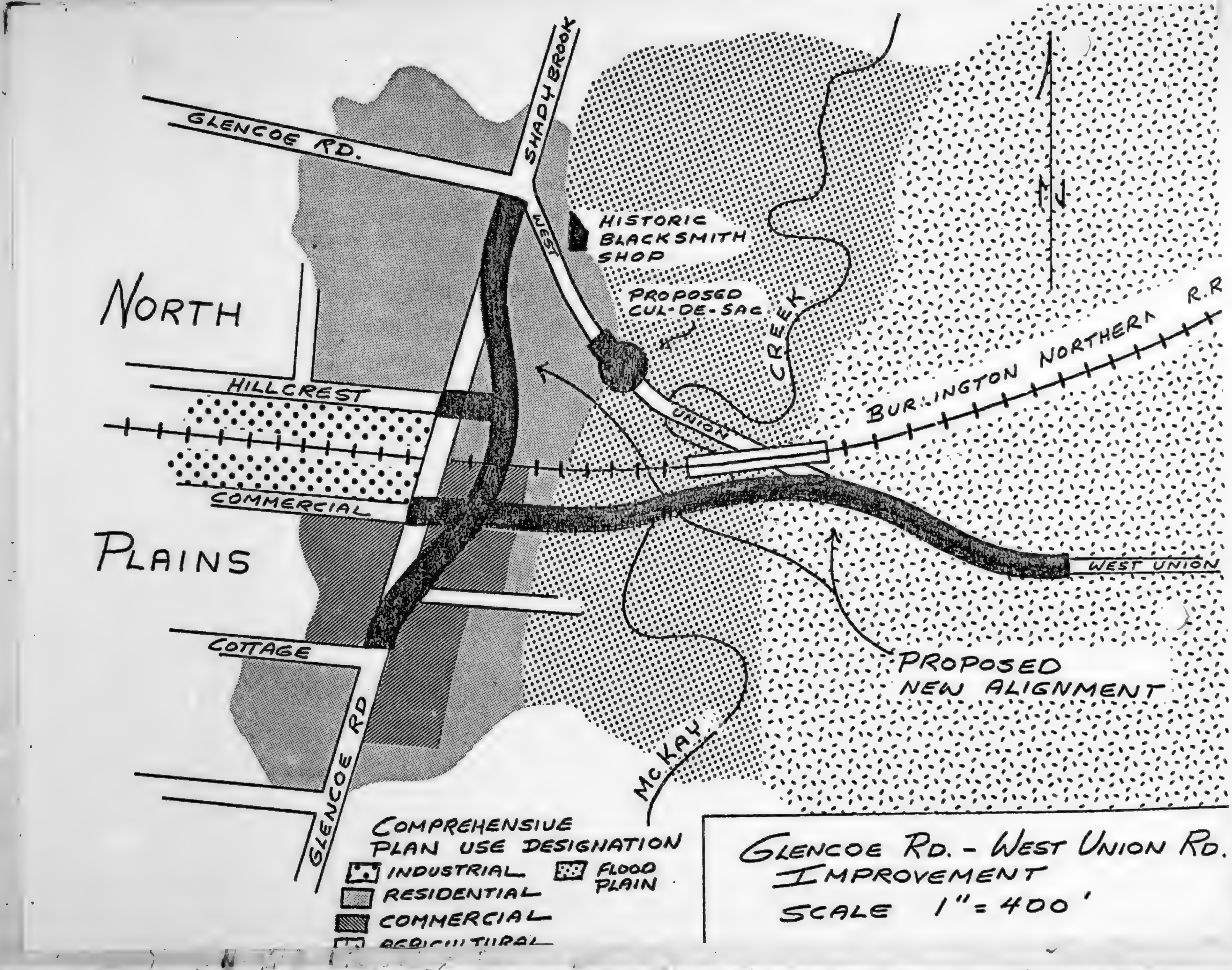
d. Area Land Use and Transportation Plans, and Zoning Consistent with Washington County Comprehensive Framework Plan.

C. Recommended Type of Action and Documentation:

-------------MAJOR ACTION-----------------		----NON-MAJOR ACTION-----
SIGNIFICANT:	NON-SIGNIFICANT:	
____ D & FEIS	_x_ D & F Neg.Dec.	____ ASSESSMENT ONLY
____ Section 4(f)	____ Section 4(f)	____ STATEWIDE ASSESSMENT

Basis for Type of Action and Documentation: The project is a major action with impacts which are not significant enough to warrant an E.I.S. treatment.

D. Recommended Project Category: ____ 1 ____ 2 _x_ 3 ____ 4



GLENCOE RD. - WEST UNION RD.
IMPROVEMENT
SCALE 1" = 400'

NORTH
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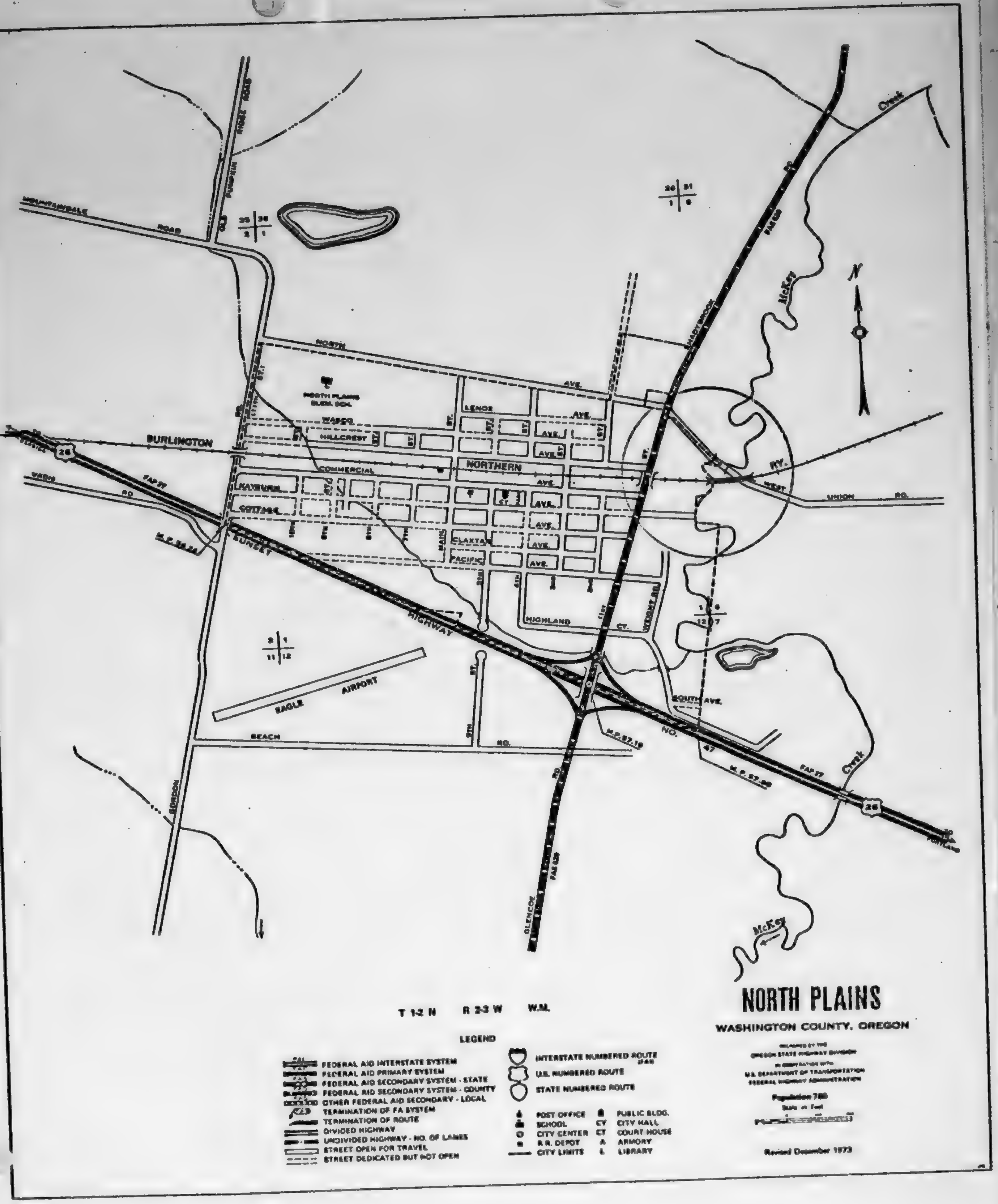
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PORTLAND
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NORTH PLAINS

WASHINGTON COUNTY, OREGON

PREPARED BY THE
OREGON STATE HIGHWAY DIVISION
IN COOPERATION WITH
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

Population 780

Revised December 1973

PROJECT INFORMATION SHEET
(to be submitted with the project request)

Section Glencoe Road - West Union Road Date

Highway City of North Plains County Washington

Existing Facility

Access control? None parking restrictions? no
Airport within 2 miles? Yes name North Plains
Water development in the area? None
Recreation areas None
Historical areas None

Roadway: no. lanes 2 paved shoulders? no
pavement width 18 - 22 ft

Structures: MP description
Existing RR O'Xing to be replaced by roadway realignment and removed. Existing McKay creek structure on West Union Road to be removed.

Signals: location None

Descriptions of adjacent sections

North end: 2 lanes paved surface width 20 ft with gravel shoulders
South end: 2 lanes paved surface width 22 ft with gravel shoulders
East 2 lanes paved surface width 18 ft with gravel shoulders

Railroad crossings yes

Name of railroad Burlington - Northern no. of tracks 1
Number of trains 1 no. of hi-speed trains None
Present protection present roadway has Overcrossing structure (Timber)
Proposed protection Grade crossing with automatic flashing lights and gates
Railroad benefits

9361

PW -

WASHINGTON COUNTY

Inter-Department Correspondence

Date July 28, 1977
For Meeting of: August 2, 1977

To : Honorable Board of County Commissioners

From : Director of Public Works

Subject : Federal Aid Secondary System Project Application - Realign Glencoe Road and West Union Road

An application has been prepared for an FAS-C project that combines two previously submitted individual requests. The purpose of the project is to eliminate three bridge problems by relocating both Glencoe Road and West Union Road at North Plains. One new structure would be constructed over McKay Creek on West Union Road.

Mayor Vanderzanden of the City of North Plains has been informed of the project and is in agreement with the relocation.

RECOMMENDATION: Your Board authorize the Chairman to sign the application whereupon it will be forwarded to the Oregon Department of Transportation.

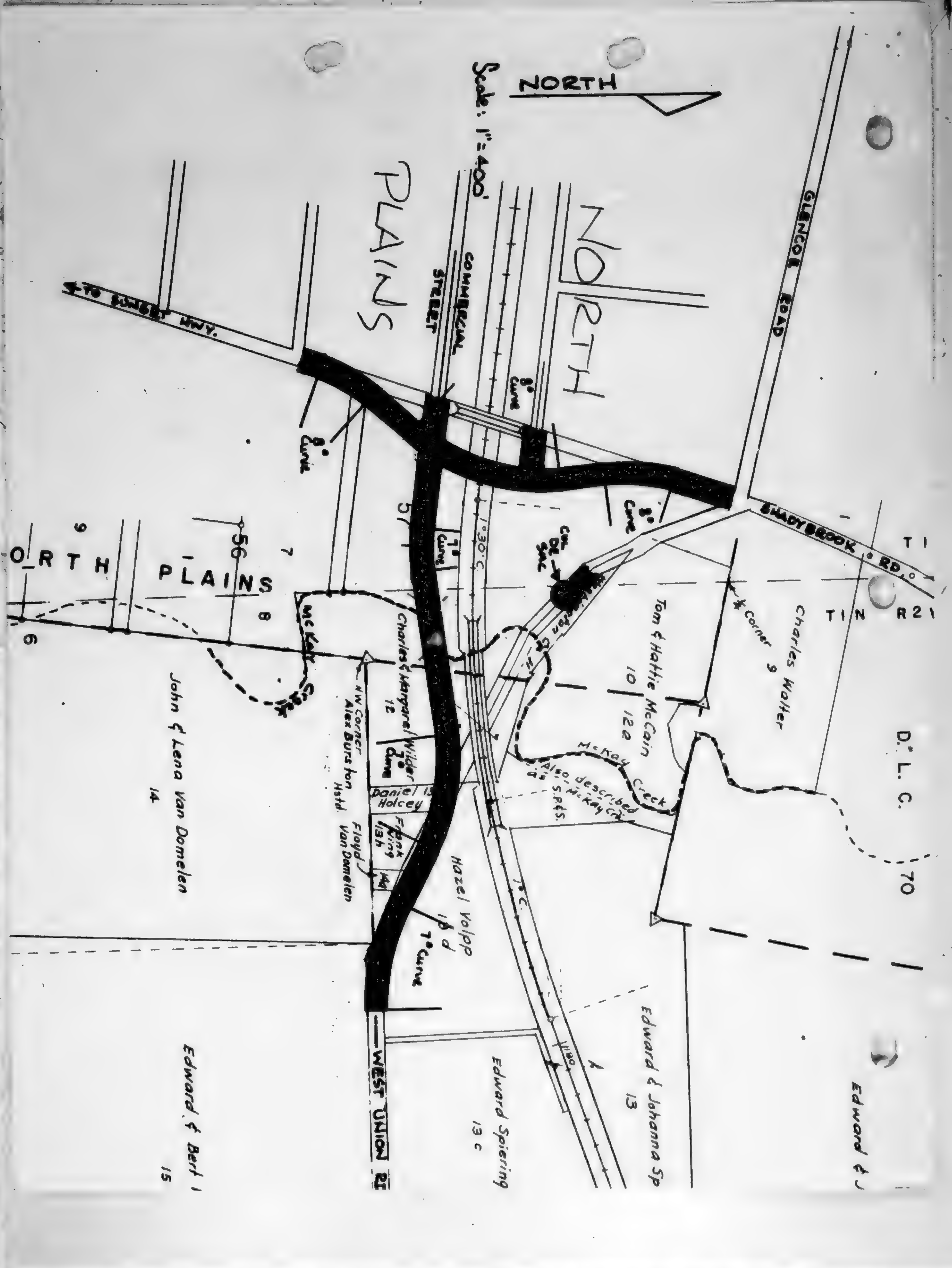
Respectfully submitted,

John F. Crockett

John F. Crockett

JFC:js

APPROVED WASHINGTON COUNTY
BOARD OF COMMISSIONERS
MINUTE ORDER # 77-389
DATE 8-2-77
BY Jo Ann Johansen
CLERK OF THE BOARD


NORTH
Scale: 1"=400'
NORTH PLAINS
COMMERCIAL STREET
GLENCOE ROAD
TO SUNSET HWY.
SHADYBROOK RD.
8° Curve
8° Curve
8° Curve
7° Curve
7° Curve
7° Curve
1°30' C
1° C
1°30'
Cul De Sac
57
56
9
7
8
6
ORTH PLAINS
McKay Cr.
McKay Creek
¼ Corner
T1N R2W
T1
Tom & Hattie McCain 10 12a
Charles Walter 9
D. L. C. 70
Charles & Margaret Wilder 12
NW Corner Alex Burston Hstd.
Daniel Holcey 13
Frank Wing 13h
Floyd Van Domelen 14a
John & Lena Van Domelen 14
Hazel Volpp 13d
Also described as S.P.&S. McKay Cr.
WEST UNION RD.
Edward Spiering 13c
Edward & Johanna Sp
Edward & Bert 15
Edward & J

9361

Rev. 10/29/75

COUNTY ROAD FAS-C PROJECT REQUEST

Name of County Washington FAS No. 685 & 686 Date July 28, 1977
County Road Name Glencoe Road and West Union Road
Section Name North Plains
Type of Project Grading, paving and bridge replacement
Location of Project (Attach sketch map) Sec. 1, T1N, R3W and Sec. 6, T1N, R2W
ADT 1750 and 650 Design Speed 45 MPH

Is this request for county bridge design only? Yes ____ No X
county FAS bridge design? Yes X No ____
Will County hire consultant for this project? Yes ____ No X

I. PROPOSED ROAD PROJECT DATA

1. Traveled Surface: Type A.C.
(AC, Pug Cold Mix, Penetration Mat)
Total Travel Width 24 feet

2. Shoulders: Type A.C.
(AC, Pug Cold Mix, Oil Mat)
Width Each Side 4'-6' Total Top Width 32'-36'

3. Grading and Drainage:
By County ____ County Date of Completion ____ By Contract X

4. Bottom Base Course:
By County ____ County Date of Completion ____ By Contract X
Has base design been given to County? Yes ____ No X
Will it be furnished? Yes ____ No X

5. Leveling Course:
By County ____ County Date of Completion ____ By Contract X

6. Binder Course:
By County ____ County Date of Completion ____ By Contract X

7. Traveled Surface and Shoulders:
By County ____ County Date of Completion ____ By Contract X

8. Clearing:
By County ____ County Date of Completion ____ By Contract X

9. Curbs:
Curbs Required? Yes X No ____
Type Desired ~~Type C~~ Curb & Gutter
(rolled, exposure, monolithic, special county standard, etc.)
Width between curbs 44'

between Commercial Street and Cottage Street in West Union

10. Pedestrian Walkway and Bicycle Trails: Paved shoulders can be used
Are walkways or trails desired? Yes______ No X
If answer is No, which of the following applies?
Contrary to public safety______ Cost excessive to need or use______
Sparse population X Area exempt from bike law______
What is desired width of trail or walkway N/A ft.
What type of surface treatment is desired N/A
(PCC, AC, gravel, pug cold mix)
Will trail or walkway be contiguous to travel lane? Yes______ No______
What type of separation from roadway will be used?______
(curb, guardrail, painted line, median)
Will trail or walkway occupy both sides of roadway? Yes______ No______
(Typical section of pedestrian walkway or bike trail showing relative position in relation to roadway should accompany application.)

11. Are there any structures to be replaced or altered? Yes X No______

12. Will replacement be by: County______ Contract X
(NOTE: If by contract, fill out bridge project data on pages 3 and 4.)

13. Will County adjust structure to new grade? Yes______ No X

14. Will County adjust structure to additional width? Yes______ No X

15. Will adjusted width be standard? Yes X No______
(NOTE: Standard width of structure is traveled way plus full shoulders.)

16. Does County wish rounding of cutbanks? Yes______ No X

17. Does County wish sight posts installed? Yes______ No X

18. Does County wish State to permanently stripe project? Yes______ No X

19. Will County do striping? Yes X No______

20. Does County wish guardrail installed? Yes X No______
By County X Contractor______
(NOTE: Guardrail, as shown on the plans, must be installed before FHWA will accept completed project.)

21. Does County wish permanent erosion control? Yes______ No X
By seeding and mulching Yes______ No______
By rock blanket Yes______ No______
(NOTE: Where temporary erosion control is necessary, it must be done by Contractor.)

22. Can road be closed during construction? Yes______ No X

23. Can through traffic be detoured? Yes X No______

24. Must new detour be constructed? Yes______ No X

25. Will detour be constructed and maintained by County? Yes N/A No ______

26. Will detour be constructed & maintained by Contractor? Yes N/A No ______

27. Will County sign project outside work area during construction? Yes X No ______

28. Will Contractor sign project outside work area during construction? Yes ______ No X

29. Should contract provide for permanent signing? Yes X No ______

30. Should State do permanent signing? Yes ______ No X

31. Will traffic signals be required? Yes ______ No X
If yes, give location and type desired ______

32. Is project contingent upon other factors? Yes ______ No X
(Such as construction and timing, cooperative project by County, tie-in with other projects, etc.)
If yes, explain ______

33. Existing facility - Total top width 18'-22'
Travelway width and surface 18, A.C.
Shoulder width and surface 0-2', Gravel

Remarks re Section I: West Union Road will be realigned to the south side of the railroad tracks and tie into Commercial Street. Glencoe Road will be realigned to the east to eliminate the overcrossing of the railroad tracks and install mechanical gates.

II. BRIDGE PROJECT DATA

1. Name of river or stream McKay Creek

2. Name of bridge West Union Road

3a. Dimensions of existing bridge. Length 165 Roadway Width 19.5 Type A.C.
b. Dimensions of existing approaches. Type A.C. Width 18' Shoulders 0-2'

4. Type of design and material used in existing bridge. Untreated Timber

5. Location (please attach map with location marked): ______
Section 6 Township 1 North Range 2 West W.M.

6. Desired width of proposed bridge 36' Approx. length 150'
(NOTE: Standard width of FAS structure is traveled way plus full shoulders.)

7. Are sidewalks desired? Yes X No ____
Upstream ________ Downstream X Width 4'

8. Does County wish a particular type of bridge design? Yes X No ____
(Such as concrete, steel, or timber structure; concrete, steel, or timber piling; etc.) Concrete w/ concrete piling. Surfacing to be included in project
(NOTE: County must place wearing surface on slab deck structures unless otherwise declared.)

9. Will County furnish any materials for bridge? Yes ____ No X
Explain ________________________________

10. Foundation Testing: By County? Yes ____ No X
By State? Yes X No ____

11. Will County close road during construction? Yes ____ No X

12. Can presently established road be used as detour? Yes X No ____

13. Must a new detour be constructed? Yes ____ No X

14. Will detour be constructed & maintained by County: Yes ____ No X

15. Will detour be constructed & maintained by Contractor? Yes ____ No X

16. Will County sign project outside work area during construction? Yes X No ____

17. Will Contractor sign project outside work area during construction? Yes ____ No X

18. Approaches or Connections: By County? Yes ____ No ____
By Contractor? Yes X No ____
Traveled surface: Type A.C. Width 24
Shoulder surface: Type A.C. Width 4'-6'
(NOTE: Approach fills for pile bent structures must be in place prior to bridge construction.)

19. Are there any side approaches into main roadway within 200 feet of structure? Yes ____ No X

N.W. quadrant distance from structure ____________
N.E. quadrant distance from structure ____________
S.W. quadrant distance from structure ____________
S.E. quadrant distance from structure ____________

20. Guardrail: Desired on approaches or connections: Yes X No

By County X Contractor

	Yes	No
Right side only?		X
Both sides?	X	

(NOTE: Safety standards require that guardrails be attached to and extend continuously from structure railings. Also, County's approach work must be completed immediately so as not to hinder the contractor's guardrail installation or otherwise delay contract completion. Guardrail must be installed before FHWA will accept completed project.)

21. Existing Structure:

	Yes	No
Remain in place?		X
Use for detour?	X	
Removed by County?	X	
Removed by Contractor?		X
Salvaged by Contractor for County?		X

(NOTE: If existing bridge salvaged by Contractor for County, County must pay 100% of salvage value of structure.)

22. If riprap or rock blanket required to be:

	Yes	No
By County?	X	
By Contractor?		X

23. Will any of the following utilities be attached to this structure?

	Yes	No	Size
a. Water mains:		X	
Company			
b. Sanitary sewer mains:		X	
Company			
c. Storm sewer:		X	
Company			
d. Gas mains:	X		4"
Company Northwest Natural Gas			
e. Power lines:		X	
Company			
f. Telephone lines:		X	
Company			
g. Other Utilities:			

	Yes	No
24. Does County wish provisions made for future utility attachment to structure?	X	
25. Does County wish lightpost bases and conduit installed?		X
26. Does County wish complete job of illumination in project?		X
27. Is project contingent upon other factors? (Such as construction and timing, cooperative project by County, tie-in with outside projects, etc.)		X

If yes, explain:

28. Existing roadway on either side of bridge:
N or E Side - Travelway surface and width A.C., $18\frac{3}{}$
Shoulder surface and width Gravel, 0-2'
S or W Side - Travelway surface and width A.C., $18\frac{3}{}$
Shoulder surface and width Gravel, 0-2'

Remarks re Section II:

III. SURVEY DATA

1. Survey, including bridge and railroad vicinity maps, to be done:
   By State? Yes X No
   By Consultant? Yes No X
   By County? Yes No X
   (NOTE: a. If project is cancelled, County must pay for survey.
   b. Early determination of any deviation from standards is essential, so that concurrence by FHWA may be obtained.)

2. Does County have any survey data? Yes X No

3. Construction plans and specifications to be prepared:
   By State? Yes X No
   By Consultant? Yes No X
   By County? Yes No X

4. Does County desire center line to be permanently monumented as part of project? Yes No X

5. Does County desire right-of-way to be permanently monumented as part of project? Yes No X
   (NOTE: Right-of-way monumenting will necessitate special programming.)

Remarks re Section III:

(NOTE: Projects for which Preliminary Survey Plans and Estimates only are requested must be constructed within a five-year period, or all funds expended other than County funds must be refunded to State.)

IV. RIGHT-OF-WAY AND UTILITIES DATA

1. What is width of existing right of way? Maximum 60' Minimum 60'

2. Is any additional right of way needed? (If answer is Yes, a hearing must be offered.) Yes X No ______

3. Will County acquire right of way and have State review negotiations? Yes ______ No X

4. Should State negotiate and acquire right of way in behalf of County? Yes X No ______

5. Should State prepare options? Yes X No ______

6. Should material source site be included in right-of-way descriptions? Yes X No ______

7. Is there any merchantable timber on right of way? Yes ______ No X

8. Will timber be reserved for owner? Yes X No ______
If removed by County or individual, must be done prior advertisment for bids.
If removed by contractor for owner, the County must pay 100% removal costs or pay State value of timber.

9. Will timber become property of contractor? Yes ______ No X

10. Is a hearing necessary? Yes POSSIBLE No ______
(NOTE: If significant amounts of right of way are acquired an opportunity for a hearing must be afforded.)

11. Are there any affected utilities (electric, water, gas, sewer, etc.) on private land? Yes ______ No X
If yes, give type and name of utility company: ______

12. Are there any affected utilities (electric, water, gas, sewer, etc.) on existing right of way? Yes X No ______
If yes, give type and name of utility company: Gas-Northwest Natural Gas Co., Electric-P.G.E., Telephone-Pacific Northwest Bell

13. Are utilities on existing right of way by permit X or by franchise ______
(NOTE: County must move all utilites on present right-of-way.)

14. Are there any irrigation facilities? Yes ______ No X
If yes, give name of irrigation company or district ______
and dates between which water can be turned off: From ______
To ______

15. Are there any railroad crossings? Yes X No ______

16. Name of Railroad Burlington-Northern

17. Number of tracks: Mainline 1 Siding ______ Total 1

18. Sight Distance: Unknown (Left) U nknown (Right)

19. Number of Trains: Passenger ______ Speed ______
Freight 1 Speed 25

20. Angle of Intersection: 80°

21. Type of Existing Crossing: Grade ____ Overcrossing X Undercrossing ____

22. Existing Protection:
Advance warning signs ______ Automatic flashing ______ Stop Signs ______
Crossbucks ______ Automatic bell ______ Gates ______

23. Proposed Protection: Grade crossing with automatic flashing lights and gates

24. Are there to be stopping lanes for buses and trucks, etc.? Yes X No ______

25. Will railroad crossing be altered: Yes X No ______
If yes, specify: crossing will be moved 150' east of existing location

26. Traffic Control Signing:
To be part of project? Yes X No ______
By County? Yes X No ______
By State at County expense? Yes ______ No X
(NOTE: These signs must be in place prior to acceptance.)

27. Striping:
To be part of project? Yes X No ______
By County? Yes X No ______
By State at County expense? Yes ______ No X

28. Does County wish State to prepare P.U.C. hearing date? Yes X No ______

29. Will P.U.C. application be made by State X or County ______?
(NOTE: County must plead or argue its own case at all P.U.C. hearings.)

30. Will there be any displaced persons from farms, homes, or business requiring relocation assistance? Yes X No ______

Remarks re Section IV: One single family residence will be displaced by relocation of West Union Road

V. MATERIAL SOURCES DATA

1. Gravel ____________ Quarry ____________ Cinders ____________
2. Owner: County __________ State __________ Private __________ Other __________
3. Location: ________ Section ________ Township ________ Range ________ W.M.
4. If County lease, what are royalty payments? ____________________
5. Materials furnished by County: Borrow ________ Select Topping ________
   Base Course ________ Level Course ________ Mineral Aggregates ________
   Location ______________________________
   Miscellaneous Items ______________________________

Remarks re Section V: ______________________________

VI. FINANCIAL DATA

1. Estimated Cost: $ 550,000 Fed. 630,000 total
2. Available FAS Funds $ 340,000
3. Does County wish advancement of future Federal funds? Yes X No ____
   Amount $210,000
4. Date match money is available Now
5. Will there be any 100% County money? Yes ____ No X
6. Maximum amount of 100% County money available: $ N/A
7. Date County request letting: Soon

Remarks re Section VI: ______________________________

VII. ACTION PLAN REQUIREMENTS

During project development for Category 1, 2 and 3 projects, the county shall perform and document responsibilities as found indexed on pages 51 and 52 of the Oregon Action Plan, particularly Citizen Involvement and Participation; Environmental Aspects; and Public Hearing Requirements.

The OSHD Region Engineer will provide assistance, liaison, and monitoring for these activities.

Responsible local office and party to be contacted for the following activities:

1.	Citizen Involvement	John F. Crockett, Director of Public Works For Washington County Office
2.	Environmental	" " " Office
3.	Public Hearing	" " " Office

Remarks re Section VII: ______________________________

UNUSUAL OR COMPLICATED CIRCUMSTANCES: ______________________________

This application is the express desire of the County.

This application is not complete without an attached exhibit showing location of project.

By ______________________________
~~County Judge or~~ Comm. Chairman

By ______________________________
County Commissioner

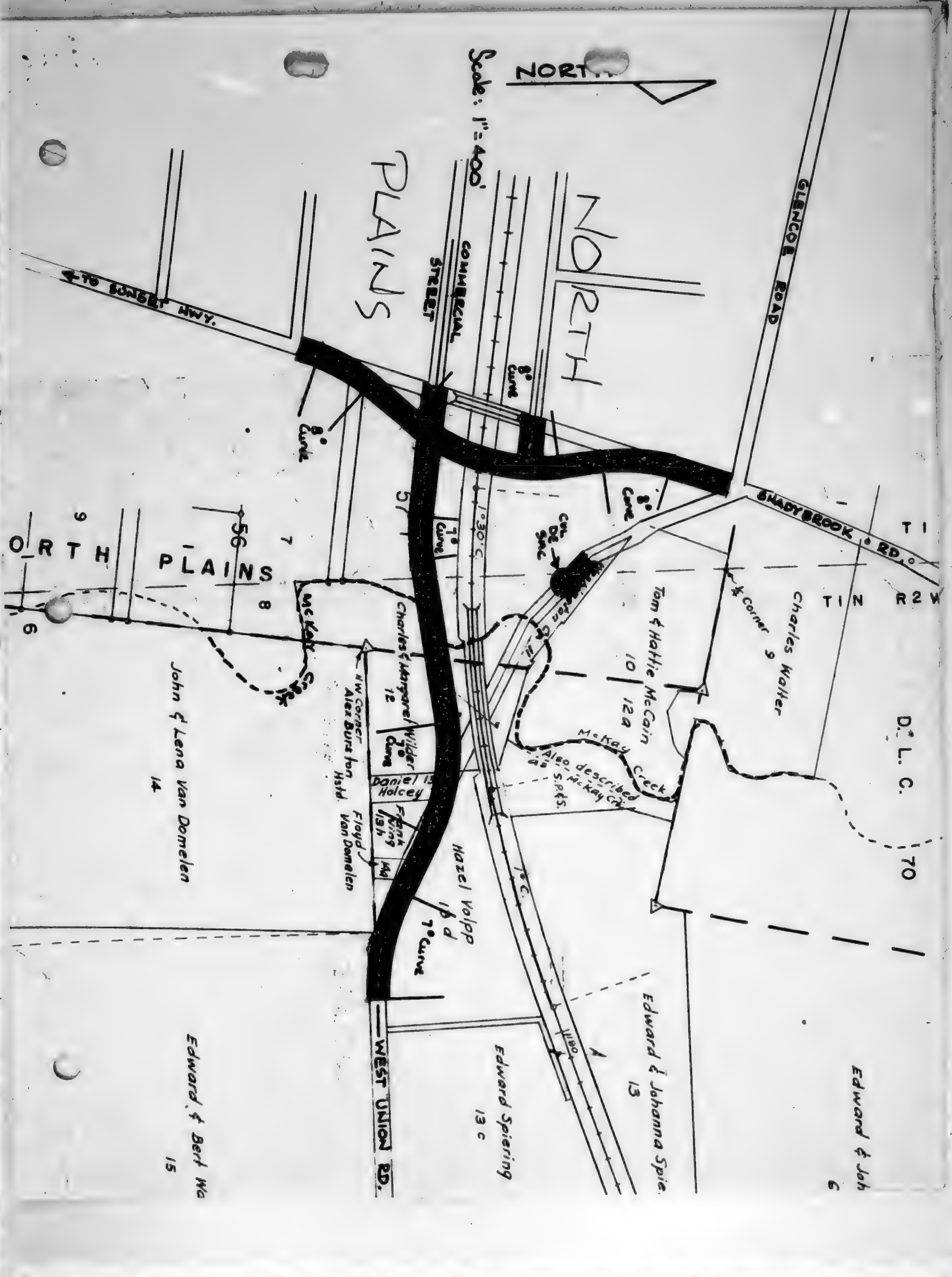
By ______________________________
County Commissioner

By ______________________________
County Engineer of Roadmaster

County WASHINGTON

Date August 2, 1977

APPROVED WASHINGTON COUNTY
BOARD OF COMMISSIONERS
MINUTE ORDER # 77-389
DATE 8-2-77
BY JoAnn Johansen
CLERK OF THE BOARD


NORTH
Scale: 1" = 400'
NORTH
PLAINS
COMMERCIAL STREET
GLENCOE ROAD
TO SUNSET HWY.
SHADYBROOK RD.
T1
T1N R2W
D. L. C.
70
ORTH PLAINS
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8° Curve
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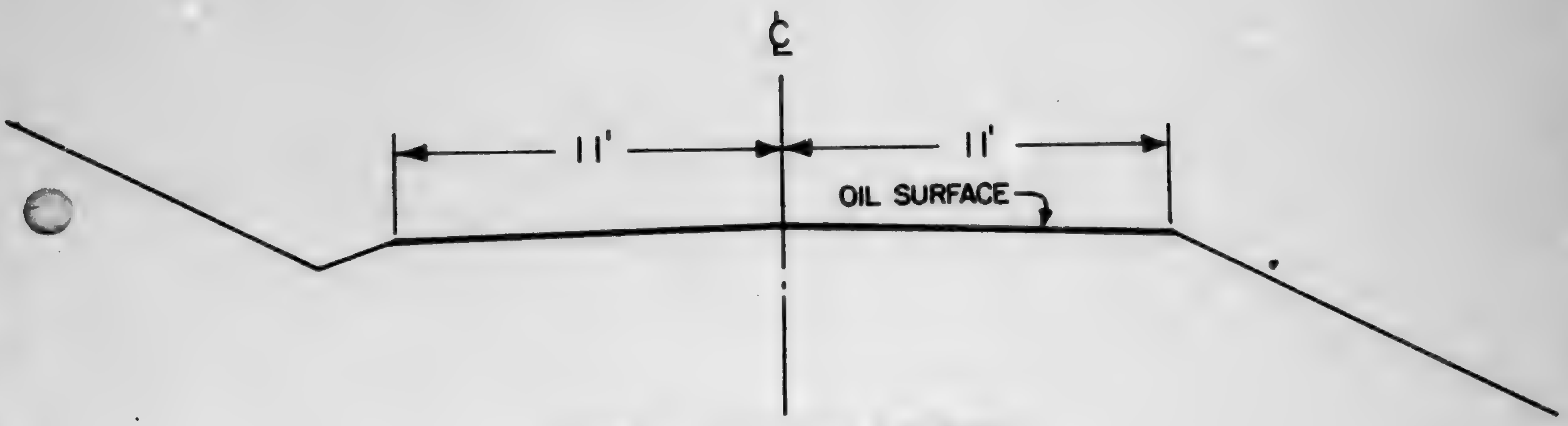
7° Curve
7° Curve
1°30' C.
1° C.
Cor. DC Sec.
McKay Creek
McKay Creek
Also described as McKay Cr.
S. Pts.
¼ Corner
¼ Corner
NW Corner Alex Burston Hstd.
Charles & Margaret Wilder
12
Daniel 13 Holcey
Frank King lish
Floyd Van Domelen
14d
Hazel Volpp
13d
John & Lena Van Domelen
14
Tom & Hattie McCain
10
12A
Charles Walter
9
Edward & Johanna Spie
13
Edward Spiering
13 C
Edward & Bert Wa
15
Edward & Joh
6
1180
WEST UNION RD.

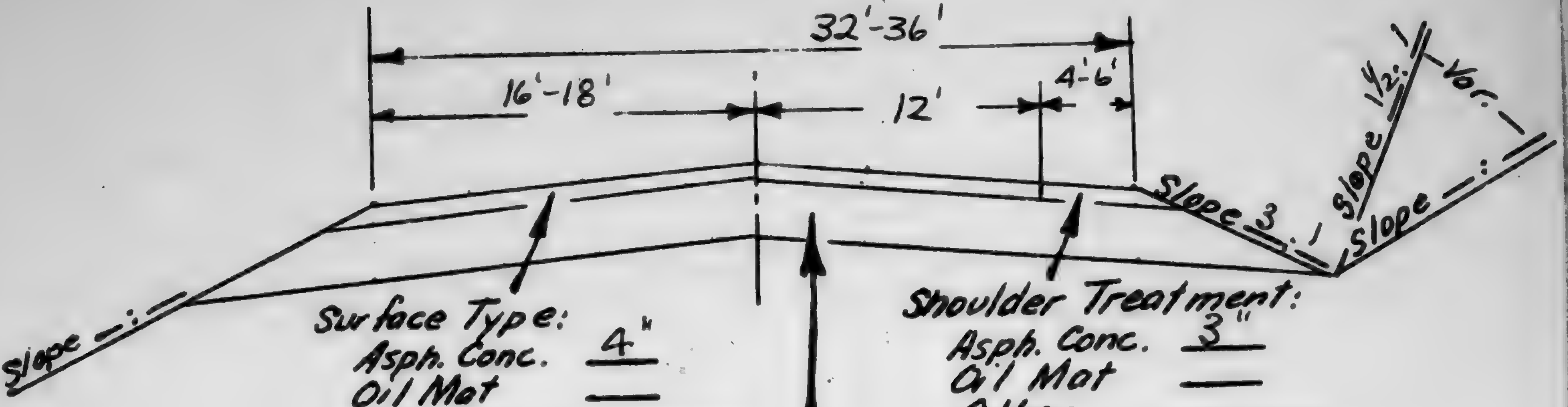
GLENCOE RD. & WEST UNION RD.


℄
11'
11'
OIL SURFACE

TYPICAL EXISTING ROADWAY

TYPICAL SECTION

Glencoe Rd & West Union Rd.



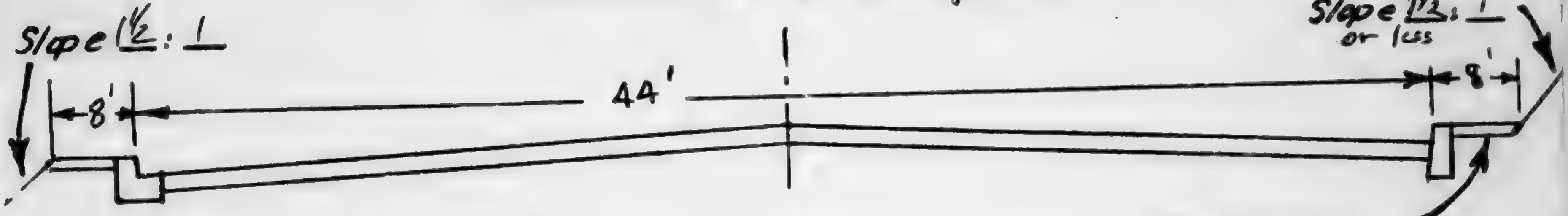
32'-36'
16'-18'
12'
4'-6'
Slope 3 : 1
Slope 1½ : 1
Var.
Slope — : —
Slope — : —

Surface Type:
Asph. Conc. 4"
Oil Mat ___
Other ___

Shoulder Treatment:
Asph. Conc. 3"
Oil Mat ___
Other ___

Type of Base:
Pit or Quarry Run ___
Crushed Stone 14"
Asph. Treated ___
Cement Treated ___

Commercial St to Cottage St.



Slope ½ : 1
8'
44'
8'
Slope ½ : 1 or less

Foot paths:
~~Asph.~~ Conc. X
Gravel ___

No. of Lanes 2
Lane Width 12
Shoulder Width ___ or Shy Dist. from Curb 10'
Median Width ___
Total Width between Curbs 44'

Curbs:
Type "C" ___
Curb & Gutter X
Other ___

9361

2.

PUBLIC UTILITY COMMISSIONER OF OREGON

LABOR & INDUSTRIES BUILDING • SALEM 97310 • Telephone (503) 378- 6659

ROBERT W. STRAUB
GOVERNOR

CHARLES DAVIS
Commissioner

January 13, 1976

Mr. J. E. Chidsey, P.E.
Railroad & Utility Engineer
Oregon State Highway Division
Highway Building
Salem, Oregon 97310

Re: Crossing 8U-21.4-A, Glencoe Road, North Plains

Dear Jim:

This is in response to your letter of January 7th, in which you ask for our reaction to the proposal of Washington County to substitute a crossing at grade for the existing separated crossing of Glencoe Road at North Plains.

The proposal seems reasonable enough, given the circumstances as described by Mr. Meng in his letter of December 22 to Jon Rose. In order to analyze this more thoroughly, however, we should have some idea of current and expected future ADT on Glencoe Road at the crossing. Also, we may wish to make a field investigation at the site.

By a copy of this letter, we request that Washington County furnish current and expected (5-year) future ADT figures for this crossing.

Yours very truly,

Dave

David J. Astle
Assistant Commissioner

RECEIVED
JAN 19 1976
Office of
Assistant State Highway Engineer

DJA:bjm

cc: Kenneth A. Meng, Director of Public Works
D. A. Still
R. A. Mather

xc: R. L. Schroeder
L. W. Rulon
J. L. Sollis
J. B. Boyd
Don Harwell
E. L. Hardt

ORS 756.040(1) The commissioner . . . "shall represent the customers of any public utility, railroad, air carrier or motor carrier, and . . . he shall make use of the jurisdiction and power of his office to protect such customers, and the public generally, from unjust and unreasonable exactions and practices and to obtain for them adequate service at fair and reasonable rates."

9361

~~RCW 18-2~~ L.

bc: R. L. Schroeder
L. W. Rulien
J. L. Sollis
J. B. Boyd
E. L. Hardt
Don Harwell

OREGON STATE
HIGHWAY DIVISION

ROBERT W. STRAUB
GOVERNOR

F. B. KLABOE
Administrator and
State Highway Engineer

January 7, 1976

Mr. David J. Astle
Asst. Commissioner
Rail, Air, Marine Div.
Public Utility Commission
Labor & Industries Bldg.
Salem, OR 97310

Crossing No. 8U-021.40-A
Glencoe Road Overcrossing
Burlington Northern Inc.

Dear Dave:

On December 22, 1975, Mr. Ken Meng, Director of Public Works of Washington County wrote to Mr. Jon Rose, Regional Federal Aid Engineer of the Oregon Highway Division, Region I in Portland, regarding Washington County's application for Federal Aid secondary "G" project concerning the overcrossing of the Burlington Northern Railway on Glencoe Road in the City of North Plains. A copy of this letter was sent to the Public Utility Commission by Mr. Meng's office.

The main point of Mr. Meng's letter was to discuss the investigation made by Washington County for the replacement of the existing wooden overcrossing structure on Glencoe Road with a proposed grade crossing. Mr. Meng reviewed the rational that Washington County used in the justification of this replacement of an overcrossing with a grade crossing.

Our Regional Engineer in the Portland area has asked me to contact you to determine if this project as proposed by Washington County would be acceptable to the Public Utility Commissioner's office. If for some reason you did not receive a copy of Mr. Meng's letter please contact me and I will send over a copy of it for your review. It would be appreciated if you could review this matter and give to me some indication as to the PUC offices' general reaction to this proposal and any requirement you might place upon the implementation of this proposal. If there is any further information I can provide to you in this matter, please contact me.

Yours truly,

J. E. Chidsey, P. E.
Railroad & Utility Engineer

JEC:jk

cc: Mr. Ken Meng
Burlington Northern
City of North Plains

NOTED

RECEIVED
JAN 7 1976
Office of
Assistant State Highway Engineer

Form 81-734-3123

9361.

OREGON STATE
HIGHWAY DIVISION

HIGHWAY BUILDING • SALEM, OREGON • 97310

DATE July 22, 1975

TO Oregon ~~State Highway~~ Transportation Commission

ORIGINAL SIGNED BY
F. B. KLABOE

FROM F. B. Klaboe
State Highway Engineer

AGENDA
JUL 30 1975
4F

SUBJECT **Proposed FAS-C Projects and Cancellations**

Attached are tabulations and maps describing and locating two proposed secondary projects, one in Lane County and the other in Washington County. Also attached are requests for the cancellation of two projects in Washington County.

The project in Lane County is for a bridge over Muddy Creek on Coburg North Road, FAS 20-502. The FAS funds required for this structure are estimated to be approximately $110,000 ($12,000 of which will be the cost to the State).

The project requested by Washington County is for the removal of a separation structure and replacement with automatic signals and gates at the Burlington Northern Railroad crossing on Glencoe Road, FAS 629, in North Plains. It is estimated that this project will cost approximately ~~$50,000.~~ Since this is an FAS-G project, it will be financed 100 percent with Federal funds and there will be no cost to the State.

$120,000 per J. Earley fr

Washington County is also requesting cancellation of two formerly approved FAS-C projects. Both are now within the Portland Urban Area so are not eligible for FAS-C funds. The first is for the Sunset Highway-S.W. 87th Place Section of Barnes Road, FAS 566, and the other is the S.W. Hunziker Street-Lower Boones Ferry Road Section of S.W. 72nd Avenue, FAS 944.

These matters will be on the agenda for the July 30 meeting and I recommend your approval.

bc:
C. W. Head
E. S. Hunter
H. S. Coulter
V. E. Skoog
Alfred Shirley
Jack Graham
George M. Baldwin
R. L. Schroeder
L. W. Rulien
Don Harwell
Ed Hardt
Gary Sund

NOTED
C. W. HEAD

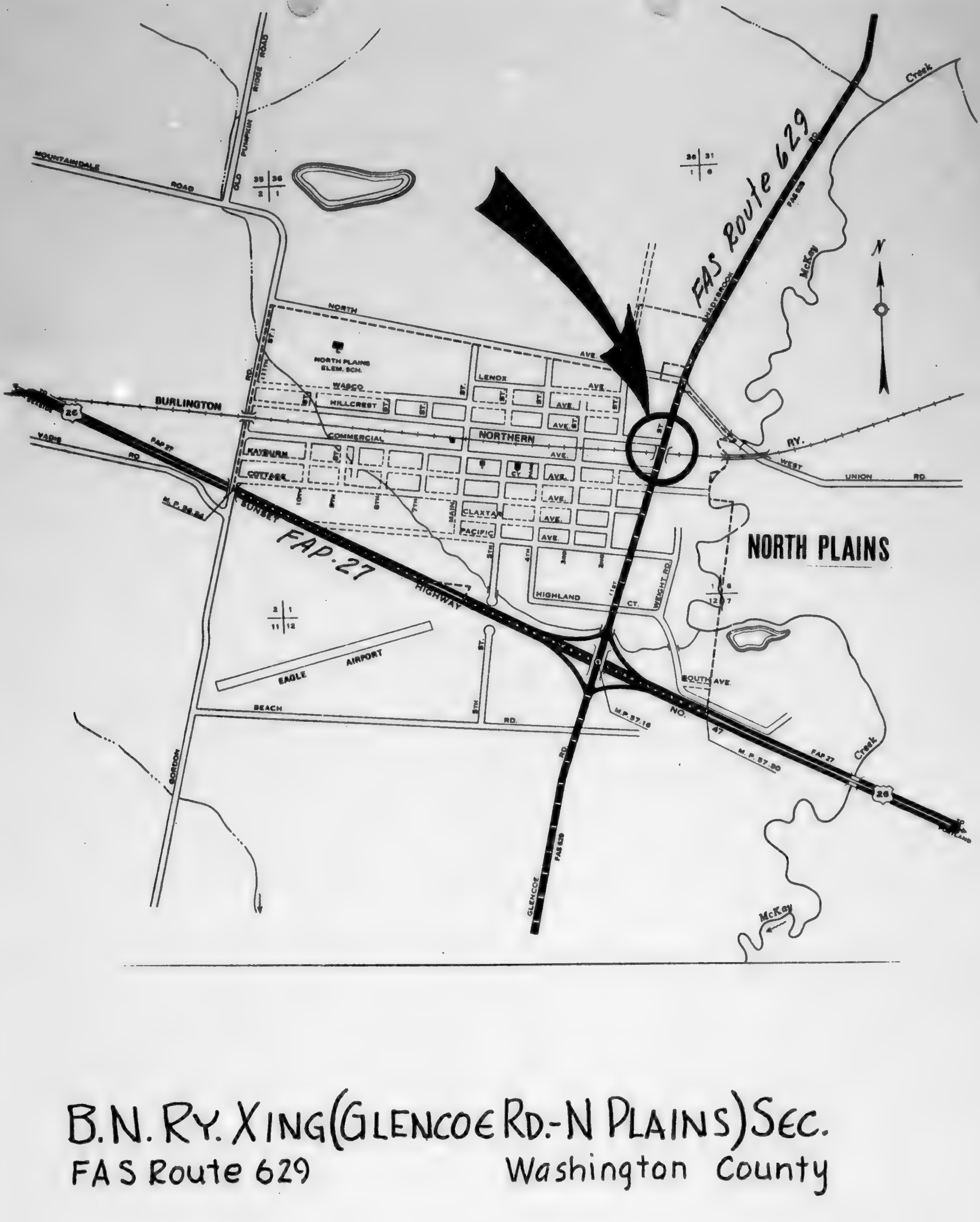
HR:mm srb

WASHINGTON COUNTY
Proposed FAS-G Project

FAS No. 629
Burlington Northern Railroad Crossing
Glencoe Road-North Plains Section
Automatic Railroad Signals
$120,000

Install automatic railroad traffic control signals at subject grade crossing. Signals are to have flashers and drop arm gates, and will be installed by Burlington Northern along with improving the crossing in the area of the rails. County will design and State will award a contract for the approaches and connections from the 40-foot crossing to the existing roadway. The crossing is to have two 12-foot asphaltic concrete travel lanes and 8-foot paved shoulders. The county will get the PUC order. No additional right-of-way is involved.

75-f
7/18/75


FAS Route 629
FAP-27
NORTH PLAINS
N
MOUNTAINDALE ROAD
OLD PUMPKIN RIDGE ROAD
NORTH AVE.
NORTH PLAINS ELEM. SCH.
LENOX AVE.
WASCO
HILLCREST
BURLINGTON NORTHERN RY.
COMMERCIAL
NORTHERN AVE.
KAYBURN
COTTAGE
CLAXTAR
PACIFIC
AVE.
HIGHLAND CT.
WEIGHT RD.
SUNSET HIGHWAY
EAGLE AIRPORT
BEACH RD.
GORDON RD.
GLENCOE RD.
SHADYBROOK RD.
WEST UNION RD.
VADIS RD.
SOUTH AVE.
NO. 47
M.P. 57.16
M.P. 57.80
FAP 27
FAS 629
McKay Creek
McKay
26
35 | 36
2 | 1
36 | 31
1 | 6
2 | 1
11 | 12
1 | 6
12 | 7

B.N. RY. XING (GLENCOE RD.-N PLAINS) SEC.
FAS Route 629 Washington County

1981 Glencoe Rd. & W. Union Rd. 9361
(N. Plains) Sec. of FAS Rts. A685
& A686. (Grad., pav. & struc.) #2

RR 1051	6-18-81, 12-14-81
RR 1077	6-18-81
C&A 6469	4-15-80

9361

WASHINGTON
COUNTY,
OREGON

MSTIP
MAJOR STREETS TRANSPORTATION
IMPROVEMENT PROGRAM

May 2, 1989

Mr. Pete Gonzalez
Billing Section, Contract Accounting
Oregon Department of Transportation
Highway Division
434 Transportation Building
Salem, Oregon 97310-0780

RE: FINAL PAYMENT - GLENCOE ROAD/WEST UNION
AGREEMENT NUMBER FO 3114-02

Enclosed please find payment for the above referenced project. Based on our records, this is the final payment for the project. Accordingly, we would request that the project be closed and that LGIP accounts NO. 12 and No. 19 be closed. Any remaining funds in these accounts will be transferred out by Washington County.

If you have any questions concerning this request, please feel free to contact me at 648-8761, ext. 2840. Thank you for your assistance in this request.

Sincerely,

Jerry Green
MSTIP Project Manager

c: Freda Larmer
Jim Crofts, Finance

Original to Ron & TAR.

5/10/89

JG:ce
JGFINAL

Department of Land Use And Transportation, Administration
150 North First Avenue
Hillsboro, Oregon 97124
Phone: 503/648-8761

WASHINGTON COUNTY FINANCE DIVISION 107457 279682

DATE	P.O. NUMBER	INVOICE NUMBER	AMOUNT	MEMO
05/25/89	A12488	38219	4507.79	FINAL BILLING ON PROJECT,
	Total		$4,507.79	

DETACH THIS PORTION FOR YOUR RECORD

WASHINGTON COUNTY FINANCE DIVISION

EQUAL OPPORTUNITY EMPLOYER 279682

96-651
1232 709

Four Thousand Five Hundred Seven dollars and 79 cents

First National Bank of Oregon Canby, Or.
Subsidiary of U.S. Bancorp
In co-operation with U.S. Bank — Hillsboro Commercial Branch

AMOUNT
$4,507.79

Washington County
Finance Division
150 N. 1st
Hillsboro, OR 97124

VOID AFTER 90 DAYS

DATE	CHECK NO.	PAY TO THE ORDER OF
05/25/89	279682	OREGON STATE HIGHWAY DIVISION 434 TRANSPORTATION BUILDING SALEM OR 97310

AUTHORIZED SIGNATURE

⑈279682⑈ ⑆123206516⑆ 709 0201 737⑈

Oregon Department of Transportation

INVOICE

PAGE NO. 1

BILLING DATE 04/27/89 2:13

REPORT NO. FMBL814-1

TO ENSURE PROPER CREDIT, RETURN THIS FORM WITH YOUR REMITTANCE TO:

OREGON DEPARTMENT OF TRANSPORTATION
434 TRANSPORTATION BUILDING
SALEM OR 97310-0780

WASHINGTON COUNTY
150 N FIRST AVE
HILLSBORO OR 97123

FOR INFORMATION CONCERNING
THIS BILLING CALL:
(503)378-6578

AGENCY	T/C	CURR. DOC.	DOC. DATE	VENDOR NO./SUFFIX	UNIT
02	350	09012	053189	0000292193-00	0523

ACCOUNT	REVENUE SOURCE	AGENCY SOURCE	CUSTOMER AMOUNT DUE	CUSTOMER AMOUNT REMITTED	REV	CUSTOMER REFERENCE
~~RVF01443-000~~	~~844010~~	~~03~~	~~647.65~~			~~F01443-02~~
~~RVF02824-000~~	~~844010~~	~~03~~	~~0.01~~			~~F02824-01~~
RVF03114-000	844010	10	4,507.79			F03114-02
~~RVF03845-000~~	~~844010~~	~~03~~	~~1,365.57~~			~~F03845-01~~
~~RVF04279-000~~	~~844010~~	~~02~~	~~0.01~~			~~F04279-01~~

Construction Engineering

PAID $4507.79
5-31-89 SM

RECEIVED
MAY 1 1989

AMOUNT DUE	$6,521.03

734-1158A(11-88)

9361

OREGON STATE HIGHWAY DIVISION

ITEMIZED STATEMENT OF FINAL COSTS DATE: ~~Juen~~ June 23, 1988 (Rev.)

COUNTY: Washington AGREEMENT NO: 6469 PROJECT NO: RS-A686(1) & RS-A685(2 & 3)

CONTRACT NO: 9361 SECTION: Glencoe Rd. & W. Union Rd.

PRELIMINARY ENGINEERING PREFIX C534-1970:

	PARTICIPATING	NONPARTICIPATING
Project Manager	$ 50,889.80	$ 943.64
Citizen Involvement	1,561.57	63.02
Final Design	17,002.45	
Legal Descriptions	4,395.90	
Region Geology	2,372.39	
Traffic Section	1,468.32	172.38
R/W Liaison	2,446.28	
Region Utility Liaison	2,779.01	
Location Section	4,974.63	
Program Section	226.33	
Specifications	2,611.45	
Administrative Services	91.21	
Environmental Section	5,963.49	172.69
Structural Foundations	8,217.16	39.60
Free Bridge Design	2,773.03	
Training	497.22	
Public Hearing Charges	1,942.36	
Total P.E. Cost	$ 110,212.60 1/	$ 1,391.33 1/

RIGHT-OF-WAY PREFIX C534-2530:

	PARTICIPATING	NONPARTICIPATING
Net Cost Land	$ 1,115.00	$
Appraisals, Witness, & Title Cost	9,367.69	
Recording Fees	321.17	
Negotiation Expense	1,443.29	
Relocation Communication	449.63	
Legal	5.64	
Appraisal Review	505.82	
Payment to Local Government	132,973.66	1.12
Program Section	14.94	
R/W Office Expense	1,430.99	
Training	1,142.18	
Total Right-of-way Cost	$ 148,770.01	$ 1.12

1/ Under Agreement #9361 with Washington County, all P.E. costs will be paid by State.

CONSTRUCTION PREFIX C534-1061:

Work Performed by Contractor	$ 563,224.01	$ 1,800.00
Interest on Final Payment		185.66
State Force Order (Parsons Exc.)	34,057.34	
RR X'ing Signal (SFO #2)	95,483.89	
Field Engineering	91,669.51	2,704.34
Audit Services	880.75	
Program Section	131.21	
Materials Section	8,640.77	
Technical Services	916.74	
Construction Section	1,084.37	
Region Office Charges	139.24	
Accounting	657.14	
Training	675.81	
Total Construction Cost	$ 797,560.78	$ 4,690.00

SUMMARY

Participating R/W Cost	$ 148,770.01
Participating Const. Cost	797,560.78
Total Participating Cost	$ 946,330.79

FEDERAL FUNDS

R/W (88.15%)	$131,140.76	
Const. (88.18%)	703,289.10	(834,429.86)
Subtotal		$ 111,900.93
Less State Share 1/2 Balance		(55,950.46)
Plus Nonparticipating County Cost		4,691.12
Less 1/2 Field Engineering Nonpartic. Cost (State)		(1,352.17)
County's Advance Deposits:		
R/W AD #810	$ 10,695.00	
65% Const. AD #929	36,500.00	
Const. AD #945	13,500.00	(60,695.00)
REFUND DUE COUNTY		$ (1,405.58)

MKS:bkw

9361

534-2530

(ORIGINAL)

FORM APPROVED BY
COMPTROLLER GENERAL,
U.S. MAY 12, 1966

U.S. DEPARTMENT OF TRANSPORTATIO
FEDERAL HIGHWAY ADMINISTRATION

VOUCHER FOR WORK PERFORMED UNDER PROVISIONS OF THE FEDERAL AID AND FEDERAL HIGHWAY ACTS, AS AMENDED

3-23-88

STATE VOUCHER NO.

FHWA VOUCHER NO.

FHWA SCHEDULE NO.

APPROPRIATION

THE UNITED STATES, DR., TO *(Insert official or depository named in project agreement)*
Treasurer of the State of Oregon

ADDRESS
Capitol Building
Salem, OR 97310

PAID BY
(For use of Paying Office)

STATE
Oregon

VOUCHER TYPE *(Check Appropriate Block)*
☐ CURRENT BILLING
☐ OTHER PROGRESS
☒ FINAL VOUCHER (*)

VOUCHER PERIOD
FROM 8/21/80
TO 8/06/87

FEDERAL AID PROJECT NO.
RS-A685(2)

(*) Use Form FHWA-1447 for Final Voucher for a project constructed under certification acceptance or secondary road procedures (23 U.S.C. 117).

	TOTAL ACTUAL COST	TOTAL PARTICIPATING COST	PRO-RATA OF PARTICIPATING COST CLAIMED FROM U.S.	TOTAL AMOUNT CLAIMED FROM U.S.	LESS PREVIOUS PAYMENTS	NET AMOUNT CLAIMED
ROW 075	$148,885.21	$148,770.01	.8815	$131,140.76	$131,140.76	$ 0.00

I certify that the costs shown in this voucher have been incurred in accordance with terms of project agreements; applicable State and Federal laws or regulations; and that no claim has previously been submitted for costs claimed.

STATE HIGHWAY AGENCY	DATE	SIGNATURE OF AUTHORIZED OFFICIAL
Oregon	3/23/88	Asst. Controller

I certify that supporting records for costs claimed, and the referenced project (if applicable), have been subjected to required reviews, approvals and inspections by the Federal Highway Administration and that the amount approved is justly due.

AMOUNT SUBMITTED $ 0.00
ADJUSTMENTS
AMOUNT APPROVED

SIGNATURE OF FHWA REPRESENTATIVE
(SIGN ORIGINAL ONLY)

DATE APPROVED

FORM PR-20
(REV. 5-78)

PREVIOUS EDITIONS ARE OBSOLETE

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

ITEM NO.	ITEM	QUANITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (Payee must not use this column)
	GLENCOE ROAD - WEST UNION ROAD (NORTH PLAINS)					
	WASHINGTON COUNTY					
	Type Code ROW Right-of-Way					
	Right-of-Way	All Required			$ 120,416.00	
	Acquisition Expense					
	State	All Required			14,681.35	+ 194.59
	County	All Required			13,672.66	+7682.48
					$ 28,354.01	
	TOTAL PARTICIPATING COSTS				148,770.01	
	Non-Participating Costs					
	Acquisition Expense	All Required			$ 115.20	-1.12
	TOTAL COSTS				$ 148,885.21	

Totals are as of the FHWA Billing voucher dated August 6, 1987. Revised R/W plans were approved by FHWA on July 24, 1987.

Participating R/W costs are for R/W actually incorporated into the final project, and all costs have been previously certified by the R/W Engineer.

AMOUNT CARRIED FO[illegible]RD ....

☆U.S. Government Printing Office: [illegible]

9361

- BOB FOWLER

534-1061

(ORIGINAL)

FORM APPROVED BY
COMPTROLLER GENERAL,
U.S. MAY 12, 1966

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

VOUCHER FOR WORK PERFORMED UNDER PROVISIONS OF THE FEDERAL AID AND FEDERAL HIGHWAY ACTS, AS AMENDED

3-5-85

No PAW VOUCHER

STATE VOUCHER NO.

FHWA VOUCHER NO.

FHWA SCHEDULE NO.

APPROPRIATION

THE UNITED STATES, DR., TO (*Insert official or depository named in project agreement*)
Treasurer of the State of Oregon

ADDRESS
Capitol Bldg.
Salem, OR 97310

PAID BY

(*For use of Paying Office*)

STATE
Oregon

VOUCHER TYPE (*Check Appropriate Block*)
☐ CURRENT BILLING
☐ OTHER PROGRESS
☒ FINAL VOUCHER (*)

VOUCHER PERIOD
FROM 8-26-81
TO 3-30-84

FEDERAL AID PROJECT NO.
RS-A685(3)

(*) *Use Form FHWA-1447 for Final Voucher for a project constructed under certification acceptance or secondary road procedures (23 U.S.C. 117).*

TOTAL ACTUAL COST	TOTAL PARTICIPATING COST	PRO-RATA OF PARTICIPATING COST CLAIMED FROM U.S.	TOTAL AMOUNT CLAIMED FROM U.S.	LESS PREVIOUS PAYMENTS	NET AMOUNT CLAIMED
$802,250.78	$797,560.78	.8818	$703,289.10	$703,289.10	$ 0.00

I certify that the costs shown in this voucher have been incurred in accordance with terms of project agreements; applicable State and Federal laws or regulations; and that no claim has previously been submitted for costs claimed.

STATE HIGHWAY AGENCY	DATE	SIGNATURE OF AUTHORIZED OFFICIAL
Oregon	3-5-85	Controller

I certify that supporting records for costs claimed, and the referenced project (if applicable), have been subjected to required reviews, approvals and inspections by the Federal Highway Administration and that the amount approved is justly due.

AMOUNT SUBMITTED $ 0.00
ADJUSTMENTS
AMOUNT APPROVED

SIGNATURE OF FHWA REPRESENTATIVE
(SIGN ORIGINAL ONLY)

DATE APPROVED

FORM PR-20
(REV. 5-7

PREVIOUS EDITIONS ARE OBSOLETE

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

ITEM NO.	ITEM	QUANITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (Payee must not use this column)
	GLENCOE RD. & WEST UNION RD. (NORTH PLAINS) County Road Washington County					
	Construction					
	Type Code 6201 (Sta. 102+50 to Sta. 119.00)					
	Roadway					
	Formal Contract Payment Summary	Lump Sum			441,350.61	
SFO	#3 Grading and paving to revise intersection					
	(Work by State)	All Required			1,375.19	
	(Work by Parsons Excavating)	All Required			32,682.15	
	Total Participating Type Code 6201				$475,407.95	
	Type Code X081					
	Structure Br. #1 3033A (Sta. 19+34 to Sta. 20+36 on West Union Road					
	Formal Contract Payment Summary	Lump Sum			121,873.40	
	Type Code Y018					
	R.R. X'ing Signal					
SFO	#2 Prepare plans for and furnish & install automatic traffic control devices (BNR)	All Required			95,483.89	
	Total Participating Construction				$692,765.24	
	Construction Engineering					
	State	All Required			$103,914.79	
	Misc. Project Cost					
	Audit Expense	All Required			880.75	
	Total Participating Project Cost				797,560.78	
	Nonparticipating Project Cost					
	Formal Contract Payment Summary	Lump Sum			1,800.00	
	Interest on Final Payments	All Required			185.66	
	Construction Engineering (State)	All Required			2,704.34	
	Total Nonparticipating Project Cost				4,690.00	
	Total Project Cost				$802,250.78	
	Prepared based on Participating Costs as shown on the Federal Billing as of 3-7-85.					
	AMOUNT CARRIED FORWARD					

801
BILLING NUMBER 48

OREGON STATE HIGHWAY DIVISION
FHWA BILLING VOUCHER

06/13/85

PREFIX	GRP FL	FED AID PROJ APPR	AGREEMENT AMOUNT	TOTAL COSTS TO DATE	PARTIC. AMOUNT	% OF PARTIC.	FEDERAL SHARE	AMOUNT PREV. CLAIMED	ADJUSTMENT AND CODE	AMOUNT OF THIS VOUCHER
528-1058	1#	RS -B440-001 APPR-075	54,777.93	62,208.54	62,141.73	88.15	54,777.93	54,777.93		
529-1006	1#	RS -A727-002 APPR-075	437,164.37	496,515.47	495,932.35	88.15	437,164.37	437,164.37		
529-1014	1L	BRS -A722-002 APPR-114	337,639.00	340,951.60	340,840.17	80.00	272,672.14	337,639.00	759.14 B 65,726.00 L	
529-1020	1	BRS -A727-004 APPR-114	81,898.00	94,477.89	94,477.89	80.00	75,582.31	75,582.31		
530-1007	1	RRS -B574-001 APPR-138	98,573.00	10,305.26	10,305.26	90.00	9,274.73	4,266.73		5,008.00
530-1008	1	RRS -B572-001 APPR-138	110,720.00			90.00				
530-1010	1	RRS -B574-002 APPR-138	73,911.00	22.22	22.22	90.00	20.00	20.00		
530-1075	1	RS -B571-002 APPR-075	566,924.00	604,371.77	604,281.64	88.18	532,855.55	532,855.55		
530-1096	1	BRS -B573-003 APPR-114	78,811.00	123,074.21	123,074.21	80.00	98,459.37	78,811.00	19,648.37 B	
	2	BROS-3000-008 APPR-114	53,359.00	33,191.25	33,191.25	80.00	26,553.00	26,553.00		
530-1096		PREFIX TOTALS	132,170.00	156,265.46	156,265.46		125,012.37	105,364.00	19,648.37	
530-1098	1	RRS -B573-001 APPR-138	127,432.00	65,253.95	65,253.95	90.00	58,728.56	58,728.56		
531-1002	1#	RRS -B618-002 APPR-138	116,309.14	129,422.29	129,232.38	90.00	116,309.14	116,309.14		
531-1021	1	BRS -B619-004 APPR-114	208,626.00	249,654.88	249,447.64	80.00	199,558.11	199,555.94		2.17
532-1054	1	BRS -B636-002 APPR-114	106,930.00	130,749.83	130,749.83	80.00	104,599.86	104,599.86		
533-1033	1#	BRS -B407-002 APPR-118	150,425.02	188,313.65	188,031.28	80.00	150,425.02	150,425.02		
534-1001	1	BRS -A685-005 APPR-114	158,836.00	203,816.48	187,501.46	80.00	150,001.17	150,001.17		
534-1004	1	BRS -A690-002 APPR-114	152,000.00	188,562.15	188,541.02	80.00	150,832.82	150,832.82		
534-1024	1	BRM -9032-001 APPR-118				80.00				
534-1059	1#	HES -A663-001 APPR-141	52,087.65	57,908.47	57,875.17	90.00	52,087.65	52,087.65		
534-1061	1#	RS -A685-003 APPR-075	703,289.10	802,336.78	797,560.78	88.18	703,289.10	703,289.10		
534-1097	1	BRS -A677-004 APPR-114	249,183.00	305,762.96	304,849.22	80.00	243,879.38	243,879.38		
536-1024	1#	RS -A696-001 APPR-075	490,637.85	557,380.42	556,594.27	88.15	490,637.85	490,637.85		
536-1096	1	RS -A563-002 APPR-075	432,013.00	20,189.59	20,154.63	88.15	17,766.31	12,691.97		5,074.34
601-1011	1#	I -8406-002 APPR-042	36,850.44	46,719.27	39,959.27	92.22	36,850.44	36,850.44		

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                                534  1059     900      00 P 1                                              131.16      21    22
                                534  1059     920      00 P 1                                               67.00      21    21
                                534  1059     940      00 P 1                                                 .92      22    22
                                534  1059     941      00 P 1                                               65.53      21    22
                                534  1059     944      OC P 1                                              257.60      21    23
                                534  1059     945      00 P 1                                              424.78      21    24
                                534  1059     948      00 P 1                                               12.15      23    23
                                              TOT      P1                                               57,875.17
                                              TOT      N1                                                   33.30
                                        ** JOB TOTALS **                  **                  **        57,908.47  **

                                                                                                                  STATE
GLENCOE RD&WEST UNION RD     CONT NO 9361   FA PROJ NOS RS  A685002 100
                                534  1061     201      00 P 1                                          563,224.01      21    23
                                534  1061     201      00 N 1                                            1,200.00      22    22
                                534  1061     205      02 P 1                            1,023.72                      23    24
                                534  1061     206      00 N 1                                              185.66      23    23
                                534  1061     220      03 P 1                           74,057.74       74,057.74      24    25
                                534  1061     240      02 P 1                           21,564.49       95,483.29      23    24
                                534  1061     270      02 P 1                           59,643.20CR    753,289.10CR    21    25
                                534  1061     296      00 N 9                                           60,000.00      21    24
                                534  1061     297      00 N 9
                                534  1061     298      00 N 9                           59,643.20      753,289.10      21    25


ACCOUNT SUMMARY - EXPENDITURES & LEDGERS                                  MAY 1985           PAGE  442
                                                                            FISCAL          GRAND TOTAL      ACTIVE YRS
        DESCRIPTION             PREFIX  FUNCTION SUB F.  GP  CURRENT MONTH   YEAR TO DATE      TO DATE         BEG   END
                                534  1061     900      00 P 1                           10,111.71       91,669.51      81    85
                                534  1061     900      00 N 1                            [illegible].81CR   2,[illegible].34   82    85
                                534  1061     915      00 P 1                              880.75          880.75      84    84
                                534  1061     920      00 P 1                                              171.21      81
                                534  1361     940      00 P 1                                            5,166.14      81
                                534  1061     941      00 P 1                                              956.68      81
                                534  1061     942      00 P 1                                            2,4[illegible].95      81
                                534  1061     944      00 P 1                                              916.74      81
                                534  1061     945      00 P 1                                            1,084.37      81    83
                                534  1061     946      00 P 1                                              139.24      81
                                534  1061     948      00 P 1                                              657.14      81
                                534  1061     950      00 P 1                                              675.81      81    83
                                              TOT      P1                           67,636.01      791,560.78
                                              TOT      N1                            [illegible].81CR   4,[illegible].00  4690
                                        ** JOB TOTALS **                  **        59,960.20  **  ~~802,336.78~~  **
                                                                                                 862,250.78
                                                                                                                 STATE
TUALATIN R BR #1335          CONT NO 9727   FA PROJ NOS BRS A677004 100
                                534  1097     201      00 P 1                           23,047.37      250,878.75            84
                                534  1097     204      00 P 1                            5,191.5[illegible]     6,200.00CR            84
                                534  1097     296      00 N 9      13.31CR              40,277.31CR    249,250.24CR    83    85
                                534  1097     297      00 N 9                            8,774.89       55,310.86      83    84
                                534  1097     298      00 N 9      13.31                31,503.42      243,[illegible].38            85
                                534  1097     900      00 P 1                            2,737.01       48,060.62
                                534  1097     900      00 N 1                                [illegible]          91[illegible].74
                                534  1097     203      00 P 1                              202.[illegible]
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                                                                              FISCAL               GRAND TOTAL
DESCRIPTION               PREFIX  FUNCTION SUB F. GR  CURRENT MONTH        YEAR TO DATE          TO DATE

                                                                                                              STATE
PLUM CRK(BETH RD)BR SEC     CONT NO        FA PROJ NOS RS  A549003 100
                              527    2518      296      00 N 9       799.33CR          3,115.29CR          3,115.29CR
                              527    2518      298      00 N 9       799.33            3,115.29            3,115.29
                              527    2518      407      00 P 1         8.78CR          1,967.63            1,967.63
                              527    2518      412      00 P 1        28.12              485.93              485.93
                              527    2518      414      00 P 1       124.72              758.98              758.98
                              527    2518      430      00 P 1         2.83              439.11              439.11
                              527    2518      930      00 P 1        21.16               50.48               50.48
                                               TOT      P1           168.05            3,702.13            3,702.13
                                          ** JOB TOTALS **           168.05   **       3,702.13   **       3.702.13   **

                                                                                                              STATE
NESTUCCA RV(WOODS)BR SEC    CONT NO        FA PROJ NOS BRS A729002 100
                              529    2513      296      00 N 9       830.96CR            830.96CR            830.96CR
                              529    2513      297      00 N 9       360.00              360.00              360.00
                              529    2513      298      00 N 9       470.96              470.96              470.96
                              529    2513      407      00 P 1         9.07              113.33              113.33
                              529    2513      412      00 P 1       471.31              471.31              471.31
                              529    2513      414      00 P 1        79.75              114.19              114.19
                              529    2513      930      00 P 1        14.31               14.31               14.31
                                               TOT      P1           574.44              713.14              713.14
                                          ** JOB TOTALS **           574.44   **         713.14   **         713.14   **

                                                                                                              STATE
GLENCOE RD-W UNION RD       CONT NO        FA PROJ NOS RS  A685002 100
                              534    2530      296      00 N 9                         1,941.01CR        119,813.05CR
                              534    2530      297      00 N 9                           120.01            8,739.92
                              534    2530      298      00 N 9                         1,821.00          111,073.13
                              534    2530      401      00 P 1                                             1,115.00
                              534    2530      407      00 P 1         4.58CR          1,049.03            8,777.31
                              534    2530      412      00 P 1                                               321.17
                              534    2530      414      00 P 1                                             1,443.29
                              534    2530      415      00 P 1                                               449.63
                              534    2530      426      00 P 1          .44                5.64                5.64
                              534    2530      430      00 P 1         1.43CR            316.84              505.82
                              534    2530      903      00 P 1                                           111,453.00
                              534    2530      920      00 P 1                                                14.94
                              534    2530      930      00 P 1                                               768.03
                              534    2530      950      00 P 1         3.10CR            685.86            1,142.18
                              534    2530      960      00 N 1                                               114.08
                                               TOT      P1             8.67CR          2,057.37          125,996.01
                                               TOT      N1                                                   114.08
                                          ** JOB TOTALS **             8.67CR**        2,057.37   **     126,110.09   **

                                                                                                              STATE
MCKAY CR&OVERFLOW BR        CONT NO        FA PROJ NOS BPS A685006 100
                              534    2542      296      00 N 9                            57.79CR          9,368.80CR
                              534    2542      297      00 N 9                                             1,742.03
```

1361

9361

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rll

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. RS-A685(3)

2. STATE PROJECT NO. See Below

2A. COUNTY NAME Washington

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 80233

6. TO

11-7-84

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 8/8/84

8. FEDERAL ROUTE NUMBER Secondary A685

9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION:

Glencoe Road - West Union Road (North Plains)

11. GENERAL DESCRIPTION OF WORK

Grade and pave to revise intersection

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

- ☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
- ☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
- ☐ ACQUISITION OF RIGHT-OF-WAY
- ☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
- ☒ CONSTRUCTION PROCEED ON XXXXXXXXXXXXXXX FORCE ACCOUNT BASIS
- ☐ OTHER *(Specify)*

13. REMARKS

Contingent upon modification of Project Agreement if additional funds are required, I approve the advance authorization date of 8/8/84 as requested in Mr. Fredrickson's letter of 10/31/84 as being cost effective for the use of State forces to proceed with the above work. State Force Order No. 3 is approved for a TEC of $25,774; Federal Funds $22,693.

RECEIVED
STATE HWY ENGR
NOV 8 '84
REFER TO
Potter
FOR

Info	Imc	R/D	D/R	Sign	Act	File

14. DATE 11/7/84

15. SIGNATURE OF APPROVING OFFICIAL G. K. Hessner

16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)

PREVIOUS EDITIONS MAY BE USED

9361

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

STATE COPY

FINAL ACCEPTANCE REPORT

9361

3-22-84

7

REGION NO. 10	REPORT NO.	COUNTY Washington	DIVISION Oregon
DATE OF REPORT March 22, 1984	REPORT MADE BY C.O.Fredrickson,Construction Engineer		PROJECT NO. RS-A685(3)
COMPLETION DATE September 13, 1982	ACCEPTANCE DATE BY CONTRACT AGENCY June 1, 1983	TIME ELAPSED 100 %	CONTRACT TIME 350 CD
APPROVED EXTENSIONS	LOCATION Glencoe Road and West Union Road (North Plains) Section of FAS Routes A685 and A686.		

*The PR-47, Statement of Materials and Labor Used by Contractors on Highway Construction Involving Federal Funds, has been submitted.

*A copy of the State's materials certificate is attached to the Division office copy of this report.

There is compliance with section 1.23 of the Regulations pertaining to encroachments on the right-of-way.

RECEIVED
STATE HWY ENGR
APR 2 '84
REFER TO
Fredrickson
FOR
Info Inves R/D D/R Sign Act File

cg 4/3

REMARKS: *The project has been completed in reasonably close conformity with the approved plans and specifications including authorized changes and extra work.*

1. Description of Improvement as Programed:

   A. Construction of highway roadbed, cement treated base and asphalt concrete pavement.

   B. Construction of Bridge No. 13033A over McKay Creek.
   Length: 102 feet. Width: 31.2 feet.

   C. Performance of such additional and incidental work as is called for by the specifications and plans.

2. Contractor's Name: Dirt & Aggregate Intch., Inc.

NOTED
W. E. SCHWARTZ

3. Contract Amount: $568,383.25

4. CERTIFICATION: I certify that the above listed project was completed as programed and in accordance with the procedures and standards contained in the State's approved Certification Acceptance Agreement. Final acceptance by the Federal Highway Administration is requested.

Signature (SHD Official) ____________________

Title Acting Construction Engineer

*NOTE: Not applicable for direct federal projects.

ACCEPTANCE OF PROJECT IS RECOMMENDED		ACCEPTED BY FEDERAL HIGHWAY ADMINISTRATION	
SIGNATURE Thomas P. Lowe		SIGNATURE Original Signed By G. K. HOSSNER Field Operations Engineer G. K. Hossner	
TITLE Area Engineer	DATE 3/26/84	TITLE Field Operations Engineer	DATE 3/30/84

FORM FHWA-1446 B (12-73) FORMERLY PR-33E

Previous Editions of PR-33E Will Not Be Used.

9361

3

September 26, 1983

United Pacific Insurance Co.
Bond Department
33405 8th Avenue So. C-3000
Federal Way, WA 98003

CON 3
#9361

Gentlemen or Ladies:

A second post-final payment for $1,320 will be made to Dirt & Aggregate Interchange, Inc. on Contract No. 9361 for work on the Glencoe Road & West Union Road (North Plains) Section of FAS A685 and A686 in Washington County as soon as the warrant is prepared.

The total amount paid on this contract will be $565,024.01 including the second post-final payment. Of the total $2,926.54 is for force account.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

cc: Dirt & Aggregate Interchange, Inc.
20905 NE Sandy Blvd.
Troutdale, OR 97060

bc: C. T. Kensey
Walt Hart
E. L. Hardt

NOTED ON CARD
9-26-83 Kjm

9361

5

September 8, 1983

United Pacific Insurance Co.
Bond Department
33405 8th Ave. So. C-3000
Federal Way, WA 98003

CON 5
#9361

Gentlemen or Ladies:

A post-final payment for $3,354.28 will be made to Dirt & Aggregate Interchange, Inc. on Contract No. 9361 for work on the Glencoe Road & West Union Road (North Plains) Section of FAS A685 and A686 in Washington County as soon as the warrant is prepared.

The total amount paid on this contract will be $363,704.01 including the post-final payment. Of the total $2,926.54 is for force account.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

kjm

cc: Dirt & Aggregate Interchange, Inc.
20905 NE Sandy Blvd.
Troutdale, OR 97060

bc: C. T. Keasey
Walt Hart
E. L. Hardt

9361

S

6-3-83

REPORT OF ACTION UNDER DELEGATED AUTHORITY BY
ASSISTANT STATE HIGHWAY ENGINEER

On behalf of the Commission and under delegated authority, the following contracts were accepted as being completed according to specifications:

Contractor and Contract No.	Section and County	Acceptance Date
Cascade Const. Co., Inc. No. 9368	Lake Rd. @ Oatfield Rd./34th (Milwaukie) & Oatfield Rd. @ SE Aldercrest Dr. Clackamas Co.	June 1, 1983
Dirt & Aggregate Intche., Inc. No. 9361	Glencoe Rd. & W. Union Rd. (North Plains) Washington Co.	June 1, 1983
Fabricators, Inc. No. 9297	Cape Cr. Tunnel-Sutton Lake Lane Co.	June 10, 1983
Hertz Electric, Inc. No. 9531	Pac. Hwy. W. @ N. Killingsworth St. (Portland) Multnomah Co.	June 20, 1983
Gervais Const., Inc. No. 9306	Ash Creek Bridge #4599A Polk Co.	June 21, 1983
Tice Electric Co. No. 9510	Columbia River Br. (N & S Channels) Mult. Co., Oregon & Clark Co., Wash.	June 27, 1983
Gresham Paving, Inc. No. 9404	Denny Rd.-Hart Rd. (Beaverton) Washington Co.	June 27, 1983

June 30, 1983

W. E. Schwartz, P.E.
Asst. State Highway Engineer

RECEIVED
STATE HWY ENGR
JUL 20 '83
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

NOTED
W. E. SCHWARTZ

9361

8

June 9, 1983

United Pacific Insurance Company
Bond Department
33405 8th Ave. So. C-3000
Federal Way, WA 98003

CON 5
#9361

Gentleman:

On June 3, 1983, we wrote to you concerning release of final payment on Contract No. 9361 awarded to Dirt & Aggregate Interchange, Inc. for work on the Glencoe Rd. & West Union Rd. (North Plains) Section of the FAS A685 & A686 Highway in Washington County.

Final payment on this contract is $5,157.15. The total contract amount is $560,476.49. No work was performed under force account.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

ks

cc: Dirt & Aggregate Interchange, Inc.
20905 N.E. Sandy Blvd.
Troutdale, OR 97060

bc: C. T. Kessey
Walt Hart
E. L. Hardt

9361

FORM 734-3001

FIELD ENGINEER'S WEEKLY REPORT

OREGON STATE HIGHWAY DIVISION

FOR CONSTRUCTION PROJECTS ONLY
CONSTRUCTION AND BRIDGE SECTION

SECTION: Glencoe Road & West Union Road (North Plains)

WEEK ENDING: October 23, 1982

SECTION PREFIX: 534-1061

HIGHWAY: FAS A685 & A686

COUNTY: Washington

NAME OF JOB:

KIND OF WORK: Grading, Paving and Structure

CONTRACTOR: Dirt & Aggregate Interchange, Inc.

CONTRACT NUMBER: 9361

FEDERAL AID PROJECT NUMBER: RS-A685(3)

DATE OF CONTRACT: September 17, 1981

DATE WORK STARTED: September 23, 1981

ESTIMATED COMPLETION DATE:

AVERAGE FORCE ON PROJECT FOR THE WEEK:
MEN: 0 SUPERVISION: 0

SPECIFIED WORK DAYS:

WORK DAYS USED:

SPECIFIED CALENDAR DAYS: 350

CALENDAR DAYS USED: 350

SPECIFIED COMPLETION DATE:

PERCENT OF TIME ELAPSED: 100

PROJECT AUTHORIZATION: $818,883.49

EXCLUSIVE OF ENGINEERING: $754,950.00

ESTIMATED COST OF COMPLETED PROJECT, EXCLUSIVE OF ENGINEERING: $712,431.10

ESTIMATED PERCENT: XXXXXXX UNDERRUN . . . . 6 %

ENGINEERING AUTHORIZATION $ 64,933.40

THIS WEEK 1,000.00

ENGINEERING COST TO DATE $ 54,000.00

PERCENT OF AUTHORIZATION . . . . . 84 %

PERCENT OF CONTRACT COMPLETED BASED ON ESTIMATED COST: 100

PERCENT OF CONTRACT COMPLETED BASED ON TOTAL AUTHORIZATION: 94

DATE PROJECT WAS COMPLETED: September 13,1982

ESTIMATED PERCENT COMPLETE (ROADWORK)

CLEARING	DRAINAGE	GRADING	BASE	OIL AND/OR PAVE.	MAT'L. PROD.		
100	100	100	100	100			

	GRADING	SURFACING	MAINTENANCE MATERIALS	OIL & BITUMINOUS MACADAM	PAVING
MILES IN PROJECT					
MILES PARTIALLY COMPLETED					
MILES COMPLETED					
TOTAL ESTIMATED QUANTITIES (CONTRACT)	22,900 CY	6,380 Ton			2,400 Ton
TOTAL QUANTITIES CORRECTED TO DATE	20,800 CY	6,340 Ton			2,490 Ton
ESTIMATED QUANTITIES MOVED OR PLACED TO DATE	20,800 CY	6,340 Ton			2,490 Ton
AVERAGE DAILY QUANTITIES					
AVERAGE DAILY QUANTITIES NECESSARY TO COMPLETE PROJECT ON TIME					
NUMBER OF SHIFTS PER DAY					
HOURS PER SHIFT					

EQUIPMENT USED DURING THE WEEK:

ESTIMATED PERCENT COMPLETE (STRUCTURES)

BRIDGE NO.	13033A							
PERCENT	100							

	WEATHER	WORK DAYS CHARGED	HOURS DELAY	CAUSE OF DELAY
SUNDAY 17		0		
MONDAY 18		0		
TUESDAY 19		0		
WEDNESDAY 20		0		
THURSDAY 21		0		
FRIDAY 22		0		
SATURDAY 23		0		

RECEIVED
OCT 25 1982
CONSTRUCTION SECTION

___ CE K
___ CAE ___
___ FOE ___
___ QCS ___
___ SCS ___
___ EEO ___
___ OM ___
___ CA ___
___ LS ___
___ TC ___
___ FE ___
___ CP ___

GENERAL DESCRIPTION OF ACTIVITIES FOR THE WEEK

SUNDAY 17	No activity.
MONDAY 18	No activity.
TUESDAY 19	No activity.
WEDNESDAY 20	No activity.
THURSDAY 21	No activity.
FRIDAY 22	No activity.
SATURDAY 23	No activity.

REMARKS

Semifinal transmitted to Region office on October 22, 1982.

FINAL REPORT.

SIGNED ______ LOCATION Portland
Asst. Project Manager

PRIME RESIDENT SUBMIT 2 COPIES. WHEN BRIDGES AND GRADING BOTH ARE INVOLVED, SUBMIT 3 COPIES

SP*F216

MEMORANDUM 9361

534-1970

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

10-7-82

FINAL VOUCHER FOR PAYMENT UNDER 23 U.S.C. 117

D.O. VOUCHER NO.

STATE VOUCHER NO.

DATE

FHWA SCHEDULE NO.

PAID BY

Appropriation:

The United States, Dr., TO Treasurer of the State of Oregon

Address Capitol Bldg. - Salem, OR 97310

STATE Oregon	FEDERAL AID PROJECT NO. Post Final RS-A686(1)
PROGRAM APPROVED	VOUCHER PERIOD From: 4-6-78 To: 8-25-81

FINANCIAL DATA

TOTAL ACTUAL COST	TOTAL PARTICIPATING COST	PRO-RATA OF PARTICIPATING COST CLAIMED FROM U.S.	TOTAL AMOUNT CLAIMED FROM U.S.	LESS PREVIOUS PAYMENTS	NET AMOUNT CLAIMED
$46,991.27	$45,404.61	85.77%	$38,943.53	$38,943.53	$ 0.00

	DATE	BY
RECEIVED IN FHWA DIVISION OFFICE		
FHWA REVIEW PERFORMED		Oregon
PASSED FOR PAYMENT		10/7/82
FORWARDED BY FHWA DIVISION OFFICE		Controller

0.00

Form FHWA-1447A (4-78) PREVIOUS EDITIONS ARE OBSOLETE

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (Payee must not use this column)
	Glencoe Rd. West Union Rd. Section Washington County					
	Preliminary Engineering					
	Type Code P.E.				$45,059.91	
	State					
	Type Code Y070	All Required			344.70	
	Archeological Salvage					
	Total Participating Project Cost				$45,404.61	
	Nonparticipating Project Cost	All Required			586.66	
	State					
	Total Project Cost				$45,991.27	
	Prepared based on Participating Costs as shown on Federal Billing as of 10/14/82.					
	AMOUNT CARRIED FORWARD					

```
                   534   1950      926       00 P 1         93.02             205.30            [illegible]
                   534   1950      927       00 P 1      2,407.30           2,407.30           2,407.30
                   534   1950      932       00 P 1                         [illegible]        [illegible]
                   534   1950      937       00 P 1                            879.30          1,[illegible]
                   534   1950      960       00 P 1                                                92.42
                                   TOT          P1       2,617.28           7,344.77          [illegible]
                            ** JOB TOTALS **             2,617.28  **       7,344.77  **      [illegible]  **

                                                                                              STATE
                      CONT NO     S FM PROJ NOS RS  686001  58 RS  686001  42             93,828.42CR
GLENCOE RD-W UNION
                   534   1970      896       00 N 9                                       93,828.42
                   534   1970      898       00 N 9                                       30,346.66
                   534   1970      901       00 P 1                                       20,643.28
                   534   1970      901       00 P 2                                          646.01
                   534   1970      901       00 N 1                                          398.63
                   534   1970      901       00 N 2                                          906.71
                   534   1970      902       00 P 1                                          466.86
                   534   1970      902       00 P 2                                           36.86
                   534   1970      902       00 N 1                                           26.47
                   534   1970      902       00 N 2                                        9,861.67
                   534   1970      906       00 P 1                                        7,140.78
                   534   1970      906       00 P 2                                          392.00
                   534   1970      906       00 P 1                                          283.23
                   534   1970      906       00 P 2                                        2,649.60
                   534   1970      909       00 P 1                                        1,846.30
                   534   1970      909       00 P 2                                        1,376.01
                   534   1970      910       00 P 1                                          996.38
                   534   1970      910       00 P 2                                          861.61
                   534   1970      911       00 P 1                                          616.71
                   534   1970      911       00 P 2                                           99.98
                   534   1970      911       00 N 1                                           72.40
                   534   1970      911       00 N 2                                        1,418.82
                   534   1970      913       00 P 1                                        1,027.46
                   534   1970      913       00 P 2                                        1,611.84
                   534   1970      914       00 P 1                                        1,167.17
                   534   1970      914       00 P 2                                        2,888.28
                   534   1970      918       00 P 1                                        2,089.36
                   534   1970      918       00 P 2                                          131.27
                   534   1970      920       00 P 1                                           96.06
                   534   1970      920       00 P 2                                        1,568.19
                   534   1970      921       00 P 1                                        1,043.26
                   534   1970      921       00 P 2                                           52.90
                   534   1970      922       00 P 1                                           38.31
                   534   1970      922       00 P 2                                        3,458.89
                   534   1970      923       00 P 1

                                                                   SEPTEMBER 1982         PAGE  822
TOTAL TO DATE JOB COST SUMMARY
                                                                       FISCAL             GRAND TOTAL
                                                                    YEAR TO DATE            TO DATE
DESCRIPTION OF JOB OR DEPARTMENT     PREFIX      FUNCTION   GR  CURRENT MONTH                2,504.60
                                  534,  1970      923       00 P 2                             100.16
```

93,389.80

To FREE
Bc Design 927

```
            534   1970        902        00 N 2                                            9,061.67
            534   1970        [illegible] 00 P 1                                            7,140.78
            534   1970        [illegible] 00 P 2                                              392.00
            534   1970        906        00 P 1                                              283.23
            534   1970        906        00 P 2                                            2,[illegible].60
            534   1970        909        00 P 1                                            1,046.30
            534   1970        909        00 P 2                                            1,376.01
            534   1970        910        00 P 1                                              [illegible].38
            534   1970        910        00 P 2                                              861.61
            534   1970        911        00 P 1                                              616.71
            534   1970        911        00 P 2                                               99.98
            534   1970        911        00 N 1                                               72.40
            534   1970        911        00 N 2                                            1,418.82
            534   1970        913        00 P 1                                            1,027.46
            534   1970        913        00 P 2                                            1,611.84
            534   1970        914        00 P 1                                            1,167.17
            534   1970        914        00 P 2                                            2,[illegible].28
            534   1970        918        00 P 1                                            2,089.36
            534   1970        918        00 P 2                                              131.27
            534   1970        920        00 P 1                                               96.06
            534   1970        920        00 P 2                                            1,568.19
            534   1970        921        00 P 1                                            1,043.26
            534   1970        921        00 P 2                                               52.90
            534   1970        922        00 P 1                                               38.31
            534   1970        922        00 P 2                                            3,458.89
            534   1970        923        00 P 1
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To FZ Be D

3 ~~to 9371~~ ~~2441.45~~

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                                                                       SEPTEMBER 1982         PAGE  822
TOTAL TO DATE JOB COST SUMMARY
                                                                            FISCAL            GRAND TOTAL
                                                                                                TO DATE
DESCRIPTION OF JOB OR DEPARTMENT     PREFIX        FUNCTION   GR  CURRENT MONTH   YEAR TO DATE   2,604.60
                                   534   1970        923        00 P 2                              100.16
                                   534   1970        923        00 N 1                               72.53
                                   534   1970        923        00 N 2                            4,765.98
                                   534   1970        926        00 P 1                            1,451.18
                                   534   1970        926        00 P 2                               22.97
                                   534   1970        926        00 N 1                               16.63
                                   534   1970        926        00 N 2                            1,216.72
                                   534   1970        927        00 P 1                              881.08
                                   534   1970        927        00 P 2                              288.38
                                   534   1970        950        00 P 1                              208.84
                                   534   1970        950        00 P 2                            1,126.57
                                   534   1970        960        00 P 1                              815.79
                                   534   1970        960        00 P 2                           64,807.99
                                                     TOT           P1                            45,404.61
                                                     TOT           P2                               804.67
                                                     TOT           N1                               586.66
                                                     TOT           N2
                                                  ** JOB TOTALS **          **              **  111,603.93  **

                          CONT NO 0000 * FD PROJ NOS RS  696001 100                                          STATE
```

110,212.60
2773.03
107439.57

OREGON STATE HIGHWAY DEPARTMENT
FHWA BILLING VOUCHER

PREFIX	ORP FI	FED AID PROJ APPR	AGREEMENT AMOUNT	TOTAL COSTS TO DATE	PARTIC. AMOUNT	% OF PARTIC.	FEDERAL SHARE	AMOUNT PREV. CLAIMED	ADJUSTMENT AND CODE	AMOUNT OF THIS VOUCHER
534-1948	1	BRS -A690-001 APPR-118	17,920.00	2,651.60	2,651.60	80.00	2,121.28	1,784.26		337.03
534-1949	1	BRS -A685-004 APPR-118	30,760.00	22,972.85	22,972.85	80.00	18,378.28	17,882.09		496.19
534-1950	1	BRS -A677-001 APPR-118	29,600.00	23,825.86	23,825.86	80.00	19,060.69	17,573.96		1,486.73
534-1970	1	RS -A686-001 APPR-075	55,585.81	65,612.66	64,807.99	85.77	55,586.81	55,585.81		
	2	RS -A685-001 APPR-075	38,943.53	45,991.27	45,404.61	85.77	38,943.53	38,943.53		
534-1970		PREFIX TOTALS	94,529.34	111,603.93	110,212.60		94,529.34	94,529.34		
536-1966	1	RS -A696-001 APPR-075	27,899.00	47,825.27	47,768.42	85.80	40,985.30	27,899.00	13,086.30 B	
536-1966	1	RS -A695-001 APPR-075	51,480.00	38,652.11	38,042.16	85.80	32,640.17	32,640.17		
536-1967	10	RS -A698-001 APPR-075	32,212.73	38,417.03	37,543.97	85.80	32,212.73	32,212.73		
536-1978	10	RES -A708-001 APPR-141	10,508.87	11,676.52	11,676.52	90.00	10,508.87	10,508.87		
601-1968	1	IR -8407-003 APPR-044	32,645.00	25,377.33	25,274.20	92.22	23,307.87	23,307.87		
603-1902	1	I -2057-082 APPR-042	2,760.00	105.72	105.72	92.22	97.49	97.49		
603-1948	1	BRI -2057-061 APPR-115	16,057.56	4,979.26	3,551.75	75.00	2,663.81	2,663.81		
	2	BRI -2057-061 APPR-118	21,441.90	28,589.20	28,589.20	75.00	21,441.90	21,441.90		
603-1948		PREFIX TOTALS	37,499.46	33,568.46	32,140.95		24,105.71	24,105.71		
610-1903	10	I -0052-066 APPR-042	190,491.07	208,423.01	206,472.00	92.26	190,491.07	190,491.07		
610-1906	1	I -0052-095 APPR-044	15,677.00	6,696.35	6,660.35	92.22	6,142.17	6,142.17		
610-1921	10	I -0052-069 APPR-042	684,273.04	749,782.60	741,678.99	92.25	684,273.04	684,273.04		
610-1922	10	I -0052-069 APPR-042	85,271.00	92,784.06	92,424.67	92.26	85,271.00	85,271.00		
610-1926	10	I -0052-074 APPR-042	59,006.06	63,955.53	63,949.34	92.27	59,006.06	59,006.06		
610-1933	10	I -0052-074 APPR-042	57,998.20	63,132.24	62,857.05	92.27	57,998.20	57,998.20		
610-1958	10	I -0053-011		7,564.89	PRIOR JAN. 1, 1966			6,579.32		
		AFTER 1/1/66 APPR-042	102,822.57	104,967.10	104,193.19	92.37	96,243.25	96,243.25		
610-1958		PREFIX TOTALS	102,822.57	112,531.99	104,193.19		96,243.25	102,822.57		
610-1969	10	I -0053-011		72,889.52	PRIOR JAN. 1, 1966			65,213.35		
		AFTER 1/1/66 APPR-042	113,428.73	52,801.41	52,198.09	92.37	48,215.38	48,215.38		
610-1969		PREFIX TOTALS	113,428.73	125,690.93	52,198.09		48,215.38	113,428.73		

9361

534-1970 (2)

MEMORANDUM

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

10-5-82

FINAL VOUCHER FOR PAYMENT UNDER 23 U.S.C. 117

D.O. VOUCHER NO.	
STATE VOUCHER NO.	
DATE	
FHWA SCHEDULE NO.	
PAID BY	

Appropriation:

The United States, Dr., TO Treasurer of the State of Oregon

Address Capitol Bldg. - Salem, OR 97310

STATE Oregon	FEDERAL AID PROJECT NO. Post Final RS-A606(1)
PROGRAM APPROVED	VOUCHER PERIOD From: 4-6-78 To: 8-28-81

FINANCIAL DATA

TOTAL ACTUAL COST	TOTAL PARTICIPATING COST	PRO-RATA OF PARTICIPATING COST CLAIMED FROM U.S.	TOTAL AMOUNT CLAIMED FROM U.S.	LESS PREVIOUS PAYMENTS	NET AMOUNT CLAIMED
$66,612.66	$64,007.99	86.77%	$55,585.81	$55,585.81	$ 0.00

	DATE	BY
RECEIVED IN FHWA DIVISION OFFICE		
FHWA REVIEW PERFORMED		Oregon
PASSED FOR PAYMENT		10/5/82
FORWARDED BY FHWA DIVISION OFFICE		Controller

0.00

Form FHWA-1447A (4-78) PREVIOUS EDITIONS ARE OBSOLETE

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (*Payee must not use this column*)
	Glencoe Rd.-West Union Rd. Section Washington County					
	Preliminary Engineering Type Code P.E. State	All Required			$64,331.98	
	Type Code Y070 Archeological Salvage	All Required			476.01	
	Total Participating Project Cost				$64,807.99	
	Nonparticipating Cost State P.E.	All Required			804.67	
	Total Project Cost				$65,612.66	
	Prepared based on Participating Costs as shown on Federal Billing as of 10/14/82.					
	AMOUNT CARRIED FORWARD					

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           534    1950        926        00 P 1          93.62               265.36
           534    1960        927        00 P 1       2,407.30             2,407.30                2,407.30
           534    1960        932        00 P 1                                4.[illegible]       [illegible]
           534    1960        935        00 P 1                              879.36               1,[illegible]
           534    1960        937        00 P 1                                                       [illegible].43
           534    1960        960        00 P 1
                              TOT           P1           2,617.25             7,344.77             [illegible]
                         ** JOB TOTALS **                2,617.25 **          7,344.77 **          [illegible] **

                                                                                                   STATE
GLENCOE RD-W UNION     CONT NO   $ FN PROJ NOS RS 606001 58 RS 606001 42                        93,828.42CR
           534    1970        [illegible] 00 N [illegible]                                      93,826.41
           534    1970        [illegible] 00 N [illegible]                                      30,346.98
           534    1970        901        00 P 1                                                 20,843.25
           534    1970        901        00 P 2                                                    846.01
           534    1970        901        00 N 1                                                    398.63
           534    1970        901        00 N 2                                                    906.71
           534    1970        902        00 P 1                                                    466.[illegible]
           534    1970        902        00 P 2                                                     35.[illegible]
           534    1970        902        00 N 1                                                     26.47
           534    1970        902        00 N 2                                                  9,861.67
           534    1970        905        00 P 1                                                  7,140.78
           534    1970        905        00 P 2                                                    392.00
           534    1970        906        00 P 1                                                    283.23
           534    1970        906        00 P 2                                                  2,649.60
           534    1970        909        00 P 1                                                  1,846.30
           534    1970        909        00 P 2                                                  1,376.01
           534    1970        910        00 P 1                                                    996.38
           534    1970        910        00 P 2                                                    861.61
           534    1970        911        00 P 1                                                    616.71
           534    1970        911        00 P 2                                                     99.98
           534    1970        911        00 N 1                                                     72.40
           534    1970        911        00 N 2                                                  1,418.82
           534    1970        913        00 P 1                                                  1,027.46
           534    1970        913        00 P 2                                                  1,611.84
           534    1970        914        00 P 1                                                  1,167.17
           534    1970        914        00 P 2                                                  2,856.28
           534    1970        918        00 P 1                                                  2,089.36
           534    1970        918        00 P 2                                                    131.27
           534    1970        920        00 P 1                                                     95.06
           534    1970        920        00 P 2                                                  1,568.19
           534    1970        921        00 P 1                                                  1,043.26
           534    1970        921        00 P 2                                                     52.90
           534    1970        922        00 P 1                                                     38.31
           534    1970        922        00 P 2                                                  3,458.89
           534    1970        923        00 P 1


                                                                    SEPTEMBER 1982         PAGE  822
TOTAL TO DATE JOB COST SUMMARY
                                                                         FISCAL            GRAND TOTAL
                                                                    YEAR TO DATE             TO DATE
DESCRIPTION OF JOB OR DEPARTMENT     PREFIX   FUNCTION   GR  CURRENT MONTH
                                   534 1970   923        00 P 2                              2,504.60
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   534   1970   [illegible]   00 N 2
   534   1970   [illegible]   00 P 1                          7,1[illegible].7[illegible]
   534   1970   [illegible]   00 P 2                            392.00
   534   1970   [illegible]   00 P 1                          [illegible]
   534   1970   [illegible]   00 P 2                          2,[illegible]
   534   1970   [illegible]   00 P 1                          1,[illegible]46.30
   534   1970   [illegible]   00 P 2                          1,3[illegible].01
   534   1970   910   00 P 1                                  [illegible]
   534   1970   910   00 P 2                                    861.61
   534   1970   911   00 P 1                                    616.71
   534   1970   911   00 P 2                                     99.98
   534   1970   911   00 N 1                                     72.40
   534   1970   911   00 N 2                                  1,[illegible]
   534   1970   913   00 P 1                                  1,027.[illegible]
   534   1970   913   00 P 2                                  1,611.84
   534   1970   914   00 P 1                                  1,167.17
   534   1970   914   00 P 2                                  2,[illegible].28
   534   1970   918   00 P 1                                  2,089.35
   534   1970   918   00 P 2                                    131.27
   534   1970   920   00 P 1                                     96.06
   534   1970   920   00 P 2                                  1,568.19
   534   1970   921   00 P 1                                  1,043.26
   534   1970   921   00 P 2                                     52.90
   534   1970   922   00 P 1                                     38.31
   534   1970   922   00 P 2                                  3,458.89
   534   1970   923   00 P 1
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                                                              SEPTEMBER 1982       PAGE  822
TOTAL TO DATE JOB COST SUMMARY
                                                                    FISCAL          GRAND TOTAL
                                                                 YEAR TO DATE        TO DATE
DESCRIPTION OF JOB OR DEPARTMENT     PREFIX     FUNCTION   GR  CURRENT MONTH                   2,504.60
                                   534   1970   923     00 P 2                                   100.16
                                   534   1970   923     00 N 1                                    72.53
                                   534   1970   923     00 N 2                                 4,765.98
                                   534   1970   926     00 P 1                                 3,451.18
                                   534   1970   926     00 P 2                                    22.97
                                   534   1970   926     00 N 1                                    16.63
                                   534   1970   926     00 N 2                                 1,216.72
                                   534   1970   927     00 P 1                                   881.08
                                   534   1970   927     00 P 2                                   288.38
                                   534   1970   950     00 P 1                                   208.84
                                   534   1970   950     00 P 2                                 1,126.57
                                   534   1970   980     00 P 1                                   815.79
                                   534   1970   980     00 P 2                                64,807.99
                                                TOT        P1                                 46,404.61
                                                TOT        P2                                    804.67
                                                TOT        N1                                    586.66
                                                TOT        N2                         **      **  !11,603.93  **
                                             ** JOB TOTALS **
                                                                                                         STATE
            ANT NO 0000 * FD PROJ NOS RS  696001 100
```

801

OREGON STATE HIGHWAY DEPARTMENT
FHWA BILLING VOUCHER

10/21/82

PREFIX	GRP FI	FED AID PROJ APPR	AGREEMENT AMOUNT	TOTAL COSTS TO DATE	PARTIC. AMOUNT	% OF PARTIC	FEDERAL SHARE	AMOUNT PREV. CLAIMED	ADJUSTMENT AND CODE	AMOUNT OF THIS VOUCHER
634-1948	1	BRS -A690-001 APPR-118	17,920.00	2,651.60	2,651.60	80.00	2,121.28	1,784.25		337.03
634-1949	1	BRS -A685-004 APPR-118	30,760.00	22,972.85	22,972.85	80.00	18,378.28	17,882.09		496.19
634-1950	1	BRS -A677-001 APPR-118	25,600.00	23,825.86	23,825.86	80.00	19,060.69	17,573.96		1,486.73
634-1970	1	RS -A686-001 APPR-075	55,585.81	65,612.66	64,807.99	85.77	55,585.81	55,585.81		
	2	RS -A685-001 APPR-075	38,943.53	45,991.27	45,404.61	85.77	38,943.53	38,943.53		
634-1970	PREFIX TOTALS		94,529.34	111,603.93	110,212.60		94,529.34	94,529.34		
636-1955	1	RS -A696-001 APPR-075	27,899.00	47,825.27	47,768.42	85.80	40,985.30	27,899.00	13,086.30 B	
6-1956	1	RS -A695-001 APPR-075	51,480.00	38,652.11	38,042.16	85.80	32,640.17	32,640.17		
636-1967	10	RS -A698-001 APPR-075	32,212.73	38,417.03	37,543.97	85.80	32,212.73	32,212.73		
636-1978	10	RES -A708-001 APPR-141	10,508.87	11,676.52	11,676.52	90.00	10,508.87	10,508.87		
601-1968	1	IR -8407-003 APPR-044	32,645.00	25,377.33	25,274.20	92.22	23,307.87	23,307.87		
603-1902	1	I -2057-082 APPR-042	2,760.00	105.72	105.72	92.22	97.49	97.49		
603-1948	1	BRI -2057-061 APPR-115	16,067.56	4,979.26	3,551.75	75.00	2,663.81	2,663.81		
	2	BRI -2057-061 APPR-118	21,441.90	28,589.20	28,589.20	75.00	21,441.90	21,441.90		
603-1948	PREFIX TOTALS		37,499.46	33,568.46	32,140.95		24,105.71	24,105.71		
610-1903	10	I -0052-066 APPR-042	190,491.07	208,423.01	206,472.00	92.26	190,491.07	190,491.07		
610-1906	1	I -0052-095 APPR-044	15,677.00	6,696.35	6,660.35	92.22	6,142.17	6,142.17		
610-1921	10	I -0052-069 APPR-042	684,273.04	749,782.60	741,678.99	92.26	684,273.04	684,273.04		
0-1922	10	I -0052-069 APPR-042	85,271.00	92,784.06	92,424.67	92.26	85,271.00	85,271.00		
3-1926	10	I -0052-074 APPR-042	59,006.06	63,955.53	63,949.34	92.27	59,006.06	59,006.06		
610-1933	10	I -0052-074 APPR-042	57,998.20	63,132.24	62,857.05	92.27	57,998.20	57,998.20		
610-1958	10	I -0053-011		7,564.89	PRIOR JAN. 1, 1966			6,579.32		
		AFTER 1/1/66 APPR-042	102,822.57	104,967.10	104,193.19	92.37	96,243.25	96,243.25		
610-1958	PREFIX TOTALS		102,822.57	112,531.99	104,193.19		96,243.25	102,822.57		
610-1969	10	I -0053-011		72,889.52	PRIOR JAN. 1, 1966			65,213.35		
		AFTER 1/1/66 APPR-042	113,428.73	52,801.41	52,198.09	92.37	48,215.38	48,215.38		
610-1969	PREFIX TOTALS		113,428.73	125,690.93	52,198.09		48,215.38	113,428.73		

9361

L.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.: PRO 6-2

December 16, 1981

TO: Dale E. Wilken
Division Administrator
Federal Highway Administration

FROM: D.E. Swan
Operation Programming Engineer

SUBJECT: Project No. RS-A685(3)
Glencoe Rd.-W. Union Rd. (N. Plains) Sec.
Washington County

Enclosed are two copies of a fully executed railroad agreement with Burlington Northern Railroad Company on the subject project.

I request the return of one copy of the agreement approved for our files.

CL:bkc
Attachment

cc: R. Trygstad
General Files

Form 734-3122

#9361

L.

STATE OF OREGON
RAILROAD & UTILITIES 378-6511

INTEROFFICE MEMO file
ROW 18-2

TO: Robert Gormsen
Commission Services

DATE: December 14, 1981

FROM: Roger D. Trygstad
Railroad & Utility Engineer

SUBJECT: Construction-Maintenance Agreement
Crossing No. 8U-21.40
Glencoe Rd. (North Plains)
Washington County
ODOT Agreement No. RR-1051
Project No. RS-A685(3)

RAILROAD COMPANIES
FILE No. 1051

Attached is the State's fully-executed counterpart of a Construction-Maintenance Agreement between the Burlington Northern Railroad Co. and the Oregon Department of Transportation, Highway Division, calling for the installation of grade crossing protection devices and a rubberized crossing at the subject location.

This work is a part of a FAS-C Project called Glencoe Road-West Union Road (North Plains) Section. Distribution of conformed copies has been made as indicated below.

The Construction Division will be responsible for monitoring the railroad's work under the terms of this Construction-Maintenance Agreement and approval of the final bill. The Accounting Section will be responsible for auditing the final bill. Section heads should thoroughly review the Agreement to understand the responsibilities their section must bear under the terms of this Agreement.

RDT/llr
Attachment
cc: D. E. Wilken - w/copy of agreement
C. T. Keasey - w/copy of agreement
V. E. Skoog - w/copy of agreement - ATTN: Pete Gonzalez
D. E. Swan - w/copy of agreement (2)
E. L. Hardt - w/copy of agreement (2)
W. A. Tison - w/copy of agreement

noted in agree.
file

9361

2.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

11-23-81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. RS-A685(1) & RS-A686(1)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Washington

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 80233 & 80234

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 11/23/81

8. FEDERAL ROUTE NUMBER Secondary A685 & 686

9. STATE ROUTE NUMBER County Roads

10. GENERAL LOCATION:
Glencoe Road - West Union Road

11. GENERAL DESCRIPTION OF WORK
Program change

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* Program change
See below

13. REMARKS

As requested in Mr. Swan's letter of 11/19/81 I approve the revised Preliminary Engineering Costs to a TEC of $123,000 Federal Funds $105,496.

(Increase TEC $12,390 Federal Funds $10,284 for RS-A685(1) and
Increase TEC $17,110 Federal Funds $14,202 for RS-A686(1))

It should be noted that PE charges are eligible up to 8/26/81 which is date of authorization to advertise the construction phase under RS-A685(3).

RECEIVED
STATE HWY ENGR
DEC 4 '81
REFER TO Mohring
FOR
Info Inves R/D D.R Sign Act File

orig
12/4

14. DATE 11/23/81

15. SIGNATURE OF APPROVING OFFICIAL G.K Gossner

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9361

STATE COPY ✓

TO BE COMPLETED BY FHWA	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	STATE Oregon
10-95	FEDERAL-AID PROJECT AGREEMENT 10/21/81	COUNTY Washington PROJECT NO. RS-A686(3)

The State, through its Highway Agency, having complied, or hereby agreeing to comply, with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) the Regulations issued pursuant thereto and, (3) the policies and procedures promulgated by the Federal Highway Administrator relative to the above designated project, and the Federal Highway Administration having authorized certain work to proceed as evidenced by the date entered opposite the specific item of work, Federal funds are obligated for the project not to exceed the amount shown herein, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends only to project costs incurred by the State after the Federal Highway Administration authorization to proceed with the project involving such costs.

PROJECT TERMINI

Glencoe Rd. & West Union Rd. (NORTH PLAINS)

PROJECT CLASSIFICATION OR PHASE OF WORK	EFFECTIVE DATE OF AUTHORIZATION	APPROXIMATE LENGTH *(Miles)*
HIGHWAY PLANNING AND RESEARCH (HP & R)		
PRELIMINARY ENGINEERING		
RIGHTS-OF-WAY		
CONSTRUCTION	8-26-81	0.502

OTHER *(Specify)*

FUNDS PRO RATA 88.18%

ESTIMATED TOTAL COST OF PROJECT $ 817,181.00	FEDERAL FUNDS $ 720,588.00

The State further stipulates that as a condition to payment of the Federal funds obligated, it accepts and will comply with the applicable provisions set forth on the reverse hereof.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Asst. State Hwy. Engineer
(Title)

XXy For: H.S. Coulter

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Date executed by Division Administrator OCT 21 1981

FORM PR-2 (REV. 10-75) PREVIOUS EDITIONS ARE OBSOLETE

AGREEMENT PROVISIONS

1. RESPONSIBILITY FOR WORK

a. Except for projects constructed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in compliance with the approved plans and specifications or project proposal which, by reference, are made a part hereof.

b. With regard to projects performed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in accordance with the terms of its approved Certification, or exceptions thereto as may have been approved by the Federal Highway Administration.

2. HIGHWAY PLANNING AND RESEARCH (HP&R) PROJECT. The State highway agency will (a) conduct or cause to be conducted, under its direct control, engineering and economic investigations of projects for future construction, together with highway research necessary in connection therewith, pursuant to the work program approved by the Federal Highway Administration and (b) prepare reports suitable for publication of the result of such investigations and research, but no report will be published without the prior approval of the Federal Highway Administration.

3. PROJECT FOR ADVANCE ACQUISITION OF RIGHTS-OF-WAY. In the event that actual construction of a road on this right-of-way is not undertaken by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

4. PRELIMINARY ENGINEERING PROJECT FOR PREPARATION OF RIGHT-OF-WAY PLANS OR FOR PREPARATION OF CONSTRUCTION PLANS, SPECIFICATIONS AND ESTIMATES. In the event that right-of-way acquisition for, or actual construction of the road for which this preliminary engineering is undertaken is not started by the close of the fifth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

5. INTERSTATE SYSTEM PROJECT. (a) The State highway agency will not add or permit to be added, without the prior approval of the Federal Highway Administration any points of access to, or exit from, the project in addition to those approved in the plans and specifications for the project. (b) The State highway agency will not permit automotive service stations, or other commercial establishments for serving motor vehicle users, to be constructed or located on the right-of-way of the interstate system. (c) The State highway agency will not after June 30, 1968, permit the construction of any portion of the Interstate Route on which this project is located, including spurs and loops, as a toll road without the written concurrence of the Secretary of Transportation or his officially designated representative. The term 'toll road' does not include toll bridges or toll tunnels.

6. PROJECT FOR CONSTRUCTION IN ADVANCE OF APPORTIONMENT. (a) This project authorized pursuant to 23 U.S.C. 115 as amended, will be subject to all procedures and requirements, and conform to the standards applicable to projects on the system on which located, financed with the aid of Federal funds. (b) No obligation of previously apportioned Federal funds is created by this agreement, its purpose and intent being to provide that, upon application by the State highway agency, and approval thereof by the Federal Highway Administration, any Federal-aid funds of the class designated by the project number prefix, apportioned to the State under 23 U.S.C. 104 subsequent to the date of this agreement, may be used to reimburse the State for the Federal share of the cost of work done on the project.

7. STAGE CONSTRUCTION. The State highway agency agrees that all stages of construction necessary to provide the initially planned complete facility, within the limits of this project, will conform to at least the minimum values set by approved AASHTO design standards applicable to this class of highways, even though such additional work is financed without Federal-aid participation..

8. BOND ISSUE PROJECT. Construction, inspection and maintenance of the project will be accomplished in the same manner as for regular Federal-aid projects. No present or immediate obligation is created by this Agreement against Federal funds, its purpose and intent being to provide aid to the State, as authorized by 23 U.S.C. 122, for retiring maturities of the principal indebtedness of the bonds referred to below. When the State requests Federal reimbursement to aid in the retirement of such bonds, the request will be supported by the appropriate certification required by 23 CFR Part 140, Subpart F, and Volume 1, Chapter 4, Section 8 of the Federal-Aid Highway Program Manual or the alternative State procedure set forth in the State's Certificate, and payment of the authorized Federal share will be made from appropriate funds available. If in any year there is no unobligated balance of any apportioned Federal funds available from which payments hereunder may be made, there will be no obligation on the part of the Federal Government on account of bond maturities for that year. Funds available to the highway agency for this project are the proceeds of bonds issued by the governmental unit indicated on the attached tabulation, pursuant to the authority and in the amounts by date of issue and beginning date of maturities set forth therein.

9. SPECIAL HIGHWAY PLANNING AND RESEARCH PROJECT. The State Highway agency hereby authorizes the Federal Highway Administration to charge the State's pro rata share of costs incurred against funds apportioned to the State under 23 U.S.C. 307 (c), as amended. In the event a project is financed with both Federal-aid funds and State matching funds, the State agrees to advance to The Federal Highway Administration the State matching funds for its share of the estimated cost. For a National Pooled Fund study, the State hereby assigns its responsibility for the work to the Federal Highway Administration. For an Intra-Regional Cooperative Study, the State hereby assigns its responsibility for the work to the lead State for the study.

10. PARKING REGULATION AND TRAFFIC CONTROL. The State highway agency will not permit any changes to be made in the provisions for parking regulations and traffic control as contained in the agreement between the State and the local unit of Government referred to in the paragraph on "Additional Provisions," without the prior approval of the Federal Highway Administration, unless the State determines, and the Division Administrator concurs, that the local unit of Government has a functioning traffic engineering unit with the demonstrated ability to apply and maintain sound traffic operations and control.

Gen-file

Oregon State Highway Division
Salem, Oregon October 8, 1981

Federal Aid Project
No. RS-A685(3)

Glencoe Rd. & West Union Rd. (North Plains)
County Road
Washington County

PROJECT AGREEMENT ESTIMATE

Type Code 6201 (Sta. 102+50 to Sta. 119.00)

Mobilization		All Required	$ 29,000.00
Temporary Protection and Direction of Traffic		All Required	8,800.00
Temporary Signs	314 Sq. Ft.	8.00	2,512.00
Temporary Barricades	20 Each	75.00	1,500.00
Flagmen	300 Hour	22.50	6,750.00
Clearing and Grubbing		All Required	18,800.00
Removal of Structures and Obstructions		All Required	5,000.00
Ditch Excavation	270 Cu. Yd.	6.00	1,620.00
Embankment Foundation Excavation	950 Cu. Yd.	4.50	4,275.00
Embankment in Place	22,900 Cu. Yd.	3.00	68,700.00
Stone Embankment	1,390 Cu. Yd.	12.75	17,722.50
Toe Trench Excavation	130 Cu. Yd.	6.00	780.00
Trench Excavation	250 Cu. Yd.	9.50	2,375.00
Finishing Roadbed and Slopes		All Required	14,800.00
Watering	245 M-Gal.	12.00	2,940.00
Aggregate Shoulders	780 Ton	10.00	7,800.00
Cement Treated Base Mixture	5,600 Ton	10.00	56,000.00
Portland Cement in CTB Mixture	310 Ton	88.00	27,280.00
Asphalt in Seal	18 Ton	330.00	5,940.00
Class "B" Asphalt Concrete	2,400 Ton	31.00	74,400.00
6-inch Culvert Pipe	16 Lin. Ft.	7.75	124.00
12-inch Culvert Pipe	280 Lin. Ft.	15.00	4,200.00
18-inch Culvert Pipe	226 Lin. Ft.	21.50	4,859.00
12-inch Sewer Pipe	444 Lin. Ft.	17.00	7,548.00
18-inch Sewer Pipe	75 Lin. Ft.	22.75	1,706.25
Concrete Inlets, Type CG-1	5 Each	445.00	2,225.00
6-inch Drain Pipe	240 Lin. Ft.	7.50	1,800.00
12-inch Drain Pipe	240 Lin. Ft.	10.80	2,592.00
Filter Fabric	475 Sq. Yd.	1.30	617.50
Gravel in Drains	75 Cu. Yd.	14.00	1,050.00
Guard Rail in Stockpile		All Required	18,260.00

Fence in Stockpile		All Required	1,320.00
Concrete Driveways	94 Sq. Yd.	22.00	2,068.00
Concrete Curbs	40 Cu. Yd.	120.00	4,800.00
Extra for Asphalt Approaches	17 Each	230.00	3,910.00
Loose Riprap, Class 50	410 Cu. Yd.	20.00	8,200.00
Roadside Seeding and Mulching	2 Acre	950.00	1,900.00
Water Main Installation		All Required	20,559.00
			$444,733.25

Anticipated Items

Railroad Protective Costs	All Required	$ 38,000.00
Temporary Erosion Control	All Required	100.00
		$ 38,100.00
	SUBTOTAL	$482,833.25
	Engineering	65,182.75
	TOTAL	$548,016.00

Type Code X081
Structure Br. #13033A (Sta. 19+34 to Sta. 20+36 on West Union Rd.)

Bridge Removal Work		All Required	$ 16,125.00
Structure Excavation	35 Cu. Yd.	All Required	210.00
Furnish Pile Driving Equipment		All Required	14,000.00

ALTERNATE "A"

Furnish Prestressed Concrete Piling	1,660 Lin. Ft.	11.50	19,090.00
Drive Prestressed Concrete Piles	1,510 Lin. Ft.	1.00	1,510.00
Structural Concrete, Class 3300 (30 Cu. Yd.)		All Required	9,770.00
4'x30'/35' Prestressed Slabs	16 Each	1,680.00	26,880.00
4'x40'/45' Prestressed Slabs	8 Each	2,135.00	17,080.00
Reinforcement (4,500 lbs.)		All Required	2,025.00
Reinforced Concrete Bridge End Panels	145 Cu. Yd.	50.00	7,250.00
Two Tube Steel Railing	200 Lin. Ft.	41.05	8,210.00
		SUBTOTAL	$122,150.00
		Engineering	16,490.00
		TOTAL	$138,640.00

Item file

Type Code Y018
R.R. X'ing Signal

Work by Burlington Northern Railroad

All Required	$115,000.00
SUBTOTAL	$115,000.00
Engineering	15,525.00
TOTAL	$130,525.00

Length of Roadway --------- 0.502 mile
Cost of Roadway Per Mile --$1,091,665.34

SUMMARY OF FUNDS (88.18%)

Description	Total Funds	Federal Funds	State Funds	County Funds
Roadway	$548,016.00	$483,240.00	$32,388.00	$32,388.00
Structure	138,640.00	122,252.00	8,194.00	8,194.00
R.R. Signal	130,525.00	115,096.00	7,714.00	7,715.00
	$817,181.00	$720,588.00	$48,296.00	$48,297.00

Group 1	100%
Contract No.	9361
Prefix:	534-1970 (PE) 534-1061 (Constr.)

Glencoe Rd. & West Union Rd. (North Plains)
County Road
Washington County

State Responsibility (Non-Participating Items)

Furnish and Installing Mailbox Posts	10 Each	150.00	$ 1,500.00

#9361 10-20-81 L.

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. RS-A685(3)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Washington

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 80233

6. TO

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 10/20/81

8. FEDERAL ROUTE NUMBER Secondary A685

9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION:

Glencoe Road - West Union Road (N. Plains)

11. GENERAL DESCRIPTION OF WORK

Program change (Railroad Work)

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* Program change

13. REMARKS

As requested in Mr. Swan's letter of 10/6/81 I approve the revised cost for work under Railroad Agreement with Burlington Northeren to a TEC of $115,500 Federal Funds $101,848. Also, as requested, I concur that initial date of authorization to proceed on 4/7/81 is still effective date to proceed.

(Increase TEC $19,832 Federal Funds $17,488. This program change does not require additional obligation of funds)

RECEIVED
STATE HWY ENGR
OCT 23 '81
REFER TO [illegible]
FOR
Info Invest R/D Draft Sign Act File

Orig 10/23

14. DATE 10/20/81

15. SIGNATURE OF APPROVING OFFICIAL G. K. Hossner

16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9361

L.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to File No.:
PRO 6-2

October 6, 1981

TO: Dale E. Wilken
Division Administrator
Federal Highway Administration

FROM: D.E. Swan
Operation Programming Engineer

SUBJECT: Project No. RS-A685(3)
Glencoe Rd.-W. Union Rd. (N. Plains) Section
Washington County

Enclosed for your approval is one copy of proposed agreement between Burlington Northern Railroad Company and the State Highway Division on the subject project. This proposed agreement replaces the previous agreement dated January 19, 1981 which was forwarded under our letter of April 2, 1981 and reflects an increase in the estimated total cost for work by the railroad to $115,500.

I further request concurrence that the previous authorization to proceed with work by the railroad as of April 7, 1981 is still the effective date.

The revised construction costs approved by your memo of July 13, 1981 included the estimated increase in railroad costs. Therefore, approval of the proposed railroad agreement will not require a further increase in estimated total cost or federal funds obligation on the project.

CL:bkc
Enc.

cc: R. Trygstad
General Files

Form 734-3122

9361

Form E-39 (Rev. 9-71)

OREGON STATE HIGHWAY DIVISION

AUTHORITY FOR SURVEY

Section Glencoe Rd.-W. Union Rd.

Highway Glencoe and West Union Roads FAS-C

County Washington

Date September 18, 1981

Authorization No. 4

Survey Prefix 534-1970 (Assigned by Salem office)

Description of termini, route, length, etc.: On West Union Rd. the westerly end is located at the intersection of Commercial St. and Glencoe Rd. in the city of North Plains. The easterly end is 2,500 feet east of Glencoe Rd.
On Glencoe Rd. the northerly terminus is at the intersection of Glencoe Rd. and old W. Union Rd. The southerly end is at the intersection of Glencoe Rd. and Cottage St. in the city of North Plains. The overall length is 0.82 mile.

Purpose of survey: Realign county roads, provide 32' to 36' roadbed and new structure on McKay Creek.

State to perform field survey, prepare plans, specifications and estimate.

Estimate of cost: $831,879 (construction authorization)
RS-A685(1) and RS-A686(1) 11-23-81
Class III, Environmental Assessment

Field Survey	(901)	52,000
Citizen Participation	(902)	1,700
City or County	(903)	
Consultant	(904)	
Final Design	(905)	16,000
Bridge Design	(906)	1,600
Preliminary Design	(907)	
R/W Description	(909)	4,400
Soils & Geology	(910)	2,400
Traffic	(911)	1,700
Landscape	(912)	
Liaison R/W	(913)	2,500
Utility	(914)	2,500
Photogrammetry	(916)	
Location Studies	(918)	5,000
Engineering Graphics	(919)	
Project Management	(920)	150
Specifications	(921)	1,500
Administrative Services	(922)	150
Environmental	(923)	5,500
Dept. of Transportation	(924)	500
Air Quality Monitoring	(925)	
Foundation Exploration	(926)	8,400
Seminars & Training	(950)	500
Hearings	(980)	2,000
Personal Leave Time	(960)	
Free County Bridge Design	(927)	15,000

INSTRUCTIONS

Submit four copies to Salem. After approval by the Assistant State Highway Engineer, one copy will be sent to the Regional Engineer and one copy to the Resident Engineer.

This form does not constitute authority for making survey until approved and returned.

Submit separate order for each survey.

NOV 19 1981

Total estimated cost of survey	$ 123,000
Previous authorization	93,500
Additional authorization requested	29,500
Additional authorization approved (Salem)	
Total all authorizations approved (Salem)	

Requests made by:
Curtis H. Duval
CURTIS H. DUVAL, Metro Location Engineer ~~Field Engineer~~

Recommended for Approval:
D.R. Adams
D.R. ADAMS, Project Development Engineer ~~Regional Engineer~~

Recommended for Approval:
Frank E. Pepin
Location Engineer

Approved:
E S Hunter
Assistant State Highway Engineer

SP*23604-734

Rp

9361

September 18, 1981

County Board of Commissioners
150 First N., Room 418
Hillsboro, Oregon 97123

ACC

Attn: Mr. Larry Rice
Director of Public Works

Gentlemen:

On September 17, 1981 the Highway Division received a satisfactory bid from Dirt and Aggregate Interchange Inc., 2220 N.W. Burnside, Gresham, Oregon 97030 for the Glencoe Road-West Union Road Section on FAS-A685 and FAS-A686. This is an FAS-C Project No. RS-A685(3). Based upon the Contractor's bid the County's advance deposit will be:

Bid	$ 579,833.25
RR Protection Costs	$ 38,000.00
Other RR Costs	115,000.00
Temp. Erosion Control	100.00
4 1/2% Contingencies	32,982.00
9% Engineering	65,963.99
ESTIMATED CONSTRUCTION COST	$ 831,879.24
ESTIMATED R/W COST	180,500.00
ESTIMATED PROJECT COST	$1,012,379.24
County's Share of Costs are (6% of $1,012,379.24)	$60,742.75
Less Construction Early Advance Deposit	36,500.00
Less R/W Advance Deposit	10,700.00
Remaining Share of County Costs Are	$13,542.75
By rounding the additional advance deposit will be	$13,500.00

Rec'd
10/12/81

We have awarded the contract for this project on 9-17-81. Please submit the additional advance deposit as soon as possible.

The attached sheet describes the three options for making your advance deposit. Please select the option you desire and submit your advance deposit according to the instructions.

Very truly yours,

ORIGINAL SIGNED BY
D. E. SWAN

D. E. Swan
Operation Programming Engineer

HR:pf
Attachment

bcc w/AD # 945: Jon Rose, Region M Federal Aid Engineer
Vern Skoog - Please return completed AD # 945 when advance deposit is received.

9361.

~~North Plains~~

STATE OF OREGON
Department of Transportation
Metropolitan Branch

INTEROFFICE MEMO
Telephone: 238-8226
Date: August ~~24~~ 31, 1981

File No: 534-1970(100)

TO: DON TROUT
Road Design, Salem

FROM: JIM McCLURE J McClure
Project Development Engineer

SUBJECT: GLENCOE ROAD-WEST UNION ROAD, CITY OF NORTH PLAINS
FISH AND WILDLIFE RESTRICTIONS

I have talked to Don Stoudenmeyer concerning the subject project, which is now being readied for a September 17 bid letting and has been certified clear for advertising. In reference to Don Adams' attached letter, you indicated there may be a possibility of reducing the time restrictions set by the Fish and Wildlife people.

If it is possible to amend this permit, the following are some ideas that may support reduction of the time restrictions:

- The Glencoe structure over the railroad is deteriorating badly, according to Washington County, and may also need to be closed this year. That decision will be made after the bridge inspection this fall. This bridge already has a load restriction and if closed a serious traffic problem will be created in the City of North Plains. The new McKay Creek Bridge would relieve the current access problem in the city.

- If work on the McKay Creek Bridge were allowed in November and December, we could possibly complete the work in the river and along the river banks. Then, assuming there would be no need to work in the creek, the bridge work could be done during the restricted time frame.

- Completion of the structure prior to the peak grain hauling season would be very beneficial to the City of North Plains. This season runs from late July to mid-September. Utilization of the McKay Creek Bridge would result in a major economic savings.

These are some of the issues that should be considered by the Fish and Wildlife Department.

If you have any questions feel free to give me a call.

Don
John Day resolved
this with dates as
shown on permit

JDM:PE
Attachment

xc: D. R. Adams
R. J. Heard

8-31-81

STATE OF OREGON
Department of Transportation
Metropolitan Branch

INTEROFFICE MEMO
Telephone: 238-8226
Date: August 13, 1981

File No: 534-1970

TO: JIM McCLURE
Project Development Engineer

FROM: DON ADAMS
Project Development Manager

SUBJECT: Glencoe Road - West Union Road
Extreme Access Restrictions

The Fish and Wildlife Commission advised that we cannot work in the stream or on the banks of the stream between the months of November and June on this project. Don Trout is working on a case to change either the November limit or the June limit in an effort to make the work site available, either for a short period of time this year or earlier next year. He needs help building his case.

Would you put together a few succinct remarks establishing why we need to get in and build that job as quickly as possible. The bridge is closed, the road is washed out, the citizens are irate; any of those kinds of arguements that you can pull together any any commitments the County may have made to the local residents could be used as part of a persuasive arguement to reduce the time restrictions placed on us by the Fish and Wildlife people.

Don Trout is working on the technical end of this thing to determine whether or not the restrictions would actually pose a problem to the contractor. He simply wants from us the local implications of the delays. Please feed that information back to Don Trout as quickly as possible in order to maintain the current September 24 letting.

[illegible]

[illegible] Bowman [illegible]

po

GLENCOE ROAD BR.
IS DETER. BADLY
MAY NEED TO BE CLOSED.

9361

4

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

8-26-81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. RS-A685(3)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Washington

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 80233

6. TO

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 8/26/81

8. FEDERAL ROUTE NUMBER Secondary A685

9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION:

Glencoe Road - West Union Road (North Plains)

11. GENERAL DESCRIPTION OF WORK

Advertise for bids

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY

☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION

☐ ACQUISITION OF RIGHT-OF-WAY

☒ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS

☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

☐ OTHER *(Specify)*

13. REMARKS

I accept the certification of Mr. Rod Henry dated 8/19/81 that provisions of FHPM 7-5-1 have been complied with and you are now authorized to advertise for bids.

RECEIVED
STATE HWY ENGR
AUG 25 '81
REFER TO Moehring
FOR

Info	Invest	R/C	D/R	Sign	Act	File
					X	

Orig CO.
8-26-81

14. DATE 8/26/81

15. SIGNATURE OF APPROVING OFFICIAL G.K. Hessner

16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)

PREVIOUS EDITIONS MAY BE USED

9361

L.

[illegible]
[illegible]
Circulate

PPG
[illegible]
TETS
v
WEM
JOB
105

MEMO TO THE FILES August 18, 1981

Jack Sullivan
Specifications Engineer

Expedite Contracts

#9361
#9357
#9347

Specifications for three upcoming projects include the following or similar language under subsection 103.08:

"103.08 Restrictions on Commencement of Work - In order to give the low bidder as many working days as possible to complete this project within the specified time for completion of the work as set forth in subsection 108.08 of these special provisions, the State will expedite the award and execution of the Contract Documents.

"If the low bid is accepted, Contract Documents will be mailed to the low bidder on the same day the bids are opened. Bidders should be prepared to have their surety sign the Performance Bond and their corporation officers available to expedite execution of the Contract. The State is prepared to execute the Contract immediately upon receiving it from the contractor. This procedure will allow the contractor to commence construction operations the following week."

done
fw

It is necessary to expedite the award of the contracts on these projects in order to complete the work this fall or because of working in the stream restrictions. These projects and their letting dates are:

(1) S.B. On Ramp at Beaverton/Hillsdale Hwy.; September 3 — 9347
(2) Germantown Rd. at Cornelius Pass Rd.; September 17 9357
(3) Glencoe Rd. and West Union Rd. (North Plains); September 17. 9361

JS:fw
cc: D. H. Moehring
J. H. Versteeg
Jack Sollis
R. W. Gormsen
Kay Turner
Ed Johnsen
Steve Macnab

9361

Section Glencoe Rd & West Union Rd (North Plains) Programming Estimate $ 885,000

Highway Co. Roads Project Length

County Washington Completion Time 350 Cal Days

Kind of Work Grade Pave & Str. Est. Comp. Date 9-19-82

Prefix 534-1970 Letting Date 27 AUG 81 Project No. RS-A685(3)

ESTIMATED CONSTRUCTION AUTHORIZATION

ROUTING SLIP—DEPT. OF TRANSPORTATION Date: 8-17-81

Director
Asst. Dir.-Administration
Accounting (Highway)
Administrative Services
Bridge
Chief Counsel
Commission Services
Construction
Data Processing (Trans. Bldg.)
Employee Development
Engineering (Design)
Environmental
Equipment Shops & Storeroom
Finance (DOT)
FHWA
General Files
Industrial Engineers

Information System (Lana Ave.)
Labor Relations
Landscape
Library
Location
Mail Room
Maintenance
Materials & Research
Motor Vehicles
Organization & Manpower Services
Parks & Recreation
Permits & Weighmaster
Personnel Operations
Photocopy
Project Management & Operations Planning
Public Affairs

Public Transit
Radio
Records Management
Right of Way
Safety & Health Services
Sign Shop
State Highway Engineer
Technical Services Engr.
Traffic Signal Unit
Traffic
Transportation Policy & Program Development
Travel Information
Utilities
[✓ Metropolitan]
Region Number
District Number
Resident Engineer

ATTENTION: Jon Rose

FROM: Proj. Mngt.

COMMENTS: This is a later estimate for this project.

Form 731-0022 (6-80) SP*71282-734

Contract Amount . . . . $ 616,423^{25}

ates A & B are the same)

. . . 38,000

. . . 115,000

. . . ✓ 100

$ 153,100

Subtotal $ 769,523^{25}

Contingencies (4-1/2%) . . . . 34,628^{55}

Engineering ([illegible], 9, [illegible]%) . . . . 69,257^{09}

~~Subtotal~~

~~Credit for~~ . . . .

Estimated Net Authorization, Construction . . . . $ 873,408^{89}

APPROVED

Duane Christensen
Road Design Engineer
Acting

APPROVED
Lyle K. Watson
Acting FINAL DESIGN ENGR.

Rev. 5/79

Section Glencoe Rd & West Union Rd (North Plains) Programming Estimate $ 885,000
Highway Co. Roads Project Length
County Washington Completion Time 350 Cal Days
Kind of Work Grade Pave & Str. Est. Comp. Date 9-19-82
Prefix 534-1970 Letting Date 27 AUG 81 Project No. RS-A685(3)

ESTIMATED CONSTRUCTION AUTHORIZATION

Estimated Contract Amount . . . . $ 616,423^{25}

Anticipated Additional Items: (Alternates A & B are the same)

Royalty Payment.		
Permit Fees		
Slide Correction		
Railroad Protective Costs	38,000	
Other Railroad Costs(. . . . .)	115,000	
Permanent Signing		
Permanent Pavement Striping. By county.		
Temporary Pavement Striping.		
Remove Pavement Striping (Exist. & Temp.) . . .		
Temporary Erosion Control	✓ 100	
State Furnished		
Roadside Seeding & Mulching		$ 153,100
Asphalt Cement Adjustment		
On the Job Trainees		
State Responsibility for Damages		
Signal Controller Testing (Engineering)		
Bikeway Signs		
Furnish Mailbox Posts		
Adjust Utilities:		
. . . . . .		
. . . . . .		
. . . . . .		
. . . . . .		
. . . . . .		

Subtotal $ 769,523^{25}

Contingencies (4-1/2%) . . . . 34,628^{55}

Engineering ([illegible], 9, [illegible]%) . . . . 69,257^{09}

~~Subtotal~~ $

~~Credit for~~ . . . .

Estimated Net Authorization, Construction . . . . $ 873,408^{89}

APPROVED

APPROVED
Lyle K. Watson
Acting FINAL DESIGN ENGR.

Duane D. Christensen
Road Design Engineer
Acting

Rev. 5/79

OREGON STATE HIGHWAY DIVISION

SUMMARY--BID SCHEDULE--COST ESTIMATE

Sheet 1 of 3

Date

tion Glencoe Rd & West Union Rd (North Plains)

County

ind Of Work

Length

Name Day

6-29-81

Item	Code	Unit	Quant.	Unit Cost	Total
Mobilization		All	All	(10%)	56,000
Temporary Protection and Direction of Traffic		All	All	–	2,800
Temporary Signs		Sq Ft	314	6 –	1884
Temporary Barricades		Each	20	125 –	2500
Flagmen		Hr.	300	23^{50} ~~24^{00}~~	7050
Roadwork					
Clearing and Grubbing		All	All	–	$10,000^{00}$
Removal of Structures and Obstructions		All	All	–	3000^{00}
Ditch Excavation		Cu Yd	270	8 ~~10^{00}~~	2160
Embankment Foundation Excavation		Cu Yd	950	6^{00}	5700
Embankment in Place		Cu Yd	22,900	5^{25} ~~5^{50}~~	120,225
Stone Embankment		Cu Yd	1,390	13 – ~~14^{00}~~	18,070
Toe Trench Excavation		Cu Yd	130	7^{00}	910
Trench Excavation		Cu Yd	250	8 ~~10~~ 00	2000
Finishing Roadbed and Slopes		All	All	–	6000^{00}
Watering		M-Gal	245	10^{00}	2450
Aggregate Shoulders		Ton	780	9^{50} ~~10^{00}~~	7,410
Cement Treated Base Mixture		Ton	5600	10 ~~14^{00}~~	56,000
Portland Cement in CTB Mixture		Ton	310	82^{00}	25,420
Asphalt in Seal		Ton	18	200 ~~[illegible]~~	3,600
Class "B" Asphalt Concrete		Ton	2400	3225 ~~33^{50}~~	77,400
6-inch Culvert Pipe		Lin Ft	16	8^{00}	128
12-inch Culvert Pipe		Lin Ft	280	16^{50}	4,620
18-inch Culvert Pipe		Lin Ft	226	23^{00} ~~[illegible]~~	5198

OREGON STATE HIGHWAY DIVISION
SUM Y--BID SCHEDULE--COST ESTIMATE

Sheet 2 of 3
Date
ion Glacier Rd 8
County
ind Of Work
Length
Name

Item	Code	Unit	Quant.	Unit Cost	Total
12-inch Sewer Pipe		Lin Ft	444	16 50 ~~22 00~~	7326
18-inch Sewer Pipe		Lin Ft	75	23 – ~~27 00~~	1725
Concrete Inlets, Type CG-1		Each	5	450 – ~~500 00~~	2250
6-inch Drain Pipe		Lin Ft	240	8 ~~9 00~~	1920
12-inch Drain Pipe		Lin Ft	240	16 50 ~~[illegible] 00~~	3960
✓ Filter Fabric	×	Sq Yd	475	1 75 ~~[illegible]~~	831 25
Gravel in Drains		Cu Yd	75	15 – ~~20 00~~	1125
✓ Guard Rail in Stockpile	×	All	All	–	22,000 00
✓ Fence in Stockpile	×	All	All	–	2000 00
Concrete Driveways		Sq Yd	94	16 50 ~~45 00~~	1,551
Concrete Curbs		Cu Yd	40	4 ~~4 50~~	160
Extra for Asphalt Approaches		Each	17	175 ~~200 00~~	2,975
Loose Riprap, Class 50		Cu Yd	410	15 00	6,150
Furnishing and Installing Mailbox Posts		Each	10	75 00 ~~200~~	750
✓ Roadside Seeding and Mulching	×	Acre	2	1,000	2,000
Water Main Installation		All	All	–	18,200 00

OREGON STATE HIGHWAY DIVISION
SUMM Y--BID SCHEDULE--COST ESTIMATE

Sheet 3 of 3
Date 9/11/81

ction Glencoe Rd & West Union Rd (North Plains)
County Washington
ind Of Work McKay Creek Bridge
Length
Name

Item	Code	Unit	Quant.	Unit Cost	Total
STRUCTURE					
Bridge Removal Work		All	All		13,000
Structure Excavation		Cu Yd	35	25-	875
✓ Furnish Pile Driving Equipment		× All	All		7,000
Alternate "A"					
Furnish Prestressed Concrete Piling		Lin Ft	1660	14-	23,240
✓ Drive Prestressed Concrete Piles		× Lin Ft	1510	2-	3,020
Alternate "B"					
Furnish Cast-in-Place Piling		Lin Ft	1660	14-	23,240
✓ Drive Steel Pile Shells		× Lin Ft	1510	2-	3020
Structural Concrete, Class 3300 (30 yd.³ @ 250)		All	All		7,500
4'x 30'/35' Prestressed Slabs		Each	16	1800 ~~2000~~	28,800
4'x 40'/45' Prestressed Slabs		Each	8	2300 ~~2,600~~	18,400
✓ Reinforcement (4500 lbs @ 045 ~~0 52~~)		× All	All		2025
Reinforced Concrete Bridge End Panels		Sq Yd	145	55.00	7,975
✓ Two Tube Steel Railing		× Lin Ft	200	46 ~~50~~-	9200

9361

Washington

ENVIRONMENTAL REVIEW CHECKLIST

Sep ~~24~~ 17 '81
~~Aug 27 '81~~ Bid Letting ____________ All Clear Deadline

ALL CLEAR 8/13/81
Donald L.

SECTION Glencoe Road-West Union Rd.
Highway County Road
County Washington Region ____
Type of Work G, P, Str Funds ____
State ____ Consultant ____ Plans Avail. ____ Yes ____ No

DSL ✓
Const Noise ✓

	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR
DOCUMENTS:					
EIS	X				
Negative Declaration		X			X
Project Assessment	X				
Write-off Letter	X				
PERMITS:					
Division of State Lands		X			X
D.O.G.M.I.	X				
Corps of Engineers		X			X
Coast Guard	X				
Co. Conditional Use	X				
NPS Air Pollution	X				
NPS Water Pollution	X				
CULTURAL:					
Cultural Survey		X			X
Cultural Salvage	X				
NOISE:					
Noise Study		X			X

4361

OREGON STATE HIGHWAY DIVISION
120 DOT Building
Salem, Oregon 97310

Highway # 534

8-4-81

Attention: Right-of-way Section

Subject: Federal Aid Project No. ____________ Prefix 534-1970

Project Name Glencoe Rd. - West Union Rd. (North Plains)
FAS-A685 & A686

Regarding the above referred to federal aid project, we hereby certify that to the best of our knowledge and belief:

A. Existing Right-of-Way

☐ 1. All construction can be accomplished completely within the existing right-of-way. This existing right-of-way was acquired prior to January 2, 1971.

B. New Right-of-Way

☒ 1. This project required additional right-of-way purchased after Jaunuary 2, 1971. Right-of-way, easements, or rights-of-entry required for this project have been secured in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, and all incidential charges related to the transfer of property will be paid by the county in accordance with said Act.

☒ a. There has been no displacement of persons from residences, farms or businesses.

OR

☐ b. There has been displacement of persons from either residences, farms or businesses and in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, displaced persons, businesses, or farm operations have been provided relocation payments, if eligible, and relocation assistance. Displaced individuals or families have been relocated to decent, safe and sanitary housing or have been offered decent, safe, sanitary and fair housing immediately available on the open market.

C. Utilities

☒ 1. The occupancy and/or adjustment of existing utilities within the right-of-way of the above referred to federal aid project have been authorized by permit, franchise, or other approved procedure.

Signed at Hillsboro, Oregon, this 4th day of August, 1981

County of WASHINGTON COUNTY

~~County Judge~~/Chairman

Commissioner

Commissioner

APPROVED WASHINGTON COUNTY
BOARD OF COMMISSIONERS
MINUTE ORDER # 81-429
DATE 8-4-81
BY Jo Ann Johansen
CLERK OF THE BOARD

Certified By:

Regional Right-of-Way Supervisor
Date 8-19-81

Instructions: Complete A or B and C.

RP

9361

2.

RECEIVED
STATE HWY ENGR
AUG 3'81
REFER TO
FOR

Info	Imres	R/D	D/R	Sign	Act	File

NOTED
H.S.COULTER

ROW 18-4

August 3, 1981

Mr. Larry Rice
Director of Public Works
Washington County
150 N. First St.
Hillsboro, OR 97123

Water Facility Relocation
City of North Plains
Glencoe Rd.-West Union Rd. (N. Plains)
Section
FAS-A685 and A686
Washington County

Dear Mr. Rice:

Reference is made to my letter of July 15, 1981 which set forth certain terms for the relocation of water facilities owned by the City of North Plains. The responsibility for the cost of relocation set forth in my letter was partly in error. Please consider the July 15, 1981 letter nil and void.

Pursuant to the terms of an agreement between the Oregon Transportation Commission and Washington County, approved by the Commission on July 18, 1978 and signed by the State Highway Engineer on September 5, 1978, it is the County's responsibility to arrange for the relocation of utilities in conflict with the subject project.

At the request of the City of North Plains and with the concurrence of Washington County, the relocation and/or adjustment of the City of Plains' water facilities has been included as a contract bid item in the highway construction project. DMJM Hilton, Consulting Engineer, for the City of North Plains has prepared plans and specifications for the relocation of the City's water facilities to accommodate the construction of the subject project. These plans and specifications have been incorporated as part of the plans being prepared for the subject project. It is the State's intent to include the water facility relocation work as a lump sum item.

A portion of the conflicting water facilities is located on City street right of way and a portion on County road right of way. Pursuant to State policies and procedures and Federal Highway Administration's Policy and Procedure Memorandum 30-4, the cost of relocating that portion of the conflicting water facilities on City street right of way is reimbursable. The cost of relocating that portion of conflicting water facilities located on County road right of way is not reimbursable.

I have been advised that an arrangement has been made between Washington County and the City of North Plains to the effect that Washington County will be responsible for the cost of relocating City water facilities located on County road right of way.

The City's consultant has prepared and submitted an estimate of cost for the relocation of the City's water facilities. The consultant estimated the cost to relocate the facilities located on City street right of way to be $7,915 and the cost to relocate the facilities located on County road right of way to be $10,290 for a total relocation cost of $18,205. Using the estimated cost figures, the County would, therefore, be responsible for 56.52% of the total relocation cost.

Upon award of the contract for the subject project, you will be advised of the name of the subcessful low bidder and the lump sum unit bid price for the relocation of water facilities. Upon completion of the water facility relocation work, the County will be billed for 56.52% of the lump sum cost of the work.

If the terms as set forth above for the relocation and payment of the relocation of the City of North Plains' water facilities is acceptable to Washington County, please execute two (2) copies of this letter in the space provided below and return the two copies to this office.

Yours truly,

Jack M. Cartwright
Utility Engineer

JMC/vlw

APPROVED:

WASHINGTON COUNTY

Date ______________________________

BY ______________________________

BY ______________________________

cc: City of North Plains
DMJM Hilton

bc: H. S. Coulter
E. S. Hunter
C. T. Keasey
J. H. Versteeg
E. L. Hardt
D. E. Swan
Jan Peterson
Ted Inloes

9361

July 24, 1981

ACC

Mr. Larry Rice
Director of Public Works
150 N. First
Hillsboro, Oregon 97123

Dear Mr. Rice:

RE: Glencoe Road-West Union Road Section
FAS-A685 and FAS-A686
Washington County
Project No. RS-A685

In the interest of expediency in awarding a contract on the subject project, we understand that the county wishes to make an early advance deposit.

Based upon our latest estimate of $933,644.76, the county's 6% share would be $56,018.69. However, to allow for the possibility of the bid coming in under our estimate we are requesting but 65% of the $56,018.69, which is $36,412.15. By rounding this amount we are requesting an early advance deposit of $36,500.00.

The attached sheet describes the three options for making your advance deposit. Please select the option you desire and submit your advance deposit according to the instructions.

Very truly yours,
ORIGINAL SIGNED BY
D. E. SWAN

D. E. Swan
Operation Programming Engineer

HR:pf
Attachment

bcc w/AD # 929: Jon Rose, Region H Federal Aid Engineer
Vern Skoog - Please return completed AD # 929 when advance deposit is received.

9361

2

RECEIVED
STATE HWY ENGR
JUL 15 '81
REFER TO

FOR

Info	Invest	R/O	D/R	Sign	Act	File

NOTED
H.S.COULTE

ROW 18-4

July 15, 1981

Mr. Larry Rice
Director of Public Works
Washington County
150 N. First Street
Hillsboro, OR 97123

Water Facility Relocation
City of North Plains
Glencoe Rd.-West Union Rd. (N. Plains)
Section
FAS-A685 and A686
Washington County

Dear Mr. Rice:

Pursuant to the terms of an agreement between the Oregon Transportation Commission and Washington County, approved by the Commission on July 18, 1978 and signed by the State Highway Engineer on September 5, 1978, it is the County's responsibility to arrange for the relocation of utilities in conflict with the subject project.

At the request of the City of North Plains, and with the concurrence of Washington County, the relocation and or adjustment of the City of North Plains water facilities has been included as a contract bid item in the Highway construction project. I have been advised that an arrangement has been made between Washington County and the City of North Plains to the effect that Washington County will be responsible for the cost of relocating the City of North Plains water facilities.

DMJM Hilton, Consulting Engineer for the City of North Plains, has prepared plans and specifications for the relocation of the City's water facilities to accommodate the construction of the subject project. The plans and specifications have now been incorporated as a part of the plans being prepared for the subject project. It is the State's intent to include the water facility relocation work as a lump sum item. The City's consultant has submitted an estimate in the amount of $18,205 for the total cost of the water facility relocation work.

Upon award of the contract for the subject project, you will be advised of the name of the successful low bidder and the lump sum unit bid price for the relocation of water facilities. Upon completion of the water facility relocation work the County will be billed for the lump sum cost of the work.

If the terms as set forth above for the relocation and payment of the relocation of the City of North Plains water facilities is acceptable to Washington County, please execute two (2) copies of this letter in the space provided below and return the two copies to this office.

Yours truly,

Jack M. Cartwright

Jack M. Cartwright
Utility Engineer

JMC/llr

APPROVED:

WASHINGTON COUNTY

Date ______________________________

By ______________________________

By ______________________________

cc: City of North Plains
DMJM Hilton

bc: H. S. Coulter
E. S. Hunter
C. T. Keasey
J. H. Versteeg
E. L. Hardt
D. E. Swan
Jan Peterson
Ted Inloes

9361

Section	Glencoe Rd & West Union Rd (North Plains)	Programming Estimate	$ 934,000
Highway	Co. Roads	Project Length	
County	Washington	Completion Time	330 Cal Days
Kind of Work	Grade Pave & Str. 7-13-81	Est. Comp. Date	
Prefix	534-1970	Letting Date 27 AUG 81	Project No. RS-A685( )

ESTIMATED CONSTRUCTION AUTHORIZATION

Estimated Contract Amount . . . . $ 669,491, 50

Anticipated Additional Items: (Alternates A & B are the same)

Royalty Payment		
Permit Fees		
Slide Correction		
Railroad Protective Costs	38,000	
Other Railroad Costs	115,000	
Permanent Signing		
Permanent Pavement Striping. By county		
Temporary Pavement Striping		
Remove Pavement Striping (Exist. & Temp.)		
Temporary Erosion Control	✓ 100	
State Furnished ______		$ 153,100
Roadside Seeding & Mulching		
Asphalt Cement Adjustment		
On the Job Trainees		
State Responsibility for Damages		
Signal Controller Testing (Engineering)		
Bikeway Signs		
Furnish Mailbox Posts		
Adjust Utilities:		

Subtotal $ 822,591 50

Contingencies (4-1/2%) 37 016 75

Engineering ([illegible], 9, [illegible]%) 74,033 51

~~Subtotal~~ $

~~Credit for~~ ______ . . . .

Estimated Net Authorization, Construction . . . . $ 933,644 76 ✓

x 85: 921,609

APPROVED

Duane D. Christensen
Road Design Engineer
Acting

APPROVED
Lyle K. Watson
Acting FINAL DESIGN ENGR.

To: JON ROST
7-13-81

Rev. 5/79

9361

7-13-81

L.

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. RS-A685(3)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Washington

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 80233

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 7/13/81

8. FEDERAL ROUTE NUMBER Secondary A685

9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION:
Glencoe Road - West Union Road (N. Plains) Section

11. GENERAL DESCRIPTION OF WORK
Program change

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* Program change

13. REMARKS

As requested in Mr. Swan's letter of July 10, 1981 I approve the revised Construction Costs to a TEC of $911,800 Federal Funds $804,000.

(Increase TEC $203,800 Federal Funds $179,700)

RECEIVED
STATE HWY ENGR
JUL 16 '81
REFER TO Moehring
FOR
Info | Invest | R/O | D/R | Sign | Act | File

M'J
6
7/16

14. DATE 7/13/81

15. SIGNATURE OF APPROVING OFFICIAL

16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9361

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

July 10, 1981

In Reply Refer to
File No. PRO 6-2

TO: Dale E. Wilken
Division Administrator
Federal Highway Administration

Original Signed By
D. E. Swan

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Program Change
Item No. 80233
Project No. RS-A685 (3)
Glencoe Rd.-West Union Rd. (N. Plains) Sec.
Washington County

I request approval of a program change and authorization for an increase in the cost of construction of the subject project requiring modifications in the "Estimated Project Cost by Phases" as follows:

	TEC	FF	%
Orig.	$ 708,000	$ 624,300	88.18
Add'l.	203,800	179,700	
Rev.	$ 911,800	$ 804,000	88.18

Approval of this request will involve an increase of $ 203,800 in total estimated cost and additional Federal funds of $ 179,700 in accordance with Oregon's approval Certification Acceptance Plan.

JLG/lms

cc: H. Reynoldson
Lou Olson
General Files

Form 734-3122

9361

Section Glencoe Rd & West Union Rd (North Plains) Programming Estimate $ ____

Highway Co. Roads Project Length ____

County Washington 7-9-81 Completion Time 330 Cal Days

Kind of Work Grade Pave & Str. Est. Comp. Date ____

Prefix 534-1970 Letting Date ____ Project No. RS-A685( )

ESTIMATED CONSTRUCTION AUTHORIZATION

Estimated Contract Amount . . . . $ ~~616,351~~50 669,491 50

Anticipated Additional Items: (Alternates A & B are the same)

Royalty Payment		
Permit Fees		
Slide Correction		
Railroad Protective Costs	38,000	
Other Railroad Costs (Signal - 75,668, Crossing - 20,000)	95,668	
Permanent Signing		
Permanent Pavement Striping. By county.		
Temporary Pavement Striping		
Remove Pavement Striping (Exist. & Temp.)		
Temporary Erosion Control	✓ 100	
State Furnished ____		
Roadside Seeding & Mulching		$ 133,768
Asphalt Cement Adjustment		
On the Job Trainees		
State Responsibility for Damages		
Signal Controller Testing (Engineering)		
Bikeway Signs		
Furnish Mailbox Posts		
Adjust Utilities:		
____		
____		
____		
____		
____		

Subtotal $ ~~780,119~~50 803259 58

Contingencies (4-1/2%) . . . . 36 146 68 ~~35,105 38~~

Engineering (~~8~~, 9, ~~10~~%) . . . . 72,293 36/76 ~~70,210~~

~~Subtotal~~ $

~~Credit for~~ ____ . . . . ____

Estimated Net Authorization, Construction . . . . $ ~~885,455~~ 63 911,699 53

APPROVED

____
Road Design Engineer

To Jon Rose
7-9-81

OREGON STATE HIGHWAY DIVISION

SUMMA--BID SCHEDULE--COST ESTIMATE

Sheet 1 of 3

Date

Section Glencoe Rd & West Union Rd (North Plains)

County

Kind Of Work

Length

Name Day

6-29-81

No	Item	Code	Unit	Quant.	Unit Cost	Total
	Mobilization		All	All	(10%)	59,000
	Temporary Protection and Direction of Traffic		All	All	–	2,800
	Temporary Signs		Sq Ft	314	6-	1884
	Temporary Barricades		Each	20	125-	2500
	Flagmen		Hr.	300	24^{00}	7200
	Roadwork					
	Clearing and Grubbing		All	All	–	$10,000^{00}$
	Removal of Structures and Obstructions		All	All	–	3000^{00}
	Ditch Excavation		Cu Yd	270	10^{00}	2700
	Embankment Foundation Excavation		Cu Yd	950	6^{00}	5700
	Embankment in Place		Cu Yd	22,900	5^{50}	125,950
	Stone Embankment		Cu Yd	1,390	14^{00}	19,460
	Toe Trench Excavation		Cu Yd	130	7^{00}	910
	Trench Excavation		Cu Yd	250	10^{00}	2,500
	Finishing Roadbed and Slopes		All	All	–	6000^{00}
	Watering		M-Gal	245	10^{00}	2450
	Aggregate Shoulders		Ton	780	10^{00}	7,800
	Cement Treated Base Mixture		Ton	5600	14^{00}	78,400
	Portland Cement in CTB Mixture		Ton	310	82^{00}	25,420
	Asphalt in Seal		Ton	18	250^{00}	4,500
	Class "B" Asphalt Concrete		Ton	2400	33^{50}	80,400
	6-inch Culvert Pipe		Lin Ft	16	8^{00}	12[illegible]
	12-inch Culvert Pipe		Lin Ft	280	16^{50}	[illegible]
	18-inch Culvert Pipe		Lin Ft	226	27^{00}	[illegible]

OREGON STATE HIGHWAY DIVISION

SUMM -BID SCHEDULE--COST ESTIMATE

Sheet 2 of 3

Date

Section Glencoe Rd 8

County

Kind Of Work

Length

Name

No	Item	Code	Unit	Quant.	Unit Cost	Total
4	12-inch Sewer Pipe		Lin Ft	444	22^{00}	9,768
5	18-inch Sewer Pipe		Lin Ft	75	27^{00}	2,025
6	Concrete Inlets, Type CG-1		Each	5	500^{00}	2,500
7	6-inch Drain Pipe		Lin Ft	240	9^{00}	2,160
8	12-inch Drain Pipe		Lin Ft	240	17^{00}	4,080
9	Filter Fabric		Sq Yd	475	3^{50}	1,662
10	Gravel in Drains		Cu Yd	75	20^{00}	1,500
11	Guard Rail in Stockpile		All	All	-	$22,000^{00}$
	Fence in Stockpile		All	All	-	2000^{00}
12	Concrete Driveways		Sq Yd	94	18^{00}	1692
	Concrete Curbs		Cu Yd	40	4^{50}	180
	Extra for Asphalt Approaches		Each	17	200^{00}	3400
	Loose Riprap, Class 50		Cu Yd	410	15^{00}	6,150
	Furnishing and Installing Mailbox Posts		Each	10	100^{00}	1,000
	Roadside Seeding and Mulching		Acre	2	1,000	2,000
	Water Main Installation		All	All	-	$18,200^{00}$

OREGON STATE HIGHWAY DIVISION
SUMMARY--BID SCHEDULE--COST ESTIMATE

Sheet 3 of 3
Date

Section
County

Kind Of Work
Length
Name

No	Item	Code	Unit	Quant.	Unit Cost	Total
	STRUCTURE					
10	Bridge Removal Work		All	All		13,000
11	Structure Excavation		Cu Yd	35	25-	875
12	Furnish Pile Driving Equipment		All	All		7,000
	Alternate "A"					
13	Furnish Prestressed Concrete Piling		Lin Ft	1660	14-	23,240
14	Drive Prestressed Concrete Piles		Lin Ft	1510	2-	3,020
	Alternate "B"					
15	Furnish Cast-in-Place Piling		Lin Ft	1660	14-	23,240
6	Drive Steel Pile Shells		Lin Ft	1510	2-	3020
7	Structural Concrete, Class 3300 (30 @ $^{\$}$250)		All	All		7,500
8	4' x 30'/35' Prestressed Slabs		Each	16	2000	32,000
9	4' x 40'/45' Prestressed Slabs		Each	8	2,600	20,800
0	Reinforcement (4500 lbs @ 0^{52})		All	All		2,340
1	Reinforced Concrete Bridge End Panels		Sq Yd	145	55^{00}	7,975
2	Two Tube Steel Railing		Lin Ft	200	50-	10,000
						646,351$^{\$}$

9361

2.

STATE OF OREGON

INTEROFFICE MEMO

files

TO: Mr. Robert Gormsen
Commission Services

DATE: June 18, 1981

FROM: Roger D. Trygstad
Railroad & Utility Engineer

SUBJECT: Supplemental Agreement
Crossing No. 8U-21.40
Glencoe Rd. (North Plains)
Washington County
ODOT Agreement No. RR-1051
Project No. RS-A685(3)

RAILROAD COMPANIES
FILE No. 1051

Attached is the State's fully-executed counterpart of a supplement to the subject Agreement which increases the cost estimate for the work the Railroad is to do from $95,668 to $115,500.

RDT/vlw
Attach.
cc: D. E. Wilken - w/copy
C. T. Keasey - w/copy
J. B. Boyd
J. L. Sollis
V. E. Skoog - w/copy
D. E. Swan - w/2 copies
Ed Hardt - w/2 copies - NOTE: The Order for State Force Work will have to be revised.

7-13-81
note to adele

Noted in
agree. book
JW

9361

2

ROW 18-2

June 18, 1981

Mr. D. L. Hawkins
Real Estate Representative
800 Central Building
Seattle, WA 98104

Permit of Entry
Glencoe Rd.-West Union Rd. Sec.
Washington County (North Plains)
R/W File 51519
ODOT Agreement No. RR-1077

RAILROAD COMPANIES
FILE No. 1077

Dear Don:

Attached is Burlington Northern's copy of the fully-executed Permit of Entry relating to the subject project.

I really appreciate the effort you put forth in expediting this matter. It is a pleasure working with you.

Cordially,

Roger D. Trygstad
Railroad & Utility Engineer

RDT/vlw
Attach.
cc: D. D. Gonrowski

bc: D. E. Wilken
J. L. Sollis
J. B. Boyd - w/copy
C. T. Keasey
R. Gormsen - w/original
D. E. Swan - w/copy
Ed Hardt - w/2 copies - PLEASE GIVE A COPY TO RES. ENGR.

OS July 8
Cy. 6-10-81 Boyd

9361

L

STATE OF OREGON

INTEROFFICE MEMO

TO: H. S. Coulter
State Highway Engineer

DATE: April 23, 1981

FROM: Roger D. Trygstad
Railroad & Utility Engineer

NOTED
H.S.COULTER

SUBJECT: SXF: 1175
Crossing No. 8U-21.4-A
8U-21.37 (RELOCATED REPLACEMENT GRADE CROSSING)

BUILDING

Attached is a copy of Order No. 81-274 issued by the Public Utility Commissioner on April 21, 1981 relative to the above subject matter.

RDT/vlw
Attach.

cc: Richard Arnold, FHWA
E. S. Hunter
W. J. Hart
C. T. Keasey
R. L. Schroeder
W. W. Geibel
E. L. Hardt (2) - Pls. give one to Res. Engr.
R. P. Hamilton
J. L. Sollis
Bob Judson

RECEIVED
STATE HWY ENGR
APR 24 '81
REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

ORDER NO. 81-274

ENTERED April 21, 1981

PUC CROSSING NO. 8U-21.4-A
DOT CROSSING NO. 58 263 C

PUC CROSSING NO. 8U-21.37
(RELOCATED REPLACEMENT GRADE CROSSING)

BEFORE THE PUBLIC UTILITY COMMISSIONER

OF OREGON

SXF 1175

In the Matter of the Application of the OREGON DEPARTMENT OF TRANSPORTATION ON BEHALF OF WASHINGTON COUNTY for the authority, pursuant to ORS 763.030, to relocate a crossing of Glencoe Road and Burlington Northern, Inc., Vernonia Branch, in North Plains, Washington County, Oregon.

ORDER

On May 15, 1980, the State of Oregon by and through its Department of Transportation, Highway Division, duly filed an application with the Commissioner seeking authority, pursuant to ORS 763.030, to replace an existing railroad-highway overcrossing of Glencoe Road, a road under the jurisdiction of Washington County, over the main track and right-of-way of the Burlington Northern, Inc., Vernonia Branch, in North Plains, Washington County, Oregon, with a grade crossing.

Comments on the application were made by various parties as follows: PUC staff by letters dated October 27 and December 11, 1980, and January 6, 1981; and applicant by letter dated December 16, 1980. Applicant amended its application by letters dated June 2 and September 9, 1980.

Copies of the application, amendments and responses thereto were duly served upon Burlington Northern, Inc., Washington County, City of North Plains and applicant. No objection by any party has been made to the granting of the application as amended.

Glencoe Road is a two-lane roadway 20 feet in width which lies in a generally north-south direction. Burlington Northern's track is basically oriented in an east-west direction. The overcrossing is an old wooden bridge-type structure and is in a deteriorated condition. The weight of vehicles on the structure is restricted to between 5 and 20 tons, depending on the number of axles per vehicle.

The road authority, after study, proposes to not repair or rebuild the existing overcrossing due to the high cost and light usage of the rail line. Instead, it is proposed to relocate the road approximately 170 feet to the east, around the base of a hill, and to cross the track at grade.

Applicant proposes to install cantilevered flashing light and automatic gate signals as the protective devices at the grade crossing. The relocated roadway will be 52 feet in width, consisting of four 12-foot paved travel lanes and two 2-foot paved shoulders.

Upon completion of the project, the overcrossing structure will be removed.

Due consideration has been given to all representations in the application, amendments and responses thereto. No matters within the scope of ORS Chapter 763 are in issue, and no hearing will be required.

Based upon the amended application and the files of the Commissioner, it is found that the crossing is required by the public safety and welfare. The application should be granted upon the following terms and conditions:

IT IS THEREFORE ORDERED that:

1. The authority to alter and relocate the crossing as requested is hereby granted.

2. Applicant shall:

    a. Construct that portion of the crossing lying outside lines drawn two feet outside each rail to accommodate a paved roadway 52 feet in width, consisting of four 12-foot travel lanes and two 2-foot shoulders, and bear 94 percent of the cost thereof;

    b. Furnish standard rural-type guardrail to be installed as provided herein, and bear 94 percent of the cost thereof;

c. Bear 94 percent of the cost of constructing that portion of the crossing lying between lines drawn two feet outside each rail to accommodate a roadway 52 feet in width; and

d. Bear 94 percent of the cost of furnishing and installing the automatic signalization and circuitry ordered herein.

3. Washington County shall:

a. Bear 6 percent of the cost of constructing the crossing;

b. Bear 6 percent of the cost of furnishing and installing the automatic signalization, circuitry and guardrail ordered herein;

c. Install standard rural-type guardrail adjacent to each set of signals at the crossing, the face of the guardrail to be located not less than 26 feet from the roadway centerline;

d. Furnish, install and maintain standard advance warning signs and advance warning pavement markings at appropriate locations on each roadway approach to the crossing, and bear all the cost thereof;

e. Furnish, install and maintain stop clearance lines at appropriate locations on each side of the track at a point one foot in advance of each automatic gate signal, and bear all the cost thereof;

f. Maintain that portion of the crossing lying outside lines drawn two feet outside each rail and maintain the guardrail ordered herein, and bear all the cost thereof;

g. Remove the existing Glencoe Road overcrossing (No. 8U-21.4-A), upon completion and opening to the public of the grade crossing authorized herein, and bear all the cost thereof; and

h. Coordinate all temporary impairments of standard railway clearances with the Burlington Northern, Inc., at least 48 hours in advance of any impairment.

4. Burlington Northern, Inc., shall:

   a. Subject to reimbursement as provided herein, construct that portion of the crossing lying between lines drawn two feet outside each rail to accommodate a roadway 52 feet in width;

   b. Subject to reimbursement as provided herein, furnish and install two Commissioner's Standard No. 2B cantilevered flashing light signals, equipped with gongs, and two Commissioner's Standard No. 4 automatic gates, each set of signals to be located not less than 15 feet from the centerline of track and not less than 32 feet from the centerline of the road. Said signals will be activated using motion sensing-type devices; and

   c. Maintain the automatic signalization and circuitry ordered herein and maintain that portion of the crossing lying between lines drawn two feet outside each rail, and bear all the cost thereof.

5. Each party shall notify the Commissioner upon completion of its portion of the project.

During the removal of the existing overcrossing structure (No. 8U-21.4-A) it may be necessary to impair clearances on the railroad. Authority to maintain such temporary impaired clearances as may be necessary is granted subject to provisions of paragraph 3.h. above.

The at grade crossing shall not be opened to use by the public until the automatic protective devices ordered herein are operational. The existing overcrossing will be closed to use by the public simultaneously with the opening of the at grade crossing.

Made, entered, and effective 4/21/81.

JOHN J. LOBDELL
Public Utility Commissioner

9361 4-28-81

PRELIMINARY COPY
FEB 27 1981
SUBJECT TO CHANGE
FINAL DESIGN UNIT

GLENCOE RD. - WEST UNION RD. (NORTH PLAINS) SEC. FAS-A635 & A686 WASHINGTON COUNTY				SHEET No. 1
FED. ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
10	OREGON			See Index

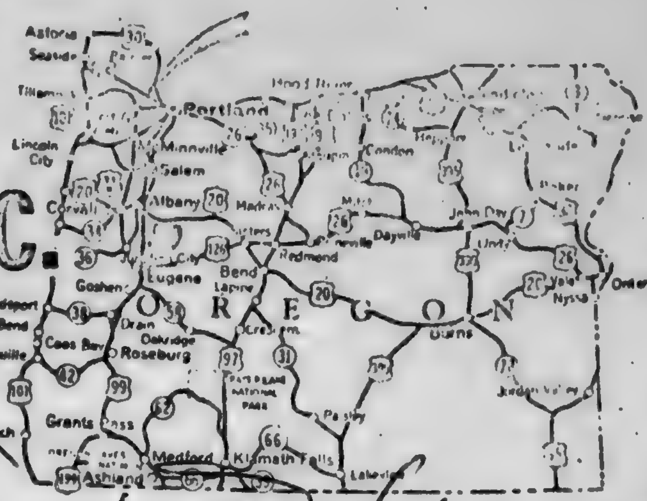
FAS-C

OREGON
RANSPORTATION
AY DIVISION

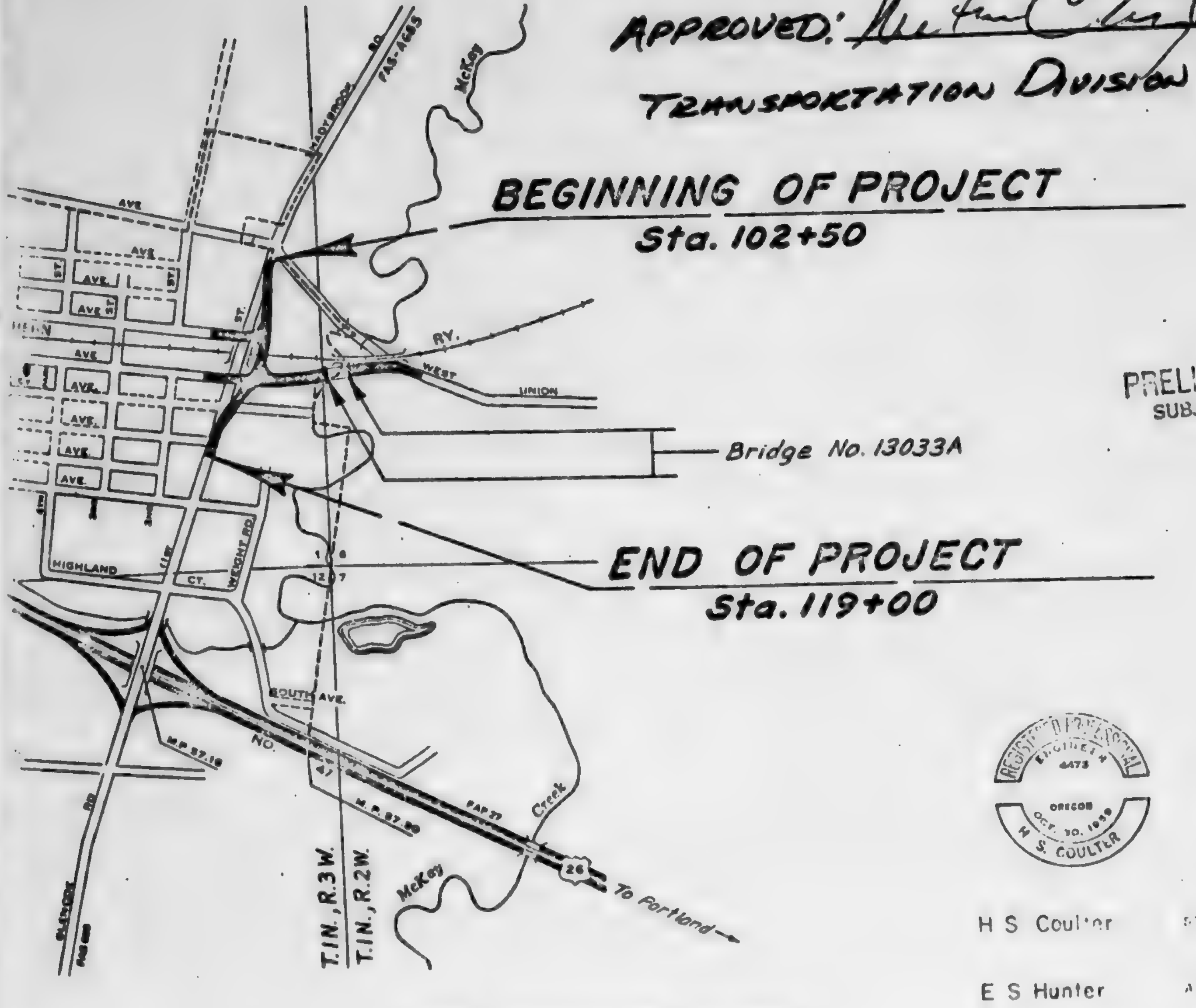
SED PROJECT

RD. (NORTH PLAINS) SEC.
& A686
COUNTY

~~APPROVED ________ 19__~~
~~BOARD OF COMMISSIONERS OF WASHINGTON COUNTY~~
~~BY ________ CHAIRMAN~~


Astoria
Seaside
Tillamook
Portland
Hood River
Lincoln City
McMinnville
Salem
Condon
Heppner
Corvallis
Albany
Madras
John Day
Baker
Ontario
Goshen
Eugene
Bend
Redmond
Burns
Vale
Nyssa
Reedsport
North Bend
Coos Bay
Coquille
Roseburg
Grants Pass
Medford
Ashland
Klamath Falls
Lakeview
Paisley
Jordan Valley
O R E G O N

APPROVED: [signature] 4-28-81
TRANSPORTATION DIVISION MANAGER


BEGINNING OF PROJECT
Sta. 102+50
Bridge No. 13033A
END OF PROJECT
Sta. 119+00
FAS-A685
McKay
RY.
WEST
UNION
AVE
HIGHLAND
CT.
SOUTH AVE.
NO.
MP 57.10
M.P. 57.80
FAP 27
Creek
26
To Portland
McKay
T.1N., R.3W.
T.1N., R.2W.

PRELIMINARY COPY
SUBJECT TO CHANGE

H. S. COULTER 4473 OCT. 30, 1959

4552

H S Coulter STATE HIGHWAY ENGINEER

E S Hunter ASSISTANT STATE HIGHWAY ENGINEER

OREGON TRANSPORTATION COMMISSION

Anthony Yturri	CHAIRMAN
Tom Walsh	VICE CHAIRMAN
Gordon Coleman	COMMISSIONER
Peter J Brix	COMMISSIONER
Michael P Hollern	COMMISSIONER
Fred B. Klaboe	DIRECTOR OF TRANSPORTATION

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
____
FIELD OPERATIONS ENGINEER

9361

TRA 7-3

STATE OF OREGON

INTEROFFICE MEMO

TO: D. N. Stoudenmeyer
Acting Final Design Supervisor

DATE: April 10, 1981

FROM: L. E. George
Traffic Engineer

SUBJECT: Approved Sign Study Plan
Glencoe Road-West Union Road (North Plains) Section
[redacted]
Washington County

Attached are two prints of the approved sign study plan for the above-named section.

This work should be included in the project scheduled for June 25, 1981.

L. E. George
Traffic Engineer

ELS:er

Attachments

cc with attachment: R. N. Bothman
E. L. Hardt
W. W. Geibel

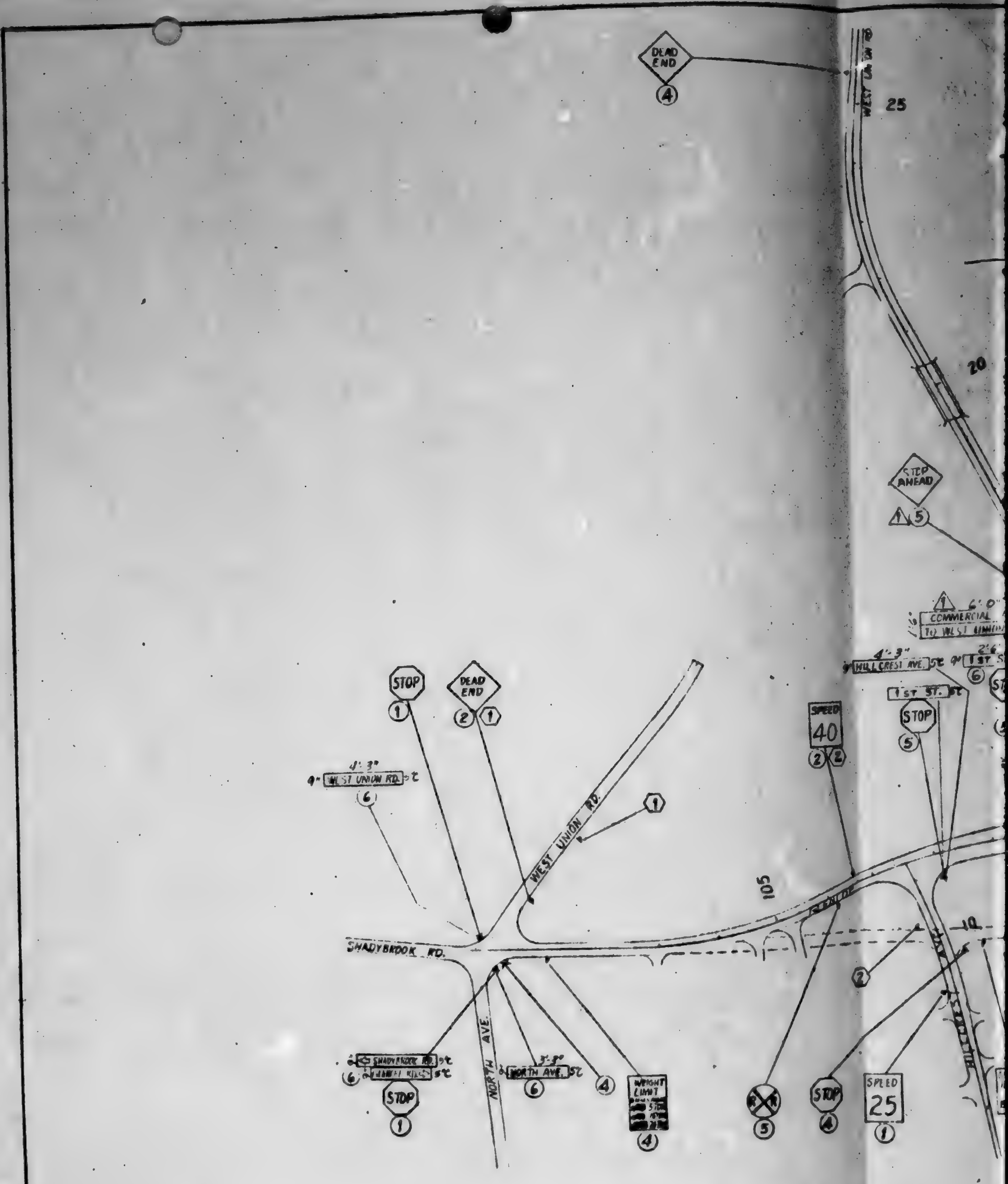
Beard [illegible]

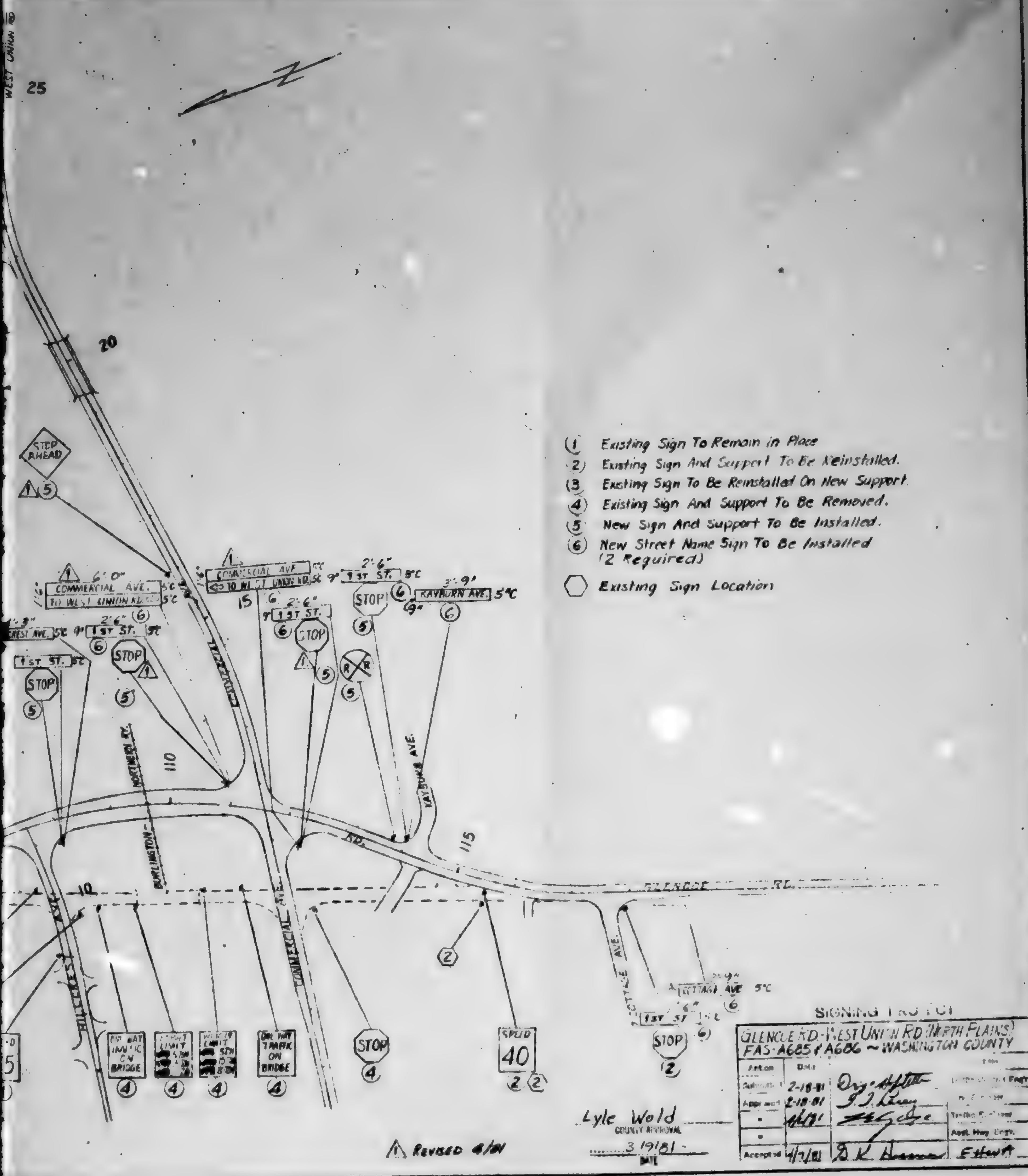
RECEIVED
APR 13 1981
ROAD DESIGN
SECTION

Verstoeg
Anderson
Christensen
Olson
Sullivan
Terpin
Trout
Wakarlig

Do Not File ☐
Return To
Bring Up / /
Action

1 Plan kept by Beard


DEAD END
④
WEST UNION
25
20
STOP AHEAD
1 5
1 6'-0"
COMMERCIAL
TO WEST UNION
4'-3"
HILLCREST AVE.
2'-6"
1ST ST.
6
1ST ST.
STOP
5
SPEED 40
2 2
STOP
①
DEAD END
2 1
4'-3"
WEST UNION RD.
6
WEST UNION RD.
1
105
10
SHADYBROOK RD.
NORTH AVE.
SHADYBROOK RD.
6
STOP
①
3'-3"
NORTH AVE.
6
4
WEIGHT LIMIT
④
2
R R
5
STOP
④
SPEED 25
①
HILLCREST


WEST UNION 18
25
20
15
110
115
10
STOP AHEAD
COMMERCIAL AVE.
TO WEST UNION RD.
6'-0"
COMMERCIAL AVE.
TO WEST UNION RD.
1ST ST.
2'-6"
KAYBURN AVE.
3'-9"
CREST AVE.
STOP
R R
NORTHERN RY.
BURLINGTON
KAYBURN AVE.
RD.
GLENCOE RD.
HILLCREST AVE.
COMMERCIAL AVE.
COTTAGE AVE.
ONE WAY TRAFFIC ON BRIDGE
SPEED LIMIT
WEIGHT LIMIT
SPEED 40
COTTAGE AVE
1ST ST
5"C
9"
Revised 4/81

(1) Existing Sign To Remain in Place
(2) Existing Sign And Support To Be Reinstalled.
(3) Existing Sign To Be Reinstalled On New Support.
(4) Existing Sign And Support To Be Removed.
(5) New Sign And Support To Be Installed.
(6) New Street Name Sign To Be Installed
(2 Required)

⬡ Existing Sign Location

Lyle Wold
COUNTY APPROVAL
3/19/81
DATE

SIGNING PROJECT

GLENCOE RD.-WEST UNION RD. (NORTH PLAINS) FAS-A685 & A686 ~ WASHINGTON COUNTY			
Action	Date		[illegible]
Submitted	2-18-81		[illegible] Engr.
Approved	2-18-81		[illegible]
•	4/1/81		Traffic Engineer
•			Asst. Hwy. Engr.
Accepted	4/7/81	D. K.	

June 85

9361 4-7-81 2

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. RS-A685(3)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Washington

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 80233

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 4/7/81

8. FEDERAL ROUTE NUMBER Secondary A685

9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION:
Glencoe Road - West Union Road (North Plains)

11. GENERAL DESCRIPTION OF WORK
Install signals, gates and rubberized crossing surface

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED ON ~~AN AGREED UNIT PRICE AND/OR~~ FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

As requested in Mr. Swan's 4/2/81 letter you are authorized to proceed with the work covered by the Agreement with Burlington Northern, Inc., approved by the Highway Division on 1/19/81 at a total estimated cost of $95,668 Federal Funds $84,360.

(The above authorization does not require an additional obligation of funds)

RECEIVED
STATE HWY ENGR
APR 16 '81
REFER TO
[illegible]

Orig to: 4-16-81

14. DATE 4/7/81

15. SIGNATURE OF APPROVING OFFICIAL G K Hessner

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9361

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:

April 2, 1981

PRO 6

TO: D.E. Wilken
Division Administrator
Federal Highway Administration

FROM: D.E. Swan
Operation Programming Engineer

SUBJECT: Proposed Railroad Agreement
Project No. RS-A685(3)
Glencoe Rd.-W. Union Rd. (N. Plains) Section
Washington County

I hereby request your approval of the proposed agreement with Burlington Northern Inc. which was approved by the Highway Division on January 19, 1981 on the subject project. The estimated total cost for work by the railroad is $95,668. (in BN)

I further request authorization to proceed with work by the railroad for the installation of crossing signals with automatic gates and a rubberized crossing surface.

Authorization to proceed as requested will not require an additional obligation of federal funds over the amount approved on February 13, 1981.

CL:bkc

cc: R. Trygstad
H. Reynoldson

Form 734-3122

9361 Form FHWA 121 (1/80)

L.

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

THE OREGON DIVISION - SALEM
UNITED STATES GOVERNMENT

memorandum

Subject: Oregon Project FAS-A685 & A686
Glencoe Road-W. Union Road
Your File DES 16-1
Washington County

Date: April 2, 1981

From: Dale E. Wilken, Division Administrator

Reply to Attn. of: HFO.6-OR

To: Mr. H. S. Coulter, State Highway Engineer, ODOT

I concur in your proposed deviation from standards and your finding in the public interest supporting work by County Forces. The County Force work is eligible for Federal participation as a part of the project if they so elect.

G.K. Hossner
for Dale E. Wilken

cc:
OSHD (D E Swan, Proj Mgmt)
OSHD (J H Versteeg, Rd Dsgn)
OSHD (L K Watson, Rd Dsgn)

RECEIVED
STATE HWY ENGR
APR 3'81
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

9361

VICTOR ATIYEH
GOVERNOR

Oregon State Highway Division

TRANSPORTATION BUILDING, SALEM, OREGON 97310

March 26, 1981

DES 16-1

Mr. Robert Hathaway
Acting Division Administrator
Federal Highway Administration
The Equitable Center, Suite 100
530 Center Street, N.E.
Salem, OR 97301

Dear Sir:

Glencoe Road-West Union Road
(North Plains) Section
FAS A685 and A686
Washington County
Your File HFO.6-OR

Reference is made to your March 10 letter indicating additional information is desired on the exceptions to minimum design standards and the work to be performed by County forces.

The typical section widths set forth in our letter of February 27, 1981 (File DES 16-1) are compatible with the existing roadways in the area and no improvements are planned for the foreseeable future. We believe the reduced design widths will adequately serve the traveling public for many years.

The development of this project to the contract plan stage has been difficult. Almost from the beginning, project cost estimates outstripped the County's funding capabilities and compromises in its design had to be made to assure the project's survival. The project is sorely needed to alleviate the problems caused by deteriorated timber bridges at the Glencoe Road railroad overcrossing and West Union Road McKay Creek crossing. The railroad overcrossing structure is posted with a 15-ton load limit and the McKay Creek structure is closed to all traffic.

Washington County forces will perform the work set forth in our letter at their expense and with no reimbursement. This arrangement reduces the County's portion of the contract cost to an amount that fits their budget and is, we believe, in the best interest of the public.

STATE HWY [illegible]
MAR 27 '81
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

We solicit your concurrence that the proposed deviation from design standards and the work to be performed by the County is in the public interest.

Very truly yours,

J. H. Versteeg
Road Design Engineer
By Lyle K. Watson
Lyle K. Watson
Acting Final Design Engineer

LKW:ja

bc H. S. Coulter
E. S. Hunter
D. H. Moehring
F. E. Terpin
Ed Hardt
Fred Eriksen

9361

STATE OF OREGON
Department of Transportation
Metropolitan Branch

INTEROFFICE MEMO
Telephone: 238-8233
Date: ~~February 10, 1981~~ 3-18-81

File No: 534-1970

TO: Bob Heard
Project Coordinator

FROM: Jim McClure
Project Development Engineer

SUBJECT: Glencoe Road-West Union Road (North Plains Section)
Glencoe Road
Washington County

As I understand from my discussions with Mike Borresen, the county has agreed to hold another hearing on the project. Mike indicated the hearing would be held in the City of North Plains since the closure of West Union Road will impact the city.

You should assist the county in holding the hearing but it's the county's responsibility to be out front on the project. The county has requested information in several areas: 1) the current estimated cost of the project which we have provided at $708,000; 2) what would be the affects on the environmental document if the city and county agree to delete the West Union Bridge over McKay Creek; and 3) what type of supplemental document, from an environmental standpoint, would be needed if the project is changed significantly. Jef Kaiser is discussing the environmental aspects of the project with Gary Potter and he will provide you with the environmental aspects Mike has requested information on.

Since we are in the right-of-way acquisition phase of the project, I would recommend we proceed with right-of-way negotiations, but not physically expend any right-of-way dollars to acquire property at this time until after the hearing and the matter is resolved by the county.

JDM:PE

xc: D. Adams
K. Rolfe
D. Christensen
G. Potter
J. Kaiser

2 ✓ Versteeg
1 Anderson
Christensen
Olson
Sullivan
Turpin
[illegible]
Wakerlig

RECEIVED
FEB 11 1981
ROAD DESIGN SECTION

Do Not File ☐
Return To
Bring Up / /
Action

REFERRED TO
Board
Staudenmeyer
Mann
Cole
Watson
✓ Eriksen
Lou
Dorn
Due
[illegible]
Discuss
Do
File Copy
BY FINAL DESIGN ENGINEER

INFORMED FRED ERIKSEN:
COUNTY WILL NOT HOLD ANOTHER
HEARING. INFO. FROM BOB HEARD
3-18-81

Form FHWA 121 (1/80)
9361

FAS A686

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

THE OREGON DIVISION - SALEM
UNITED STATES GOVERNMENT

memorandum

Subject: Oregon Projects RS-A685(1) & RS-686(1)
Glencoe Road-West Union Road Section
North Plains, Washington County

Date: March 10, 1981

From: Acting Division Administrator

Reply to Attn. of: HFO.6-OR

To: Mr. H. S. Coulter, State Highway Engineer, ODOT

Reference is made to your letter of February 27, 1981 (File DES 16-1) documenting the compatability of reduced design standards for this project. Your files should also contain the reasons why a deviation from standards is in the best public interest. A similar "finding" should be made covering work to be performed by County Forces.

G. K. Hossner
for E. J. Valach

RECEIVED
STATE HWY ENGR
MAR 12 '81
REFER TO
R

1 Versteeg ✓
Anderson
2 Christensen LW
Olson
Sullivan
Terpin
Trout
Wakerlig

RECEIVED
MAR 17 1981
ROAD DESIGN SECTION

Do Not File ☐
Return To
Bring Up 4/1
Action

Hal
Eriksen preparing letter addressing deviation & finding to be in public interest.
L.W.

9361

L.

VICTOR ATIYEH
GOVERNOR

Oregon State Highway Division

TRANSPORTATION BUILDING, SALEM, OREGON 97310

February 27, 1981

des 16-1

RECEIVED
STATE HWY ENGR
MAR 4'81
REFER TO
FOR
Info [illegible] R/D D/R Sign Act File

Mr. Ernest J. Valach
Acting Division Administrator
Federal Highway Administration
The Equitable Center, Suite 100
530 Center Street, N.E.
Salem, OR 97301

Attn. Glenn K. Hossner

Dear Sir:

Glencoe Road-West Union
Road (North Plains) Section
FAS A685 and A686
Washington County

The purpose of this FAS-C project is (1) to replace a narrow, deteriorated timber railroad overcrossing structure with an at-grade crossing on Glencoe Road and (2) to replace a deteriorated bridge over McKay Creek and eliminate a low clearance railroad undercrossing on West Union Road.

The present ADT is 1750 for Glencoe Road and 650 for West Union Road. The design speed for both is 35 MPH.

The Glencoe Road typical section north of the railroad is 12-foot travel lanes with 4-foot shoulders; south of the railroad, 12-foot travel lanes with a 6-foot shoulder on the east side and with a 2-foot offset to a Type "C" curb on the west side. At the railroad grade crossing, 12-foot truck and bus stop lanes with 2-foot shoulders will be provided. The West Union Road typical section is 12-foot travel lanes with 4-foot shoulders. The new bridge at McKay Creek will have a 31.5-foot roadway. The typical sections proposed are consistent with the existing roadways in the area and will provide the needed improvement within the funding capability.

The horizontal alignment has a maximum curvature of 10 degrees. The vertical alignment has a maximum gradient of 5.65 percent.

Work to be done by contract includes grading, paving, structure and riprap. The contractor is to furnish and stockpile the guardrail and necessary fence materials. The County, in an

A DIVISION OF THE DEPARTMENT OF TRANSPORTATION

effort to reduce the contract cost, will remove the two bridges, do the permanent signing and striping, and install the guardrail and fence.

The Glencoe Road at-grade railroad crossing will have flashing lights and gates installed.

This letter is submitted as documentation on the exception to minimum design criteria as set forth in the "Geometric Design Standards for Highways Other Than Freeways, AASHTO, 1969".

This project is presently scheduled for the June 25, 1981 contract letting.

Very truly yours,

J. H. Versteeg
Road Design Engineer
ORIGINAL SIGNED
By DUANE O. CHRISTENSEN

Duane O. Christensen
Final Design Engineer

bc H. S. Coulter
E. S. Hunter
D. H. Moehring
F. E. Terpin
Ed Hardt
Fred Eriksen

FE:ja

9361

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6-2

February 13, 1981

TO: E.J. Valach, Acting Division Administrator
Federal Highway Administration

FROM: D.E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 80233
Project No. RS-A685(3)
Glencoe Rd.-W. Union Rd. (N. Plains) Sec.
Washington County

Attached data consists of PR-1 form with project maps.

I request authorization to proceed with actions necessary to advance the physical construction provided for by the project at an estimated total cost of $708,000 with an obligation of $624,300 in federal funds in accordance with the approved Certification Acceptance Plan.

CL:bkc
Attachments

cc: E.L. Hardt (Region 1)
H. Reynoldson
Lou Olson
General Files

Form 734-3122

9361

2-13-81

2

U. S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

FEDERAL AID PROJECT NO.: RS-A685(3)

STATE PROJECT NO.: See below

FROM:
E.J. Valach, Acting Division Admin
FHWA - Oregon Division

PROGRAM NO.:

ITEM NO.: 80233

COUNTY NAME: Washington

PROGRAM STAGE (Check) ☐ 1. ☐ 2.

TO:

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

RECEIVED
STATE HWY ENGR
FEB 19 '81
REFER TO Moehring
FOR

Orig to: 2-19-81

DATE PS&E APPROVED	DATE AUTHORIZATION EFFECTIVE	FEDERAL ROUTE NUMBER / STATE ROUTE NUMBER
2/13/81	2/13/81	Secondary A685 County Road

GENERAL LOCATION:

Glencoe Road - W. Union Road (N. Plains) Section

GENERAL DESCRIPTION OF WORK:

Grade, drain, pave and structure

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

PRELIMINARY ENGINEERING TO DETERMINE
☐ LOCATION ONLY
PRELIMINARY ENGINEERING FOR SURVEY AND PLAN
☐ PREPARATION
☒ OTHER (Specify) See below

☐ ACQUISITION OF RIGHT-OF-WAY
CONSTRUCTION - ADVERTISE FOR RECEIPT
☐ OF BIDS
☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of 2/13/81 you are now authorized to proceed with actions necessary to advance the physical construction provided for by the above project at a total estimated cost of $708,000 Federal Funds $624,300 in accordance with the approved Certification Acceptance Plan. If you subsequently find that exceptions to the procedure will be needed or that your proposed design standards are lower than the minimum design as approved, this office should be notified of such proposed exceptions and reasons thereof.

DATE	SIGNATURE OF APPROVING OFFICIAL	TITLE
2/13/81	G. K. Hessner	for Acting Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U. S. GOVERNMENT PRINTING OFFICE: 1975-631-888

9361

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6-2

February 13, 1981

TO: E.J. Valach, Acting Division Administrator
Federal Highway Administration

FROM: D.E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 80233
Project No. RS-A685(3)
Glencoe Rd.-W. Union Rd. (N. Plains) Sec.
Washington County

Attached data consists of PR-1 form with project maps.

I request authorization to proceed with actions necessary to advance the physical construction provided for by the project at an estimated total cost of $708,000 with an obligation of $624,300 in federal funds in accordance with the approved Certification Acceptance Plan.

CL:bkc
Attachments

cc: E.L. Hardt (Region 1)
H. Reynoldson
Lou Olson
General Files

Form 734-3122

Budget Bureau No. 41-R2

MONTHLY TRANSACTION NO.

DATE SUBMITTED TO W.O.

FORM PR-1
(REV. 4-61)

2-13-81

FEDERAL-AID PROGRAM DATA

(PPM 21-1)

CARD 2	REPORT NUMBER (19) (20)	PROJECT LOCATION (45 typewriter spaces) 21 … 65 Co. Rd., W. Union & Glencoe Roads (N. Plains)	**ADT**	PRESENT 1,750	FUTURE ---- (66) (70)	YEAR -- (71) (72)	REGION 10	STATE NAME Oregon

CARD 3	CHARACTER OF PROPOSED WORK (35 typewriter spaces) 28 … 62 Gr., Dr., H.T. Pave. & Str.	NATL. FOREST (63) (65)	FH ROUTE NO. (66) (68)	SUPV AGCY (69)	DA CLASSIF. (70)	DA AREA (71)	EMERG. YR. (72) (73)	PL. AUTH YR (74) (75)	PROJECT NUMBER PREFIX LETTER(S) 14 … 23 RS-	NUMBER 7 A685

CARD 4	CLASS OF FEDERAL FUNDS Rural Secondary	COUNTY NAME Washington			
	NAME OF URBAN AREA 17-31 -----	ROUTE NO. S	FEDERAL-AID A685 (32)	STATE Co. Rd. (36)	U.S --- (37)

ESTIMATED PROJECT COST BY PHASES

CARD	LINE NO.	CHANGE CODE	PROJECT CODE	CLASS	WORK TYPE	WORK STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS 88.18%	STATE FUNDS	OTHER FUNDS
1	(14-15)	(16	41	42	43 … 46	53		(54) (58)	(59) (66)	(67) (76)		
5					**PE**							
5					**ROW**							
5					**CONST** (CODE) 6201 X081 Y018		"Glenco Rd.-W. Union Rd. (N. Plains) Section"	0.68	708,000	624,300	41,850	41,850 (

CARD 1	CODE 1	PREPARED BY C.L.	PROJECT TOTALS	0.68	708,000 (16) (23)	624,300 (24) (33)	41,850	41,850 (
1	14	PROGRAM APPROVAL DATES 4-6-78 10-4-79					REMARKS Additional Data: See items 8 Projects RS-A685(1), RS-A68	

-OV

5341970

Budget Bureau No. 41-R2067; Approval Expires February 28, 1966

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

FORM PR-1
(REV. 4-61)

FEDERAL-AID PROGRAM DATA

(PPM 21-1)

2-13-81

ADT	PRESENT 1,750	FUTURE ----	YEAR --	REGION 10	STATE NAME Oregon	STATE CODE 41	APPN CODE 075	ITEM NO. 80233

(66) (70) (71) (72) (2) (3) (4) (9) (14) (18)

OCATION (45 typewriter spaces)
, W. Union & Glencoe Roads (N. Plains) 65

(35 typewriter
& Str. 62

NATL. FOREST	FH ROUTE NO.	SUPV AGCY	DA CLASSIF.	DA AREA	EMERG. YR.	PL. AUTH YR
(63) (68)	(68) (66)	(69)	(70)	(71)	(72) (73)	(74) (75)

PROJECT NUMBER

PREFIX LETTER(S)	NUMBER	SEQ. NO.	I. Projects Only POST MI.	DESIG.
RS-	A685	(3)		

14 23 7 13 (24) (26) 27

COUNTY NAME Washington CODE 067 (14) (16)

PROGRAM STAGE ☐ 1 OR ☐ 2

Rural Secondary

ROUTE NO. S FEDERAL-AID A685 (32) STATE Co. Rd. (36) (37) U.S. ---- (41)

ESTIMATED PROJECT COST BY PHASES

PE	STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS 88.18%	STATE FUNDS	OTHER FUNDS	CHARACTER OF PROPOSED WORK (Full description)
46	53	–	(54) (58)	(59) (66)	(67) (76)			
W								
ST E)		"Glenco Rd.-W. Union Rd. (N. Plains) Section"	0.68	708,000	624,300	41,850	41,850 (Co.)	
	C.L.	PROJECT TOTALS	0.68	708,000	624,300	41,850	41,850 (Co.)	
				(16) (23)	(24) (33)			

VAL DATES
4-6-78
10-4-79

REMARKS
Additional Data: See items 80233 & 80234;
Projects RS-A685(1), RS-A685(2) & RS-A686(1).

-over-

USCOMM DUSCOMM-DC 48908-P61

Glencoe Rd.-W. Union Rd. (N. Plains) Section
Project No. RS-A685(3)

Project Data: Work consists of the following:

1) Remove existing railroad overcrossing structure.
2) Grade, drain and high-type pave two 12 foot lanes with 4 foot shoulders as required to realign Glencoe road to cross the railroad at grade and the realignment of W. Union road to provide an improved connection with Glencoe road and incidental work common to this type of project. Adjust utilities as required.
3) Construct 100-foot prestressed concrete bridge (Str. No. 13033A) over McKay Creek with horizontal clearance of 34 feet.
4) Installation of railroad crossing signals with drop arm gates and rubberized crossing by railroad forces.

Accommodation of Utilities: A State-County agreement in compliance with paragraph 6d(1) of PPM 30-4.1 was executed on September 5, 1978.

Maintenance: A State-County agreement in compliance with Section 116, Title 23 USC was executed on September 5, 1978.

Data for PR-37:	Type Code 6201 ---------------------	$486,600
	Type Code X080 ---------------------	151,400
	Y018 ---------------------	70,000
	TOTAL	$708,000

Note: This project in in Congressional District No. 1.

Unusual Circumstances: Work being accomplished on realignment of W. Union Road (FAS-A686) is being included in this project for accounting simplicity.

9361

2.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6-2

February 13, 1981

TO: Executive Department
Federal Aid Coordination Unit

FROM: D.E. Swan
Operation Programming Engineer

SUBJECT: Federal Aid Funding Application

In compliance with step 7 of Procedure 13-020-02 of Executive Memorandum 02-270-20, we are submitting one copy of the completed application for federal aid funding of the following:

Item No.	Project No.	Section Name & PNRS No.
80233	RS-A685(3)	Glencoe Rd.-W. Union Rd. (N. Plains) PNRS #7802-2-080

CL:bkc
Enc.

cc: E.J. Valach (FHWA)
General Files

Form 734-3122

9361

NOTED
E. S. HUNTER

ROW 18-4

February 10, 1981

Mr. Leslie J. Thoreen, Manager
of Land Department
Portland General Electric Co.
121 SW Salmon Street
Portland, OR 97204

Quit Claim Deed
Power Line Easement
Glencoe Acres, Inc. Property
Glencoe Rd.-West Union Rd. (North
Plains) Section
Commercial Avenue (County Road)
Washington County
File No. 51271

Dear Mr. Thoreen:

Here is a Quit Claim Deed for the relinquishment of your interest in the highway right of way being acquired from Glencoe Acres, Inc., for the construction of Commercial Ave., a County road, between Glencoe Road and West Union Road in the City of North Plains. A copy of our right of way map 9B-18-1, for the subject project, was sent to you on July 31, 1980.

I have been advised that there are no Portland General Electric Co. facilities occupying the easement area described in the Quit Claim Deed.

Please return the fully executed original copy of the Quit Claim Deed to this office.

Yours truly,

Jack M. Cartwright

Jack M. Cartwright
Utility Engineer

JMC/llr
Enc.

bc: E. S. Hunter
J. B. Boyd (file 51271)
E. L. Hardt w/att
Ken Rolfe w/att
Ted Inloes w/att

RECEIVED
TECHNICAL SERVICES

FEB 12 '81

REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

9361 1-81

NOISE STUDY REPORT

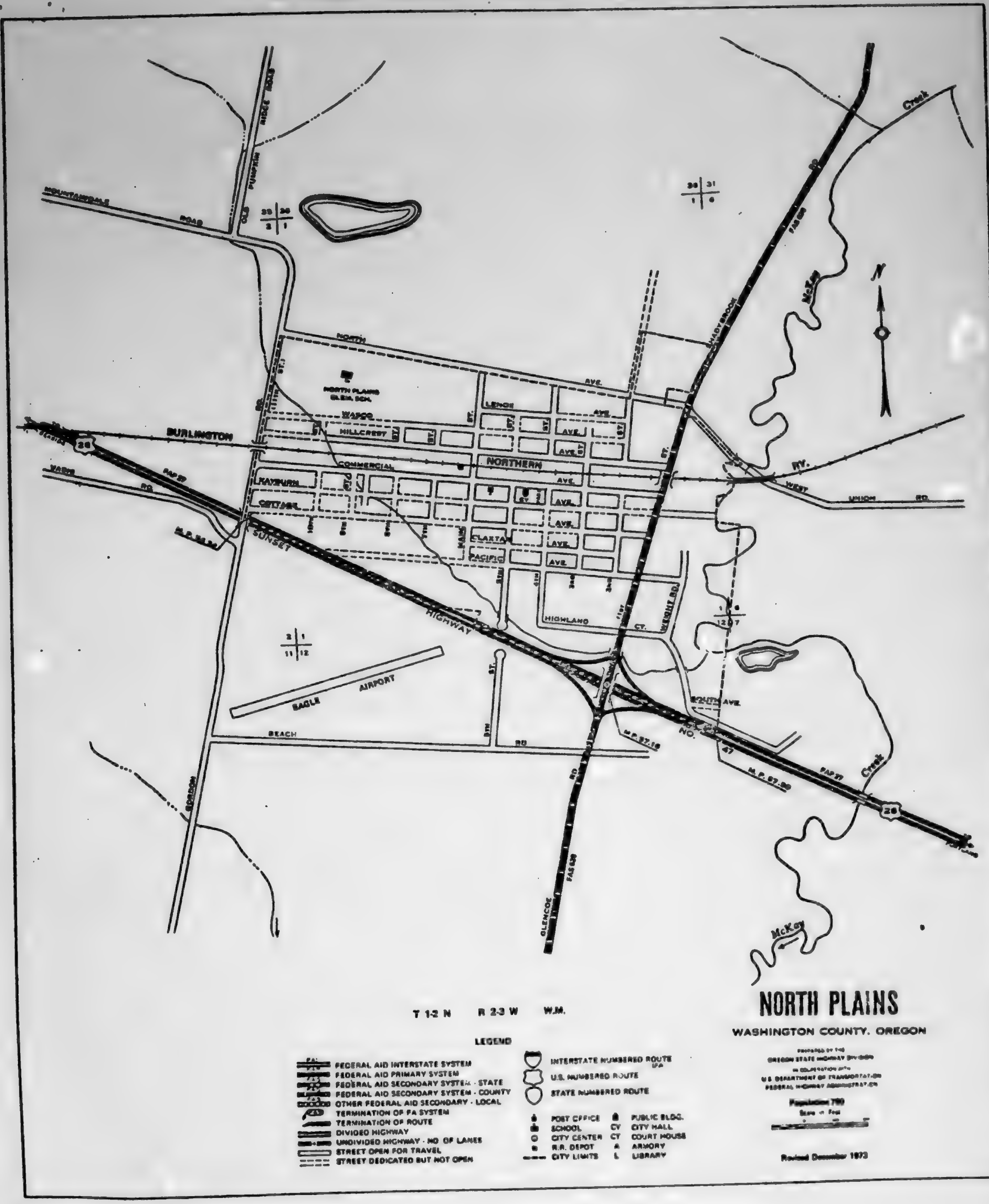
Glencoe Road - W. Union Road (FAS 685)
Washington County

Prepared by:

Tim H. Thex, Environmental Engineer
Oregon Department of Transportation

January 1981

GLENCOE ROAD-WEST UNION ROAD
NOISE STUDY REPORT
FIGURE 1-PROJECT LOCATION



NORTH PLAINS
WASHINGTON COUNTY, OREGON
PREPARED BY THE
OREGON STATE HIGHWAY DIVISION
IN COOPERATION WITH
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
Population 790
Scale in Feet
Revised December 1973
T 1-2 N
R 2-3 W
W.M.
LEGEND
FEDERAL AID INTERSTATE SYSTEM
FEDERAL AID PRIMARY SYSTEM
FEDERAL AID SECONDARY SYSTEM - STATE
FEDERAL AID SECONDARY SYSTEM - COUNTY
OTHER FEDERAL AID SECONDARY - LOCAL
TERMINATION OF FA SYSTEM
TERMINATION OF ROUTE
DIVIDED HIGHWAY
UNDIVIDED HIGHWAY - NO. OF LANES
STREET OPEN FOR TRAVEL
STREET DEDICATED BUT NOT OPEN
INTERSTATE NUMBERED ROUTE
U.S. NUMBERED ROUTE
STATE NUMBERED ROUTE
POST OFFICE
SCHOOL
CITY CENTER
R.R. DEPOT
CITY LIMITS
PUBLIC BLDG.
CV CITY HALL
CT COURT HOUSE
A ARMORY
L LIBRARY
MOUNTAINDALE ROAD
OLD PUMPKIN RIDGE ROAD
NORTH AVE.
NORTH PLAINS ELEM. SCH.
LENOX
WAPCO
HILLCREST
BURLINGTON
NORTHERN
RY.
COMMERCIAL
RAYBURN
COTTAGE
CLAXTAR AVE.
PACIFIC
HIGHLAND CT.
SUNSET HIGHWAY
26
WEST UNION RD.
GLENCOE RD
HADYBROOK
EAGLE AIRPORT
BEACH RD
GORDON
McKay Creek
McKay
Creek
N

PROJECT DESCRIPTION

The proposed project is located in Washington County, east of the town of North Plains (population 850). The project involves sections of Glencoe Road and West Union Road. A portion of Glencoe and West Union Roads would be relocated, the bridge over McKay Creek would be replaced, and a substandard railroad separation structure would be replaced with a gate protected grade crossing (see Figure 2).

The primary purpose of the project is to remove present load restrictions from the overpass structure and provide better turning access from Glencoe Road to West Union Road. These improvements would provide an alternate route for heavy truck and farm traffic presently going through the town of North Plains. This project is classified Type I-B, as defined by FHPM 7-7-3.

LAND USE

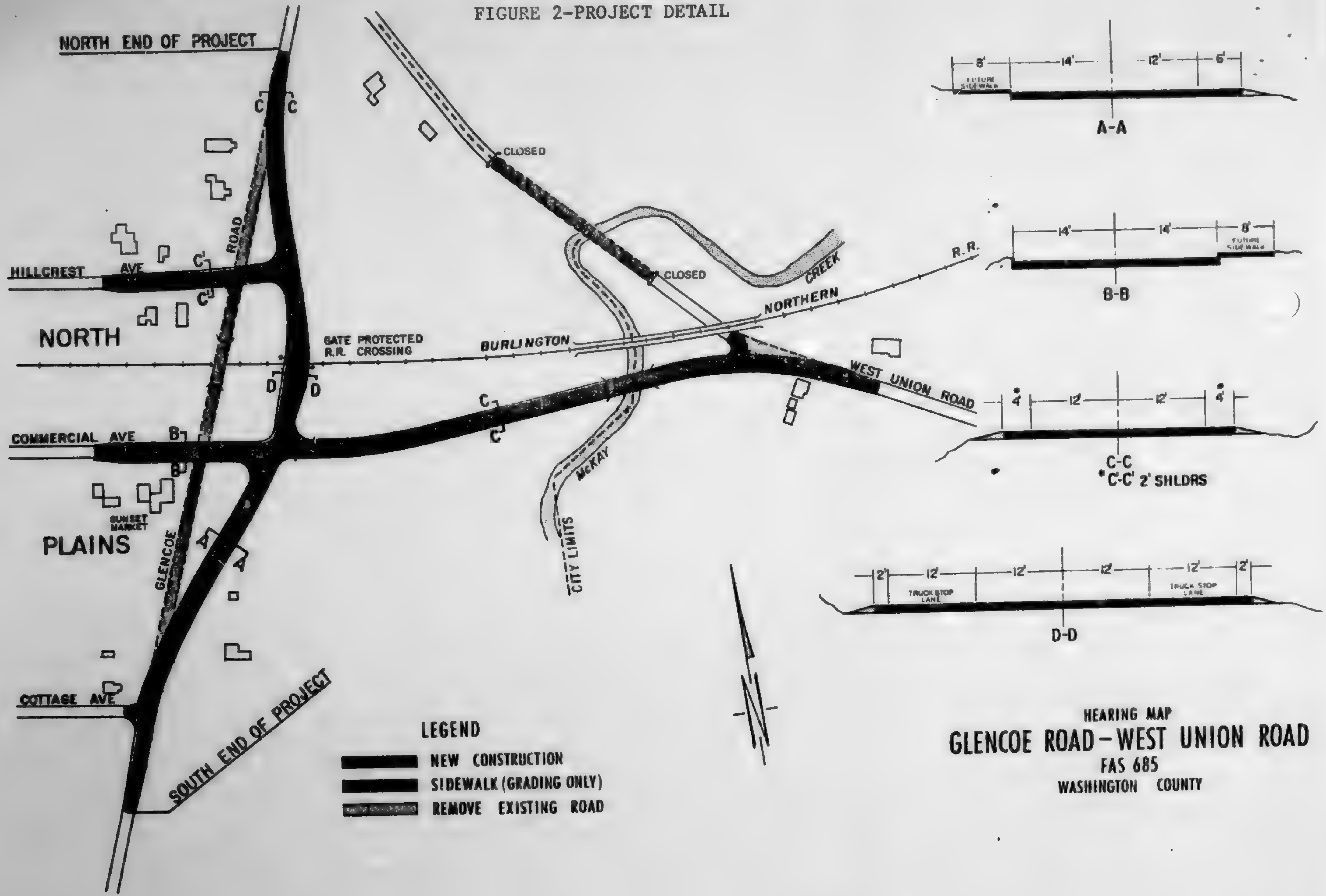
Glencoe Road is North Plains' most heavily traveled route. Commercial Avenue, from its intersection with Glencoe Road is the second most heavily traveled. South of the railroad overpass the existing land use on either side of Glencoe Road is a mixture of small retail businesses and private residences. South of the railroad crossing, the majority of the property immediately adjacent to the project area is zoned for commercial development. The remainder of the property is zoned for industrial usage.

North of the railroad crossing the existing property is primarily pasture land. The triangle formed by the new alignment would be zoned for commercial development. The remainder of the property north of the railroad tracks would be zoned for either residential or commercial development.

METHODOLOGY

This analysis was conducted in conformance with FHPM 7-7-3, "Procedures

GLENCOE ROAD-WEST UNION ROAD
NOISE STUDY REPORT
FIGURE 2-PROJECT DETAIL


NORTH END OF PROJECT
C
C
ROAD
HILLCREST AVE
C'
C'
NORTH
GATE PROTECTED R.R. CROSSING
D
D
COMMERCIAL AVE
B
B
SUNSET MARKET
PLAINS
GLENCOE
A
A
COTTAGE AVE
SOUTH END OF PROJECT
CLOSED
CLOSED
CREEK
R.R.
NORTHERN
BURLINGTON
WEST UNION ROAD
C
C
McKAY
CITY LIMITS
LEGEND
NEW CONSTRUCTION
SIDEWALK (GRADING ONLY)
REMOVE EXISTING ROAD
8'
14'
12'
6'
FUTURE SIDEWALK
A-A
14'
14'
8'
FUTURE SIDEWALK
B-B
4'
12'
12'
4'
C-C
*C-C' 2' SHLDRS
2'
12'
12'
12'
12'
2'
TRUCK STOP LANE
TRUCK STOP LANE
D-D
HEARING MAP
GLENCOE ROAD-WEST UNION ROAD
FAS 685
WASHINGTON COUNTY

for Abatement of Highway Traffic Noise and Construction Noise". FHPM 7-7-3 is the standard developed by FHWA (Federal Highway Administration) to evaluate and mitigate traffic noise impacts associated with highway projects. The directive contains Federal design noise levels, which refer to the upper limit of acceptable traffic noise levels for various activities and land uses. Table 1 shows the various FHWA activity categories and their respective Federal design noise levels.

The degree of impact of traffic noise on human activities was determined by comparing predicted noise levels to Federal design noise levels. Residences adjacent to the proposed project were evaluated for impacts by comparing predicted noise levels to FHWA Activity Category B design noise levels (Leq 67 dBA). Residences exceeding Leq 67 dBA are considered to be impacted.

The noise descriptor used on this project was the Leq, which is the average hourly sound level. The Leq noise level contains the same acoustic energy as the time varying sound level. The FHWA classification for this project is 1-B (uncontrolled access). Future noise levels were predicted by utilizing the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108).

No field noise measurements were taken.

TRAFFIC

Traffic volumes and speeds were developed by the Oregon Department of Transportation. Peak noise levels would occur during the annual harvest period, which extends from August to October. At this time truck volumes are highest, the result of trucks carrying wheat to the two grain elevators in North Plains. The traffic volumes used for noise predictions on this project are given in Table 2.

TRAFFIC NOISE IMPACTS

In order to identify areas of potential noise impacts, unshielded Leq

GLENCOE ROAD-WEST UNION ROAD

NOISE STUDY REPORT

TABLE 1

FEDERAL HIGHWAY ADMINISTRATION DESIGN NOISE LEVEL STANDARDS

Activity Category	Design Noise Levels $L_{eq}(h)$	Description of Activity Category
A	57 (Exterior)	Tracts of land in which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks, open spaces, or historic districts which are dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet.
B	67 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, and parks which are not included in Category A and residences, motels, hotels, public meeting rooms, schools, churches, libraries, and hospitals.
C	72 (Exterior)	Developed lands, properties or activities not included in Categories A or B above.
D	--	For requirements on undeveloped lands see paragraphs 11a and c.
E	52 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

TABLE 2

GLENCOE ROAD-WEST UNION ROAD
NOISE STUDY REPORT

Peak Truck Hour Traffic Volumes

Section	Year	Alternative	Autos	Medium Trucks	Heavy Trucks	Speed
Southern Terminus-Commercial Avenue (Glencoe Road)	1979	Existing	307	9	14	35
	1999	Build	525	0	25	35
	1999	No Build	525	0	25	35
Commercial Avenue-Hillcrest Avenue (Glencoe Road)	1979	Existing	140	4	6	35
	1999	Build	220	0	10	35
	1999	No Build	277	0	13	35
Hillcrest Avenue-Northern Terminus (Glencoe Road)	1979	Existing	93	3	4	35
	1999	Build	124	0	6	35
	1999	No Build	191	0	9	35
Commercial Avenue (West of Glencoe Road)	1979	Existing	195	6	9	25
	1999	Build	353	0	17	20
	1999	No Build	353	0	17	20
Hillcrest Avenue (West of Glencoe Road)	1979	Existing	70	2	3	23
	1999	Build	130	4	6	23
	1999	No Build	130	4	6	23
West Union Road (old alignment)	1979	Existing	60	2	3	35
West Union Road (new alignment)	1999	Build	115	0	5	35
West Union Road (old alignment)	1999	No Build	115	0	5	35

67 dBA noise contours were calculated for year 1999 for both the Build and No Build alternatives. All traffic links in the immediate vicinity of the project were studied. Unshielded noise contours represent the maximum distance from the roadway at which Federal design noise levels will not be exceeded. All the calculated noise contours are given in Table 3.

None of the properties adjacent to the project are inside the unshielded Leq 67 dBA noise contours for either of the alternatives. Also, the Burlington Northern Railroad tracks parallel to Commercial Avenue are only used once or twice a day, so excessive noise is not predicted to occur as a result of the railroad. Therefore, it was concluded that no noise impacts will occur as a result of the proposed project. No further evaluation was performed.

CONSTRUCTION NOISE

Construction noise is expected to create a temporary adverse noise condition on this project. However, construction noise rarely occurs in any one location for an extensive length of time.

Actual construction noise levels vary so much from project to project that the levels are difficult to predict accurately. Therefore, the discussion is limited to the listing of noise emission levels for common construction equipment. Table 4 provides this information. The construction equipment in Table 4 is grouped according to mobility and operating characteristics.

In order to mitigate noise levels on this project, the following construction noise abatement measures will be included in the project construction specifications:

1. No construction shall be performed within 1,000 feet of an occupied dwelling unit on Sundays, legal holidays and between the hours of 10:00 p.m. and 6:00 a.m. on other days without the approval of the engineer.

2. All equipment used shall have sound control devices no less effective than those provided on the original equipment. No equipment shall have an unmuffled exhaust.

TABLE 3

GLENCOE ROAD-WEST UNION ROAD
NOISE STUDY REPORT

Unshielded Leq 67 dBA Noise Contours (year 1999)

Section	Distance from Centerline to Leq 67 dBA Unshielded Noise Contour	
	Build	No Build
Southern Terminus-Commercial Avenue (Glencoe Road)	40'	40'
Commercial Avenue-Hillcrest Avenue (Glencoe Road)	Less than 20'	20'
Hillcrest Avenue-Northern Terminus (Glencoe Road)	Less than 20'	Less than 20'
Commercial Avenue (West of Glencoe Road)	Less than 20'	Less than 20'
Hillcrest Avenue (West of Glencoe Road)	Less than 20'	Less than 20'
W. Union Road (Old and new alignments)	Less than 20'	Less than 20'

[redacted]. All equipment shall comply with pertinent equipment noise standards of the U.S. Environmental Protection Agency.

[redacted]. No pile driving or blasting operations shall be performed within 3,000 feet of an occupied dwelling unit on Sundays, legal holidays, and between the hours of 8:00 p.m. and 8:00 a.m. on other days, without the approval of the engineer.

[redacted]. Rock crushing or screening operations performed within 3,000 feet of an occupied dwelling shall block the direct view of the affected dwelling units through the strategic placement of material stockpiles or as directed by the engineer.

Should a specific noise impact complaint occur during the construction of the project, the contractor at his own expense may be required to implement one or more of the following noise mitigations as directed by the engineer.

1. Locate stationary construction equipment as far from nearby noise sensitive properties as possible.
2. Shut off idling equipment.
3. Schedule noisy construction operations near the middle of the day.
4. Notify nearby residents whenever extremely noisy work will be occuring.
5. Install permanent or portable acoustic barriers around stationary construction noise sources.

LOCAL COORDINATION

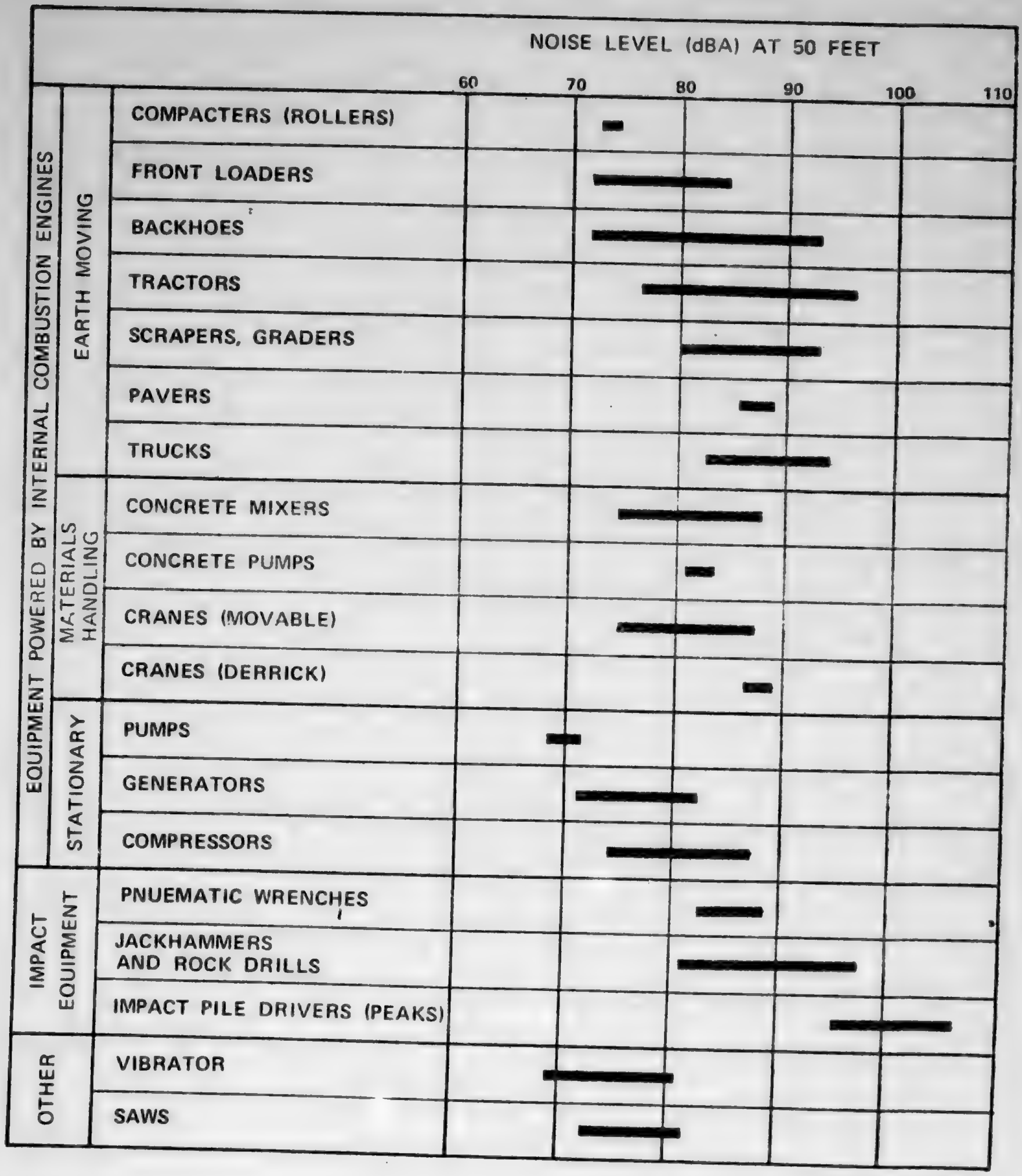
To date, no communication has taken place with local officials concerning the project noise impacts.

A copy of this report as well as a copy of FHWA policy regarding limitations on noise mitigation for future development will be forwarded to Washington County. These reports will assist local jurisdictions in land use planning for both developed and undeveloped properties in the immediate vicinity of the project. The information contained herein can be used by local planning agencies to protect future land use development from becoming incompatible with anticipated highway noise levels.

Mitigation of noise impacts on any undeveloped land will be the re-

GLENCOE ROAD-WEST UNION ROAD
NOISE STUDY REPORT
TABLE 4

CONSTRUCTION EQUIPMENT NOISE RANGES



sponsibility of Washington County and the developer. Noise contours contained in this report will aid in determining where noise conflicts will occur. The only area where noise impacts may occur is the area south of Commercial Avenue along Glencoe Road. If traffic noise is or will be a problem, the developer should be requested to solve the problem as a prerequisite to plat approval. Noise impacts can be mitigated by future developers through appropriate application of building setbacks, site design, sound barriers, and acoustical treatment of structures. In this manner, noise abatement becomes a design and construction requirement for any new development.

9361

STATE OF OREGON

INTEROFFICE MEMO

DES 23
13033A

DATE: January 28, 1981

TO: Mr. R. N. Bothman
Metro Engineer

T.G. Thompson

FROM: T. G. Thompson
Supervising Structural
Design Engineer

SUBJECT:

McKay Creek Bridge
Glencoe Rd.-W.Union Rd.(N.Plains) Section -FAS-C
Glencoe Road
Washington County
Bridge 13033A

Enclosed are two reduced prints of drawings 35372, 35778 and 35779 which are the advance detail drawings for the subject structure.

Our present estimate of costs for the proposed contract is as follows:

Grading and Paving	$464,000
Structure	126,000
Engineering & Contingencies	118,000
TOTAL	$708,000

It is planned to call for bids on this section on June 25, 1981.

Please make a field review and return one set by February 16, 1981 with your comments and/or corrections noted thereon.

GDA:smd

Enclosures

cc Jerry Morse, Washington Co. Eng., /w/ 2 sets encls.
H. A. Schell /w/ 2 sets encls.
Specs Unit, /w/ 1 set encls. plus estimate sheet (unchecked) and designer's notes.
Construction /w/ 1 set encl.
Utility Unit /w/ 1 set encls.
County-City Unit
Engineering /w/ 1 set encls.
William Tison /w/ 1 set encls.
E. L. Hardt /w/ 1 set encls.

Rp

9361 ROW 12 A Plains

STATE OF OREGON

INTERОFFICE MEMO

TO: Hal Versteeg
Road Design Engineer

DATE: November 24, 1980

Rod Henry

FROM: Rod Henry, Assistant
Right of Way Manager

SUBJECT: Glencoe Acres Inc.
51271

I have discussed the attached request for a Right of Way revision with Regional Supervisor Ken Rolfe. Normally, we would not concur in a recommendation of this type simply as a matter of saving money. However, in this case there are mitigating circumstances that justify a minor revision if it can be completed without adversely impacting the design of the highway.

We do not believe it is good practice to leave a house this close to the right-of-way line, but in this case the house is in very poor condition and will either collapse under its own weight or will be removed by the owner within a very few years.

If we were to acquire the house, we would be faced with a costly relocation. Under these circumstances, I concur in the recommendation made by the filed supervisor. The revision will save approximately $25,000.

RH:jr

1 Versteeg ✓
Anderson
Christensen
3 Olson
Sullivan
Terpin
Trout
2 Wakerlig

RECEIVED
NOV 24 1980
ROAD DESIGN SECTION

Do Not File
Return To
Bring Up
Action

11/26/80
revision has been made

STATE OF OREGON
Department of Transportation
Metropolitan Branch

INTEROFFICE MEMO
Telephone: 238-8354
Date: November 19, 1980

File No: 534-1970

TO: FRANK TERPIN
Location Engineer - Salem

FROM: Curt H. Duval
CURT DUVAL
Metro Location Engineer

#51271

SUBJECT: Glencoe Rd.-W. Union Rd.
City of North Plains
Washington County

Ken Rolfe, Region I Right-of-Way Supervisor, has advised us by changing the roadway alignment at Stas. LW 20 + 85 to LW 24 + 90, a substantial savings in right-of-way acquisition cost could be realized on subject project. The new alignment, eight degree curve to a 10 degree curve, was discussed and agreed to by Washington County.

Please revise the description for File No. 51271 so that the right-of-way acquisition may proceed. Attached for your use is a sketch map showing the alignment change.

RIGHT OF WAY ADMINISTRATION
RECEIVED
NOV 21 1980
☐ AM ☐ ADM ☐ RBR ☐ CA ☐ RS
☐ PMS ☐ AS ☐ CE ☐ OS ☐ TA ☐ RUE
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ F

pv

Attachment

cc Duane Christensen w/attach.
Hank Wakerlig w/attach.

____Versteeg____
____Anderson____
____Christensen____
____Olson____
____Sullivan____
____Terpin____
____Trout____
____Wakerlig copy

RECEIVED
NOV 20 1980
ROAD DESIGN SECTION

Do Not File ☐
Return To ____
Bring Up ___/___/___
Action ____

VICTOR ATIYEH
GOVERNOR

Department of Transportation
METROPOLITAN BRANCH
6415 S.W. CANYON CT.; RM. 210, PORTLAND, OREGON 97221
229-5828

October 30, 1980

Mike Borreson
Project Development Engineer
Dept. of Public Works
Washington County
150 N. First
Hillsboro, Oregon 97123

Subject: File 51271-Glencoe Acres Inc.
Glenooe Rd.-W. Union (North Plains)
FAP RS A 685(2)

The R/W appraisal has been completed on the subject File, and the attached recommendation by our Regional R/W Supervisor is being submitted to you for review and response.

O.D.O.T. Metro Staff has indicated that the recommendation of missing the house can be accomplished by changing the horizontal alignment from an eight degree to a ten degree curve in this area, and that this is an acceptable design based on the standards used for this project.

Please give this your attention so that the R/W appraisals can be expeditiously concluded.

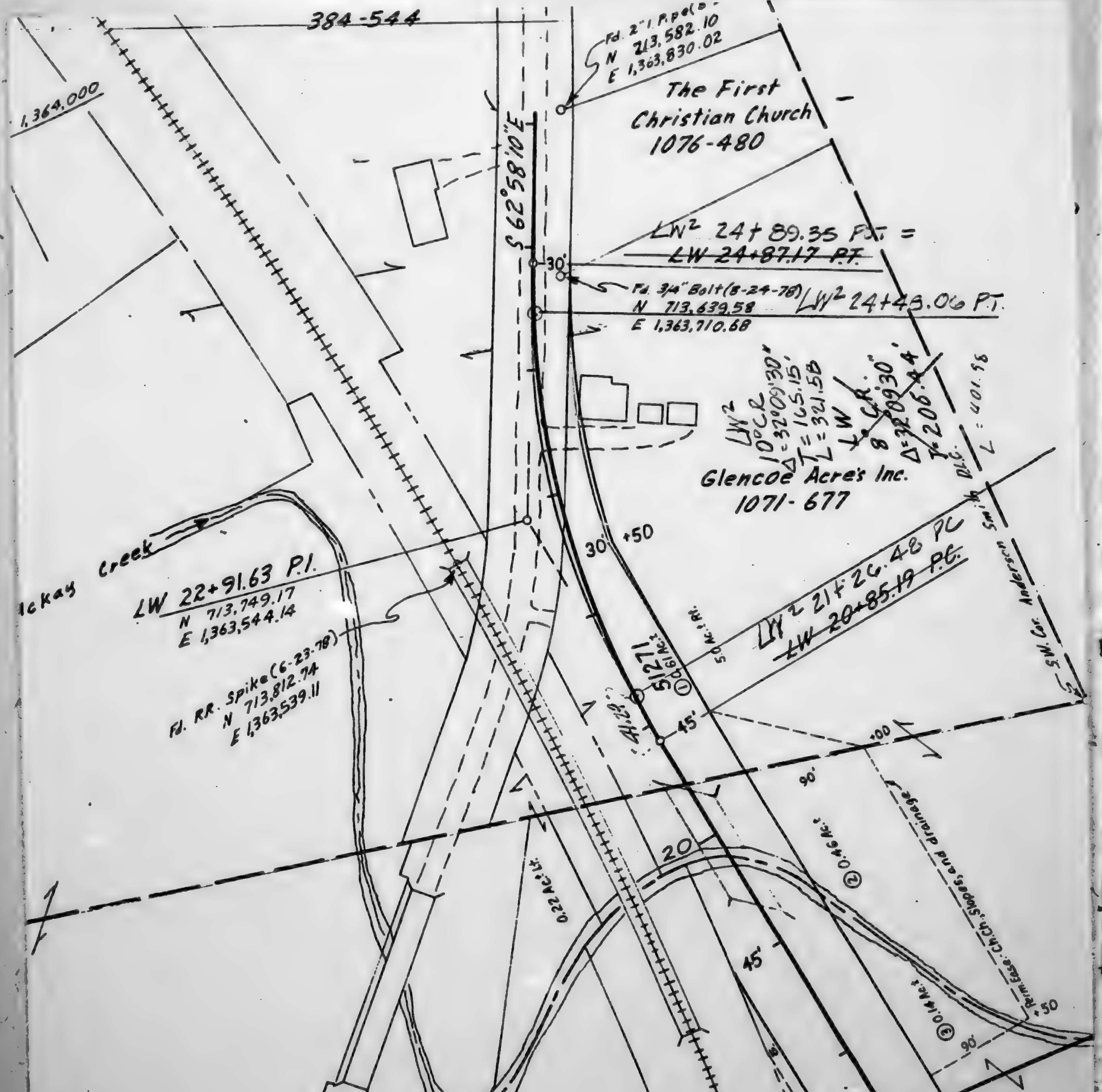
Yours truly,

Earl C. Purdy

Earl C. Purdy
Res. Loc. Engr.

cc: Don Adams
Curt Duval
K. Rolfe

ECP/dw


384-544
1,364,000
Fd. 2" I. Pipe (8-
N 713,582.10
E 1,363,830.02
The First
Christian Church
1076-480
S 62°58'10"E
LW² 24+89.35 P.T. =
~~LW 24+87.17 P.T.~~
30'
Fd. 3/4" Bolt (8-24-78)
N 713,639.58
E 1,363,710.68
LW² 24+43.06 P.T.
LW²
10° C.R.
Δ=32°09'30"
T=165.15'
L=321.58
~~LW~~
~~8° C.R.~~
~~Δ=32°09'30"~~
~~T=206.44'~~
D.L.C.
L=401.96
Glencoe Acre's Inc.
1071-677
30' +50
Smith
LW² 21+26.48 P.C.
~~LW 20+85.19 P.C.~~
S.W. Cor. Anderson
Ackay Creek
LW 22+91.63 P.I.
N 713,749.17
E 1,363,544.14
Fd. RR. Spike (6-23-78)
N 713,812.74
E 1,363,539.11
5|271
① 0.61 Ac.±
5.0 Ac.± Rt.
41.28'
45'
100
90'
② 0.46 Ac.±
Perm. Ease: Ch. Ch. Slopes, and drainage
20
0.22 Ac. Lt.
45'
③ 0.14 Ac.±
50
90'
R. Martin
24251
NORTH PLAINS
CITY LIMITS
drainage
0.12 Ac.±
AD
N 84°52'20"E
W

STATE OF OREGON

INTEROFFICE MEMO

Transportation
DEPT.

229-5828
TELEPHONE

TO: A. J. Viducich
Title Supervisor

DATE: November 17, 1980

Earl C. Purdy

FROM: Earl C. Purdy
Resident Location Engineer

SUBJECT: File No. 51271, Map No. 83-23, 9B-18-1
Glencoe Acres, Inc.
Glencoe -- W. Union (N. Plains)

Please be advised that there is an alignment change to miss a residence under consideration at this time. This change will affect the centerline description as shown in Exhibit A of the attached Title Report packet.

You will probably be advised of this change soon.

cc: R. W. Bothman
Curt Duval
Kenneth Rolfe

9361

September 9, 1980

ACC

Washington County
150 First N., Room 418
Hillsboro, Oregon 97123

Attn: Mr. Larry Rice
Director of Public Works

Gentlemen:

We have submitted a program to the Federal Highway Administration for approval of the Right-of-Way phase of the Glencoe Road-West Union Road Section, FAS-A685 and FAS-A686.

Financial sharing of the Right-of-Way is:

Total Right-of-Way	$180,500
Federal Funds	159,110
BALANCE	$ 21,390

Local Share:
1/2 of $21,390 = $10,695

By rounding the County's Advance Deposit will be $10,700.

The attached sheet defines the three options for making your advance deposit. Please select the option you desire and submit your advance deposit in accordance with the instructions.

Very truly yours,

R.H.P.
for D. E. Swan
Operation Programming Engineer

HR:pf
Attachment
bcc w/AD # 810: Vern Skoog - Please return completed AD # 810 when funds are received.
Jon Rose, Region H Federal Aid Engineer

9361

PRO 6

STATE OF OREGON

INTEROFFICE MEMO

TO: FILES

DATE: September 8, 1980

FROM: Harold Reynoldson
Harold Reynoldson
Local Programs Engineer

SUBJECT: Glencoe Road - West Union Road Section
FAS-A685 and FAS-A686 (North Plains)
Washington County
Project No. RS-A685(2)

Washington County with their own forces and at their own expense will:

1. Remove the existing bridges. Cont. Glencoe Rd McKay Crk - County
2. Be responsible for the permanent signing and permanent striping.
3. Install the fence. ✓
4. Install the guardrail. ✓

The County wishes the following included in the contract:

1. Seeding and mulching. ✓
2. Rip rap. ✓
3. Furnish the fencing material. ✓
4. Furnish the guardrail. ✓

The material for the fencing and guardrail is to be stockpiled in the County shops on River Road.

HR:pf

cc: Mike Borresen - Washington County
Ted Thompson
Fred Erickson
Roger Trygstad
Jon Rose
Jack Sullivan

Contains Recycled Materials
81-125-1387

9361

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6

August 20, 1980

TO: G. L. Green, Division Administrator
Federal Highway Administration

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 80233
Project No. RS-A685(2)
Glencoe Rd.-W. Union Rd. Section
Washington County

Enclosed is data consisting of PR-1 forms, sketch maps, relocation plan and right of way map 9B-18-1 on the subject project.

I request the following:

1) Approval of the relocation plan for the project.

2) Authorization to proceed with the actual acquisition of right of way, all phases, at an estimated total cost of $180,500 with an obligation of $159,110 in federal funds. The right of way to be acquired is as outlined in red on the enclosed right of way map.

Within a reasonable period of time prior to displacement a comparable replacement dwelling will be available or provided for the displaced family who are initial occupants or an adequate replacement dwelling will be available or provided for individuals or families who are subsequent occupants for each displaced person on this project. This assurance is based on the relocation plan for the project. Relocation assistance will be provided from the Region 1 Right of Way Office in Milwaukie.

HA

DmH.

Form 734-3122

Our State relocation program is realistic and is adequate to provide orderly, timely and efficient relocation of displaced persons as provided in FHPM 7-5-1.

A copy of the State Clearinghouse A-95 review conclusions has been forwarded previously.

CL:bke
Enc.

cc: M. Klotz
J. Boyd
F. Lowe
H. Reynoldson

Budget Bureau No. 41-R2

MONTHLY TRANSACTION NO.

DATE SUBMITTED TO W.O.

FORM PR-1 (REV. 4-61)

8-20-80

FEDERAL-AID PROGRAM DATA

(PPM 21-1)

CARD 2
REPORT NUMBER (19) (20)
PROJECT LOCATION (45 typewriter spaces) 21 65: Co. Rd., W. Union & Glencoe Roads (N. Plains)
ADT PRESENT: 1,750 (66)
FUTURE: --- (70) YEAR: -- (71) (72)
REGION: 10
STATE NAME: Oregon

CARD 3
CHARACTER OF PROPOSED WORK (35 typewriter spaces) 28 62: Right of Way Acquisition
NATL. FOREST (62) (65)
FH ROUTE NO. (66) (68)
SUPV AGCY (69)
DA CLASSIF. (70)
DA AREA (71)
EMERG. YR. (72) (73)
PL. AUTH YR (74) (75)
PROJECT NUMBER — PREFIX LETTER(S) 14 23: RS- NUMBER 7: A685

CARD
CLASS OF FEDERAL FUNDS: Rural Secondary
COUNTY NAME: Washington
NAME OF URBAN AREA 17-31: ---
ROUTE NO. S
FEDERAL-AID: A685 (32)
STATE: Co. Rd. (36) (37)
U.S. --

CARD	LINE NO.	CHANGE CODE	PROJECT CODE	CLASS	WORK TYPE	STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS 88.15%	STATE FUNDS	OTHER FUNDS
1	(14-15)	116	41	42	43 46	53		(54) (58)	(59) (66)	(67) (76)		
5					PE							
5					ROW		"Glencoe Road - W. Union Road Section"	0.68	180,500	159,110	10,695	10,695 (Co
5					CONST (CODE)							

CARD	CODE	PREPARED BY		MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS	STATE FUNDS	OTHER FUNDS
1	1	CL	PROJECT TOTALS	0.68	180,500	159,110	10,695	10,695 (Co
1	14				(16) (23)	(24) (33)		

PROGRAM APPROVAL DATES
4-6-78
10-4-79

REMARKS
Additional Data see items 802
Project No. RS-A685(1) & RS-A

Budget Bureau No. 41-R2067; Approval Expires February 28, 1966

FORM PR-1 (REV. 4-61)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

FEDERAL-AID PROGRAM DATA

(PPM 21-1)

8-20-80

T LOCATION (45 typewriter spaces)	ADT	PRESENT	FUTURE	YEAR	REGION	STATE NAME	STATE CODE	APPN CODE	ITEM NO.
d., W. Union & Glencoe Roads (N. Plains)		1,750	---	--	10	Oregon	41	075	80233

RK (35 typewriter	NATL. FOREST	FH ROUTE NO.	SUPV AGCY	DA CLASSIF.	DA AREA	EMERG. YR.	PL. AUTH YR	PROJECT NUMBER PREFIX LETTER(S)	NUMBER	SEQ. NO.	T. Projects Only POST MI.	DESIG.
isition		▨	▨	▨	▨			RS-	A685	(2)		

Rural Secondary

COUNTY NAME: Washington
CODE: 067

ROUTE NO. S
FEDERAL-AID: A685
STATE: Co. Rd.
U.S.: --

PROGRAM STAGE ☐ 1 OR ☐ 2

RK TYPE	STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS 88.15%	STATE FUNDS	OTHER FUNDS	CHARACTER OF PROPOSED WORK (Full description)
W		"Glencoe Road - W. Union Road Section"	0.68	180,500	159,110	10,695	10,695 (Co.)	ROW-90' normal; Access Control-none; Parking Restrictions-none.
NST E)								
CL		PROJECT TOTALS	0.68	180,500	159,110	10,695	10,695 (Co.)	

VAL DATES
4-6-78
10-4-79

REMARKS
Additional Data see items 80233 & 80234;
Project No. RS-A685(1) & RS-A686(1).

-over-

GLENCOE ROAD-W. UNION ROAD SECTION
PROJECT NO. RS-A685(2)

Project Data: Work under this project consists of right of way acquisition all phases including relocation assistance as required for the future construction of W. Union Road and Glencoe Road on revised alignment to provide for two 12-foot travel lanes with 4-foot shoulders.

FHPM 7-7-2 Requirements: Final Negative Declaration approved by FHWA on October 31, 1979.

FHPM 7-7-5 Requirements:

a) Public Hearings ------------- Held on August 16, 1979.
b) Location/Design ------------- Approved October 31, 1979 by adoption of the Final Negative Declaration.

Data for PR-37: Relocation Assistance

Moving Costs (1 Family) ---------------- $ 500.00
Replacement Housing -------------------- $15,000.00
$15,500.00

Note: This project is in Congressional District No. 1

Unusual Circumstances: The right of way for realignment cf 1500 feet of W. Union road (FAS A686) is included in this project for accounting simplicity.

9361

STATE OF OREGON

INTEROFFICE MEMO

ROW 12

DATE: August 4, 1980

TO: Ken Rolfe
Reg. R/W Supervisor
REGION 1

FROM: Adele L. Egan
R/W Office Unit Supervisor

SUBJECT: File 51270 and others
Glencoe Rd.-W. Union Road (N. Plains) Sec. FAS-C
County Roads
Washington County

Attached are two copies each of six original Option forms covering right of way to be acquired in connection with the Glencoe Road- West Union Road (North Plains) Section of County Roads in Washington County. This contract is scheduled for letting in the fiscal third quarter of 1981.

The distribution number to be used for the acquisition of these files has not been assigned.

Do not appraise or negotiate until notified by Frank Lowe. ✓

Please send cost estimates for programming purposes to Frank and submit a Relocation Plan to the Relocation Supervisor if one is necessary.

Enclosed for your information are copies of the Authorization List and Mr. Rounds' letter of July 31, 1980.

We are forwarding under separate cover, three prints of Map 9B-18-1 covering this area and bearing our date of August 1, 1980.

File No.	Name	Area
51270	Paul and Hazel Volpp	1.12 ac., 0.03 ac.
51271	Glencoe Acres, Inc.	0.61 ac., 0.46 ac.
51272	William E. & Charlene Troutman	2.75 ac., 0.12 ac., 0.14 ac., 0.23 ac., 0.03 ac.
51273	Jane Ann LaMordden & Lloyd E. LaMordden	0.15 ac.
51274	Ron and Elizabeth Jane Tankersley	0.07 ac.
51275	Herbert and Sharon Jorgensen	102 sq. ft.

AC:nn
Enc. 6 Options, etc.
cc: Ed Hardt
Appraisal/Auth. List
F. Lowe
Title
A. Riveness/Exhibit
✓ Don Harwell

Don H.

Contains Recycled Materials
81-125-1387

9361

WASHINGTON COUNTY
ADMINISTRATION BUILDING — 150 N. FIRST AVENUE
HILLSBORO, OREGON 97123

BOARD OF COMMISSIONERS
MILLER M. DURIS
JIM FISHER
VIRGINIA DAGG

DEPT. OF PUBLIC WORKS
LARRY RICE, Director
ROOM 201
(503) 648-8826

July ~~16~~ 21, 1980

Jon Rose, Federal Aid Specialist
Oregon Department of Transportation
5821 N.E. Glisan
Portland, Oregon 97213

Subject: Highway Bridge Replacement Program

Dear Jon:

I have reviewed the three year bridge replacement program that you sent to me on July 1, and would like to make the following recommendations:

The first bridge on the list on Fern Hill Road over the Tualatin River is shown to have an estimated cost of $400,000. This cost included a major relocation of the approach roads to the bridge to eliminate the dangerous curve. It is now my understanding that FHWA will only allow minor approach construction as a part of the bridge construction projects. I am therefore submitting a separate FASC project for the realignment of the road approaches. Based on this, the estimated cost for replacement of the bridge itself will be approximately $250,000.

FAS-C Project
Glencoe Road - W. Union Rd Sec.

The West Union Road bridge over McKay Creek, shown as 1982 construction is already being designed in Salem and their estimated cost is $170,000. The realignment project on West Union Road is scheduled for construction in the summer of 1981. In order for the bridge construction to occur at the same time, I am requesting that this bridge project be moved into 1981, along with the Fern Hill Road project. Both projects together will then have an estimated cost of $420,000, compared to the previous estimate of $400,000 for just the one bridge.

The Dixie Mountain Road bridge over McKay Creek is being replaced this summer with a culvert, using county funds, so it can therefore be eliminated from the list. In place of the Dixie Mountain Road bridge and the West Union Road bridge on the 1982 on-system projects, I would like to recommend addition of the Timber Road bridge over the Louisignant Creek, bridge #13314 at a cost of $150,000 and the Shadybrook Road bridge over the McKay Creek, #13114 for a cost of $110,000.

Also on the 1983 on-system program, the West Union Road bridge over Rock Creek, which was rebuilt in 1978, can be removed from the list.

On the off-system program for 1982, the Cochran Road bridge over the Nehalem River is in the process of being replaced using timber revenues, so it can be eliminated from this program. I therefore recommend moving the Buxton Cemetery Road bridge from 1983 into 1982.

The total cost of the three year program which you sent to me included $1,510,000 worth of bridges for the on-system and $770,000 of off-system bridges for a total of $2,280,000. My proposal is for a two-year program of $830,000 for on-system bridges, $420,000 for off-system bridges for a total of $1,250,000. We also have several bridges that were submitted too late for this review that would be eligible to be on the program. When the advisory committee reviews the new bridges next year, we could possibly pickup several of these newly submitted bridges from the million dollars that would be saved under my proposed program.

In summary, the two bridges that I am requesting be included, have sufficiency ratings of 12.3 and 13.0, which is well within the eligibility requirements for federal funds. Three bridges are being eliminated because they are being replaced with local funds and two bridges have been reduced in cost. If you have any questions about these changes, please give me a call.

Very truly yours,

Michael A. Borresen

Michael A. Borresen
Project Development Engineer

MAB:ja

From Metro JON ROSE
Date 7/21/80
To WALT HART
Program Mgmt. Traffic Region [✓ STRUCTURES]
Comments: WASHINGTON COUNTY has several comments on the HBR program, some of which are critical. Please consider these and take appropriate action.

Jon Rose

9341

L.

ROBERT W. STRAUB
GOVERNOR

Department of Transportation
METROPOLITAN BRANCH
5821 N.E. GLISAN, PORTLAND, OREGON 97213

July 11, 1980 Telephone 238-8226 534-1970

MIKE BORRESEN
Project Development Engineer
Washington County
150 N. 1st Avenue
Hillsboro, OR 97123

NOTED
E. S. HUNTER

Dear Mike:

I cannot find serious fault with any of your comments in your letter of June 30 regarding the delays of the Glencoe Road/West Union Road realignment project.

For reasons now hard to document, the Right-of-Way Descriptions Unit did not receive the project until March of this year. At that point in time, the workload in their shop was substantial, and still is. Regionally, there were higher priority projects, and even in the County, 89th-I-5 (Tualatin) took a higher priority than the Glencoe-West Union Road project.

I have been advised by the Right-of-Way Descriptions Unit that they are still anticipating an August 1 completion. They have found it necessary to request from Washington County the road establishment documents for the roads involved in the project in order to establish accurate right-of-way lines. With early receipt of these we should still be able to make the August 1 deadline.

For your information, additional people have been moved into the Right-of-Way Descriptions office and we all hope this will relieve the backlog currently experienced by the current surge of work.

D. R. ADAMS
Project Development Engineer

nyr

cc: R.J.Kleinschmit

bc: E. Hunter
H. Versteeg
H. Wakerlig

RECEIVED
TECHNICAL SERVICES
JUL 15'80
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Form 734-3122

WASHINGTON COUNTY

ADMINISTRATION BUILDING — 150 N. FIRST AVENUE
HILLSBORO, OREGON 97123

BOARD OF COMMISSIONERS
MILLER M. DURIS, Chairman
JIM FISHER, Vice Chairman
VIRGINIA DAGG

DEPT. OF PUBLIC WORKS
LARRY RICE, Director
ROOM 201
(503) 648-8886

June 30, 1980

MA PDM. PDE TSE SPC
ODOT - METRO
JUL 02 1980
AMS PPS PPC FILE T/A

Don Adams
Project Development Manager
Oregon Department of Transportation
5821 N.E. Glisan
Portland, Oregon 97213

Subject: FAS Project, Glencoe Road/West Union Road Realignment

Dear Don:

The public hearing for this project was held on August 16, 1979, and the final negative declaration was signed by FHWA on August 31, 1979. At that time, right-of-way negotiations were supposed to start in January, 1980, so that construction could begin in the fall of 1980. I have now learned that the right-of-way descriptions won't be completed until the first of August and then the project will be programed with FHWA, to begin right-of-way purchases.

This project had always been on a tight schedule in order to replace the two structurally deficient bridges as early as possible. One of these bridges has since been closed and traffic must now bypass around the bridge several miles. The delay of nine months in receiving right-of-way descriptions have not only extended the hardship and expense of those persons who now have to bypass around the bridge to get back onto their normal route of travel, but have also increased the project t due to inflation. At a yearly inflation rate of 18% the project is increasing $133,000 per year. As the federal government does not inflate these funds, that means the only way to make up for that is to take another year's allotment to the county for the same project.

Certain delays on projects occur but cannot be helped, but it seems that right-of-way descriptions are becoming the biggest stumbling block on every project that now goes into Salem. With inflation eroding the construction dollar as it has been the last few years, it would seem to me hiring a couple more people in the right-of-way department would be very cost effective.

I would appreciate any assistance you can give us in getting this project back on schedule again before the costs get so high that we can no longer build it.

Very truly yours,

Michael A. Borresen

Michael A. Borresen
Project Development Engineer

MAB:ja
cc: Ron Kleinschmit, ODOT

9361

2.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.: ROW 18-2

June 27, 1980

NOTED
H. S. COULTER

D. Leigh Davis
Transportation Spec.
Rail Rate & Service Div.
Public Utility Commission
Labor & Industries Building
Salem, OR 97310

SXF: 1175
Crossing: 8U-21.40-B

Dear Leigh:

In the Matter of the Application of the OREGON DEPARTMENT OF TRANSPORTATION ON BEHALF OF WASHINGTON COUNTY for the authority, pursuant to ORS 763.030, to relocate a crossing of Glencoe Rd. and Burlington Northern, Inc., Vernonia Branch, in North Plains, Washington County, Oregon.

The State of Oregon, by and through its Department of Transportation Highway Division, has no objection to the issuance of an order in accordance with the application filed in the above-entitled matter. The road is not under the jurisdiction of the Highway Division.

Cordially,

RDTrygstad

Roger D. Trygstad
Railroad & Utility Engineer

RECEIVED
STATE HWY ENGR
JUN 27 '80
REFER TO
FOR
Info | Inves | R/D | D/R | Sign | Act | File

RDT/vlw
cc: H. S. Coulter
C. T. Keasey
E. L. Hardt
R. N. Bothman

Form 734-3122

9361

STATE OF OREGON

INTEROFFICE MEMO

TO: E. L. Hardt
Region 1 Engineer
Attn. Jon Rose

DATE: June 6, 1980

DES 23
Br. 13033A

FROM: TG Thompson
T. G. Thompson
Supervising Structural
Design Engineer

SUBJECT:
McKay Creek Bridge
Glencoe Rd.-West Union Rd. Sec.
Glencoe Road
Washington County
Bridge 13033A

Enclosed are four reduced prints of drawings 35238 and 35102 which are the preliminary plan and elevation and vicinity map for the subject structure.

Our present estimate of costs for the proposed contract is as follows:

Grading and Paving	$407,000
Structure	146,000
Engineering & Contingencies	29,000
Total	$582,000

Please use these prints to obtain the approval of Washington County and return one set of prints to this office with the appropriate approval stamped thereon.

It is planned to call for bids on this project in the first quarter of 1981.

582
110
652

GDA:dh
Enclosures

cc H. A. Schell /w/ 1 set encls.
Engineering /w/ 1 set encls.
County-City Unit
Environment (M. Banks) /w/ 1 set encls.

Contains Recycled Materials
81-125-1387

SP*75683-12

9361

L.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION

In Reply Refer to
File No.: ROW 18-2

May 14, 1980

Mr. Craig Reiley
Administrator
Rail Rate and Service Division
Public Utility Commission
Labor & Industries Building
Salem, OR 97310

PUC Application
Crossing No. 8U-21.40-B
Glencoe Rd. (North Plains)
Washington County

Dear Craig:

Enclosed is an original and eight copies of the Application of the Oregon Department of Transportation on behalf of Washington County, relating to a construction project which will close the existing separated crossing and construct a new public grade crossing at the subject location.

If you have any questions regarding this application, do not hesitate to call me.

Cordially,

RDTrygstad

Roger D. Trygstad
Railroad & Utility Engineer

Noted
H. S. COULTER

RDT/vlw
Enc.

cc: ~~H. S. Coulter~~ - w/copy
E. S. Hunter - w/copy
Walter Hart - w/copy
R. N. Bothman - w/copy
Ed Hardt - w/copy
C. T. Keasey - w/copy
D. E. Swan - w/copy
Jack Sollis - w/ copy

RECEIVED
STATE HWY ENGR
MAY 15 '80
REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

Form 734-3122

PUC Docket No. SXF ________
PUC Crossin[illegible]. 8U-21.40-B
DOT-AAR Crossing No. 58 268 L

BEFORE THE PUBLIC UTILITY COMMISSIONER

OF OREGON

APPLICATION FOR AUTHORITY in connection with a proposed railroad-highway crossing project.

Formal Title:

In the matter of the application of Oregon Dept. of Transportation (name of applicant)
on behalf of Washington County
for the authority, pursuant to ORS 763. 020 (020/030/040), to
relocate (construct/alter/change protection at/relocate/close) a ________ (grade/separated) crossing
of Glencoe Road (name of street or highway)
and Burlington Northern, Inc. (name of railroad company),
United Jct.-Banks (name of railroad main or branch line or other trackage)
in (in/near) North Plains (name of city/town/rail station), Washington (name of county) County,
Oregon.

Check one of the following:

Allocation of funds from one of the following sources is requested or expected--

☐ State grade crossing protection account (ORS 763.270, .280, .290). Estimate of dollar cost to fund: $________

☒ Federal-Aid Highway System funds.* FAS-C

☐ Other Federal funds.*

☐ None of above.

*If Federal funding assistance is expected, please give appropriate federal statutory provision.

Title Page

PUC Form 202 (31) 10-77
Replaces AX-1/75

BEFORE THE PUBLIC UTILITY COMMISSIONER
OF OREGON

APPLICATION FOR AUTHORITY in connection with a proposed railroad-highway crossing project

---

Check one of the following and answer all of Section I, plus all other parts of the application indicated beside that item.

(1) ____ Construction of a new public highway/bikeway over an existing railroad at grade. Answer: Sec. I, II, V, as appropriate.

(2) ____ Construction of a new railroad track or tracks over an existing public highway at grade. Answer: Sec. I, II, V, as appropriate.

(3) ____ Construction of a new public highway over or under an existing railroad. Answer: Sec. I, III, V and #12 (a)(1) & (b)(1).

(4) ____ Construction of a new railroad track or tracks over or under an existing public highway. Answer: Sec. I, III, V and #12 (a)(1) & (b)(1).

(5) ____ Alteration/relocation of an existing public highway at an existing grade crossing. Answer: Sec. I, II & V.

(6) ____ Alteration or relocation of existing railroad trackage at an existing grade crossing. Answer: Sec. I, II & V.

(7) ____ Separation of an existing grade crossing. Answer: Sec. I, III, V and #12 (a)(1) & (b)(1).

(8) ____ Alteration of an existing separated crossing. Answer: Sec. I, III & V.

(9) ____ Removal of a track or tracks from an existing grade crossing. (If this is all that is involved, no application is required. Please notify us in writing.)

(10) ____ Addition of a track or tracks at an existing grade crossing. (See (6) above and answer as indicated.)

(11) ____ Addition of protective devices at an existing crossing. (Simplified form 203 (31) 10-77 can be used if no other alteration is involved at the crossing in question. Otherwise, answer as indicated under (5) above.)

(12) ____ Addition or removal of stop sign protection at an existing crossing. (Simplified form 204 (31) 10-77 may be used if this is all that is involved. Otherwise, answer as indicated under (5) above.)

(13) ____ Closure of an existing grade crossing. Answer: Sec. I, IV and the applicable portions of #'s 11, 12 & 13.

(14) X Other (please specify) Closure of an existing separated crossing and construction of a new public grade crossing.

If item (1), (2), (3), (4), (5) or (6) is checked, has a siting permit for a public transportation facility been obtained pursuant to ORS 197.415?

No (yes/no) If no, why not? Not required.

Note: TO SAVE PAPER WHEN COMPLETING THIS FORM, IF IT IS FOUND THAT NO RESPONSES ARE REQUIRED ON ANY PARTICULAR PAGE(S), PLEASE OMIT SUCH PAGE(S) FROM YOUR APPLICATION. ALL SUCH OMISSIONS MUST BE SPECIFIED ON THE SIGNATURE PAGE.

IMPORTANT: PLEASE READ NOTE AT BOTTOM OF PRECEDING PAGE BEFORE COMPLETING THIS FORM.

NOTE TO APPLICANT: If assistance in completing this form is desired, please call 378-6659. On a question involving railroad data, the railroad involved can usually provide assistance as well:

Burlington Northern, Engineering Dept.	221-1300	(Portland)
Southern Pacific, Division Engineer	228-8181	(Portland)
Union Pacific, Division Engineer	288-8221	(Portland)
or--	208-232-4450	(Pocatello)

(Pocatello should be called for Union Pacific lines east of Huntington, including the line to Burns.)

SECTION 1. (To be filled out completely by all applicants.)

1. Name of Applicant: ODOT on behalf of Washington County
   Address: State Hwy. Building - Salem 97310

2. Statutory authority under which this application is made: ORS 763.020
   020/030/040

   Note: If a new grade crossing is proposed -- ORS 763.020; if an existing grade or separated crossing is to be altered -- ORS 763.030; if a new separated crossing is proposed -- ORS 763.040.

3. Location of the proposed project:

   Railroad milepost 8U-21.40-A
   City North Plains
   Nearest railroad station North Plains
   County Washington
   The proposed project is to be in the _____ 1/4 of the _____ 1/4 of Section 1, Township 2N, Range 3W, W. M.

4. Name of public highway involved in this project:
   Glencoe Road

   Name of public authority with jurisdiction over this highway:
   Washington County

5. Name of railroad involved in this project: Burlington Northern, Inc.
   United Jct.-Banks.
   (include name of branch, main line or other track)

6. List the proper parties of interest in this matter:

   a. B.N.
   b. Washington County
   c. ODOT
   d. City of North Plains
   e. _____
   f. _____

   Have you served each of these parties with a copy of this application? NO (yes/no)

   If yes, please provide certificate of such service. (We would prefer to serve the application ourselves.)

PUC Form 202 (31) 10-77
Page Two

7. Describe the proj[illegible] in detail (including its purpose):

Remove the existing separated crossing and relocate the crossing

170 Ft. easterly, with a grade crossing.

8. Is the project contemplated required by the public safety, necessity, convenience and general welfare? Yes (yes/no)

If yes, why? Present structure is deteriorating (currently has a

load limit) and is narrow.

9. Is the crossing involved (to be) a separated crossing? No (yes/no)

SECTION II. Grade Crossings (If a separated crossing is involved in this application, answer 12 (a)(1) and 12 (b)(1), then go on to Section III.)

10. Is it possible or practical to construct a separated crossing at this location?

No (yes/no) If no, why not? Low volume of traffic, the high cost

of a separated crossing, and less impact on neighborhood.

11. Physical description of the crossing:

a. The Highway

(1) Alignment--Describe the highway alignment for 1000 feet on each approach, both before and after the project:

After - 7 degree reversing curves, both sides.

Before - straight

(2) *Width--The highway is 20 feet wide at the crossing at present; after completion of the project, it will be 52 feet wide at the crossing; consisting (from E (N or E) to W (S or W)) of:

At present--			After completion--		
Shoulder** of	NA	feet	Shoulder of	2	feet
____ lane(s) at	NA	ft. ea.	2 lane(s) at	12	ft. ea.
Median of	NA	feet	Median of	0	feet
____ lane(s) at	NA	ft. ea.	2 lane(s) at	12	ft. ea.
Shoulder of	NA	feet	Shoulder of	2	feet

---

* Measurement of highway width should be along a line perpendicular to the highway.

** If highway is curbed to crossing, "shoulder" is assumed to mean "parking area".

11.a. (Continued)

(3) Surface--	At present:	After completion:
Type of surface on traveled way:		
on approaches	NA	Asphaltic Concrete
at crossing	NA	Asphaltic Concrete
Type of surface on shoulders;	NA	Asphaltic Concrete
Condition of surface:		
on approaches	NA	New
at crossing	NA	New
Is the highway curbed on the approaches?	NA	Westerly Side
Is there one or more sidewalks at this crossing?	NA	Yes

If either answer to the above question is "Yes", please describe below, including width and location of each sidewalk:

One 5 Foot walk,westerly side

(4) Gradient, going toward crossing on--	At present:	After completion:
N (N or E) approach	± 0 %	± -2.75 %
S (S or W) approach	± 0 %	± -3.28 %

(5) Nearest public roadway intersection on each approach--

(a) N (N or E) approach: 200 ft; ADT Unknown

(b) S (S or W) approach: 200 ft; ADT Unknown

Name of road or highway:

(a) Hillcrest Ave.

(b) Commercial Ave.

Public authority with jurisdiction over road or highway:

(a) City of North Plains

(b) City of North Plains

(If different public authority than that with jurisdiction over road at crossing, please add name to list of parties of interest in this matter--see item 6 of this application form.)

Are traffic signals (to be) installed at either of these intersections?

(a) NO (yes/no); (b) NO (yes/no).

11.a. (Continued)

If yes to either, please explain below which intersection(s) is (are) (to be) signalized, and whether or not this signalization is (to be) interconnected with track circuitry on the railroad. If it is, are part-time turn restriction signs (to be) installed? (If there is to be interconnected circuitry, please include the interconnection and part-time turn restriction signs as items of protection proposed herein. If traffic signals at the adjacent intersection are to be installed in connection with this project, and if costs of same are to be partially borne by the railroad and/or the state grade crossing protection account, they should also be listed under item 14 herein.)

N/A

(6) Describe how the crossing is now protected. (For example: 2 crossbucks, 2 stop signs, 2 advance warning signs.) Please indicate which of these devices will be removed upon completion of this project:

Separated Crossing.

b. The Railroad

	At present:	After completion:
(1) Number of tracks--	1	1

Name of each track from N (N or E) to S (S or W):

One Track

(2) Angle of intersection-- 98° 98°

If more than one track-highway angle exists, please give details below, track by track:

One track.

(3) Alignment--Describe the alignment of the railroad track(s) for 1000 feet in each direction, both before and after the project:

Straight to the West.

Slight curve to the East. Curve starts at approx. 500 ft.

Easterly.

PUC Form 202 (31) 10-77

11.b. (Continued)

(4) Nearest switch--	At present:	After completion:
E (N or E) of crossing:	1000+ ft.	Same ft.
W (S or W) of crossing:	800 ft.	Same ft.

12. Use of the crossing:

a. The Highway

(1) Average daily traffic volume--

At present: 1,350; After completion: 1,350;

Expected 5 years from completion: 1,800.

(2) Speed of vehicles (estimated 85th percentile speed)--

	At present:	Expected after completion:
300 ft. from crossing on N (N or E) approach:	35 mph	35 mph
on (S or W) approach:	35 mph	35 mph
At crossing:	35 mph	35 mph
Posted speed limit on approaches:	35 mph	35 mph
(3) Direction of traffic flow:	N & S (N & S, etc.)	N & S

b. The Railroad

(1) Train movements-- (avg. per day)	At present:	Expected after completion:
Freight trains:	2	Same
Switching movements:	0	
Passenger trains:	0	
(2) Speed of trains--		
Maximum allowable:	mph	mph
Typical:	20 mph	mph
Slowest Normal:	mph	mph

13. Visibility at the crossing from the standpoint of the approaching motor vehicle operator:

a. Of approaching trains--

(1) From a "stop" position (approx. 18 feet from edge of nearest rail) on the . . .	The motor vehicle operator can see along the railroad . . .
N (N or E) approach:	200 ft. to right; 200 ft. to left
S (S or W) approach:	200 ft. to right; 200 ft. to left

13.a. (Continued)

(2) From a "sa[illegible]stopping distance" (see table below) on the . . . The motor vehicle operator can see along the railroad . . .

N (N or E) approach: 155 ft. to right; 380 ft. to left*

S (S or W) approach: 380 ft.* to right; 155 ft. to left

If these sight distances will be changed on completion of the project, please explain below:

*Subject to trimming of vegetation.

NOTE: TABLE OF SAFE STOPPING DISTANCES ("SSD")

Typical Approach Speed	"SSD"	Typical Approach Speed	"SSD"
10 mph	44 feet	[✓ 35 mph	210 feet]
15 mph	69 feet	40 mph	256 feet
20 mph	98 feet	45 mph	305 feet
25 mph	131 feet	50 mph	360 feet
30 mph	169 feet	55 mph	418 feet

b. Of the proposed protective devices--

(1) Will vision of the protective devices to be installed at the crossing be obstructed on the main approach road within 1000 feet of the crossing?

YES (yes/no) If yes, please explain by what and at what point it will be obstructed:

Due to alignment.

(2) If roadside-mounted protective devices (such as "STOP" signs or Standard No. 2 flashing light signals) are to be installed at the crossing, is the approaching driver's vision of these devices likely to be totally or partially obscured by parked vehicles? NO (yes/no)

If yes, explain how you propose to overcome this problem:

If no, why not?

No Parking.

14. List the number and types of protective devices to be installed at the crossing and on its approaches.

TYPES OF DEVICES (refer to rule OAR 860-42-060)

Standard No. 1M, multiple track sign
Standard No. 1P, reflectorized crossbuck for pedestrian crossings only
Standard No. 1R, reflectorized crossbuck
Standard No. 1S, vehicle stop sign (to stop vehicles)
Standard No. 1T, railroad stop sign (to stop trains)
Standard No. 2, flashing light signal
Standard No. 2B, cantilevered flashing light signal
Standard No. 2P, flashing light signal for pedestrian crossings only
*Standard No. 4, automatic gate signal
Standard stop clearance lines
Standard "EXEMPT" sign
Standard advance "EXEMPT" sign
**Standard part-time turn restriction sign
Standard "DO NOT STOP ON TRACKS" sign
Standard advance warning sign
Standard "STOP AHEAD" sign
Standard advance warning pavement markings
Standard highway guard rail
Non-mountable curb
**Traffic signals at adjacent intersection
Track circuitry to interconnect crossing signals with traffic signals at adjacent intersection
Traffic signals at crossing

---

* To be used in conjunction with Standard No. 2 or No. 2B signals. Please indicate which it will be.

** Please furnish description of traffic signal operation, including standard phasing and phasing upon train activation.

a. Protection type: STD-2B & STD-4

Number of such devices: ________; To be located as follows: ________

One each side of crossing.

(1) Who will perform the installation: B.N.

(2) Estimated cost of installation: $ 65,000 ***

(3) Who will pay for said installation?

Name of Party	Percent of Cost
FHWA	88
County of Washington	6
State (ODOT)	6

(4) Who will maintain these devices? BN

(5) Who will pay for said maintenance?

Name of Party	Percent of Cost
BN	100

*** Include cost of furnishing the protective device(s).

14. (Continued)

b. Protection typ Rural Guard Rail

Number of such devices: 1 ; To be located as follows: on

Easterly side.

(1) Who will perform the installation? ODOT By contract.

(2) Estimated cost of installation: $ 1,500 ***

(3) Who will pay for said installation?

Name of Party	Percent of Cost
FHWA	88
County	6
State (ODOT)	6

(4) Who will maintain these devices? Washington County

(5) Who will pay for said maintenance?

Name of Party	Percent of Cost
Washington County	100

c. Protection type: Curb

Number of such devices: 1 ; To be located as follows: 26 Feet from center line on Westerly side.

(1) Who will perform the installation? ODOT by contract.

(2) Estimated cost of installation: $ Part of construction work***

(3) Who will pay for said installation?

Name of Party	Percent of Cost
FHWA	88
COUNTY	6
STATE (ODOT)	6

(4) Who will maintain these devices? Washington County

(5) Who will pay for said maintenance?

Name of Party	Percent of Cost
Washington County	100

NOTE: Add 14d, e, etc., on separate sheet, if needed.

15. Who will construct the crossing?

a. Between the rails and for a distance of two feet outside thereof:

B.N.

Estimated cost of this portion: $ 7,200

Note: These costs include rail renewal, compromise joints, ballasting, ties, tie plates, angle bars, crossing materials and installation of all these items.

b. Remainder of crossing area: ODOT by contract

16. Who will pay for such construction and in what proportion?

a. Between the rails and for a distance of two feet outside thereof:

FHWA - 88%; Washington Co. - 6%; ODOT - 6%

b. Remainder of crossing area: FHWA - 88%; Washington Co. - 6%; ODOT - 6%.

17. Who will maintain the crossing?

a. Between the rails and for a distance of two feet outside thereof:

B.N.

b. Remainder of crossing area: Washington County

18. Who will pay for said maintenance?

a. Between the rails and for a distance of two feet outside thereof:

B.N.

b. Remainder of crossing area: Washington County

19. If automatic protective devices are (to be) installed at the crossing, please answer the following:

a. What type of device will be used to activate them?

(Each track at the crossing should be covered in the answer. Example: Main track--predictor units; Spur tracks--island circuits.)

To be determined by the Railroad.

b. If automatic gates are to be installed, are there any overhead wires or other obstacles which might impair the operation of the gate arms?

No (yes/no) If so, describe the obstacles, identify the owner and make the owner a party of interest in this matter.

SECTION III. Separated Crossings

20. At the crossing, the highway will be ________ (above/below) the railroad tracks.

30. (Continued)

Route B: ______

31. Do either of these alternate routes involve use of another railroad-highway crossing? If so, which other crossing, how is it protected, and approximately how much traffic will be added to it if the crossing closure is granted?

Route A: ______

Route B: ______

32. Will emergency services to or from the area served by the crossing to be closed be adversely affected? ______ (yes/no)

If yes, please include the appropriate Fire Department or Fire District and the appropriate local police agency as parties of interest in this matter under item 6 herein, and explain how much the effect will be and whether or not other steps can be taken to overcome this adverse effect:

33. What protective devices are currently installed at the crossing to be closed?

34. Will a pedestrian and/or bicycle crossing be maintained at the site of the crossing to be closed? ______ (yes/no)

35. Who will close the crossing? ______

36. Who will bear the expense of closing the crossing? ______

37. Who will maintain the barricades, if any, at the closed crossing?

38. Who will pay for said maintenance? ______

SECTION V. -- (To be completed by all.)

39. Upon completion of this project, will it be possible to close any existing grade crossing(s) in the area? No (yes/no)

If yes, list and explain: N/A

39. (Continued)

If no, explain why not: All existing crossings a[illegible] necessary for the motoring public.

40. Other items of construction and cost distribution:

* *

41. Are the maps and drawings required by the Division IV Commissioner's Rules and Regulations attached to this application? Yes (yes/no)

PLEASE FURNISH SUFFICIENT COPIES OF THE APPLICATION AND DRAWINGS TO ENABLE US TO SERVE ALL PARTIES OF INTEREST (INCLUDING STATE HIGHWAY DIVISION, COUNTY, AND REGIONAL COUNCIL OF GOVERNMENTS) PLUS AN ORIGINAL AND ONE COPY FOR OUR USE.

The following enumerated page(s) have been omitted from this application because no response to the questions and/or information requested thereon is required in this matter: Pages 11 & 12

Applicant prays for an order permitting construction in accordance with this application, or for such other and further order as may be proper in the premises.

Dated at SALEM, Oregon this 13th day of MAY, 1980.

H S Coulter
(Applicant)

(Attorney)

I, H. S. COULTER, being first duly sworn, say that I am the applicant in the within entitled cause, and that the foregoing application is true, as I verily believe.

H S Coulter

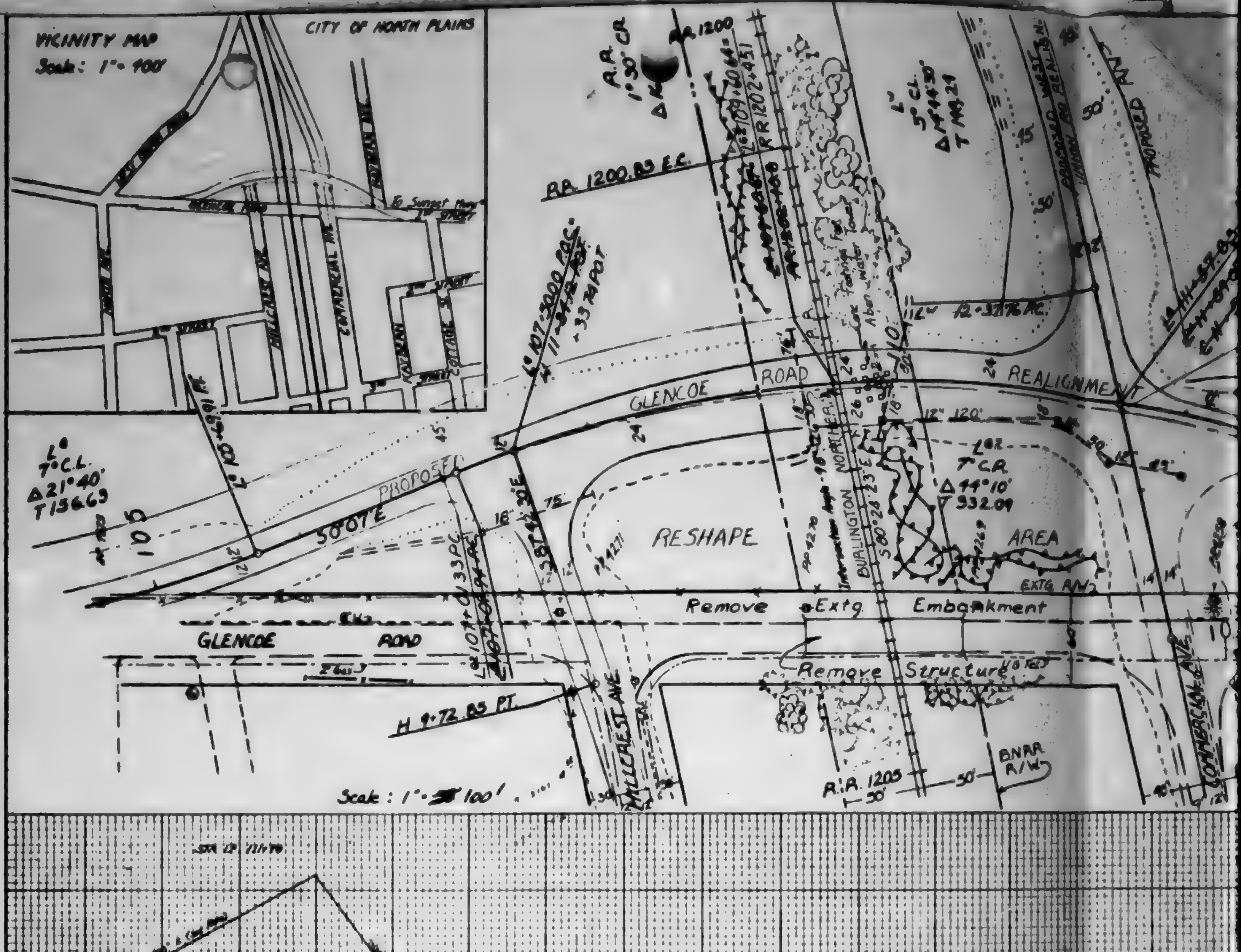
STATE OF OREGON }
County of } ss.

Subscribed and sworn to before me this 12 day of May, 1980.

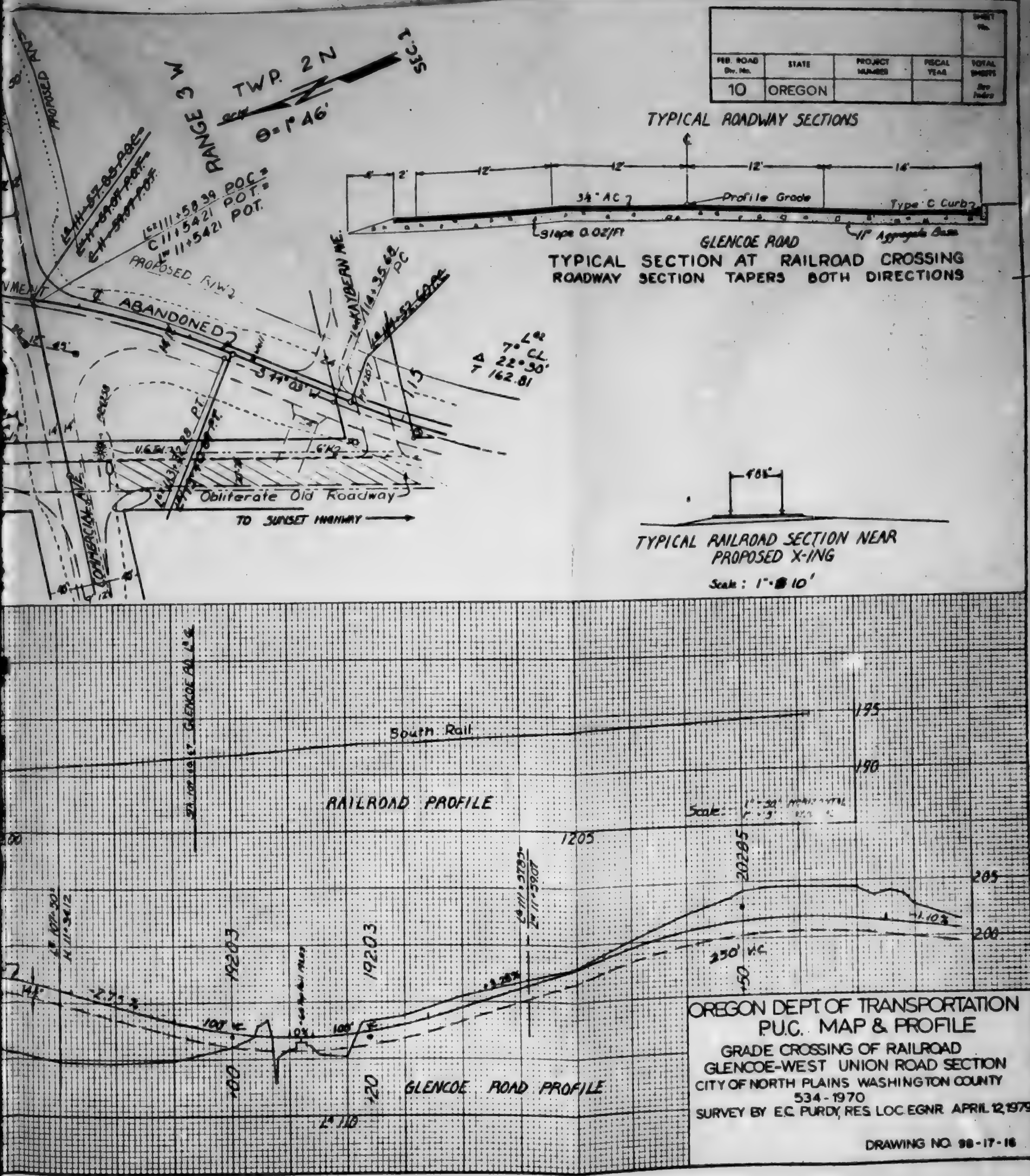
(Notary Public for Oregon)

My Commission Expires: 12-18-80

PUC Form 202 (31) 10-77
Signature Page


VICINITY MAP
Scale: 1" = 400'
CITY OF NORTH PLAINS
To Sunset Hwy
COMMERCIAL AVE
HILLCREST AVE
A.R. 1°30' CR.
R.R. 1200
R.R. 1200.83 E.C.
R.R. 1202+45.1
L 107+00.00 P.O.C.
11+34.12
L 103+69.91 P.C.
L° 7° C.L. Δ21°40' T 136.63
S 0°07' E
PROPOSED
GLENCOE ROAD REALIGNMENT
L² 5° C.L. Δ 14°44'30" T 148.29
L² 7° C.R. Δ 44°10' T 332.09
RESHAPE AREA
BURLINGTON NORTHERN R.R.
S 0°24'23" E
PROPOSED WEST UNION RD REALIGN.
PROPOSED R/W
L 12+32.76 P.C.
12" 120'
EXTG R/W
Remove Extg Embankment
GLENCOE ROAD
Remove Structure
H 9+72.85 PT.
BNRR R/W
R.R. 1205
30'
50'
Scale: 1" = 100'
195
190
185
1200
201.38
L 107+30
H 11+34.12
200
195
190
185
PROFILE GRADE AT ℄
400' V.C.
NOTE: Sight Distance subject to Trimming of Vegetation
National Geodetic Vertical Datum of 1929
Scale: 1" = 30' Horizontal
1" = 3' Vertical
L 103

FED. ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
10	OREGON			See Index


TWP. 2 N
RANGE 3 W
SEC. 1
θ = 1° 46'
PROPOSED ALIGNMENT
PROPOSED R/W
C 111+58.39 P.O.C.
C 111+54.21 P.O.T.
111+54.21 P.O.T.
ABANDONED
S 44° 03' W
KAYBERN AVE.
7° CL.
Δ 22° 30'
T 162.81
Obliterate Old Roadway
TO SUNSET HIGHWAY
COMMERCIAL AVE.
TYPICAL ROADWAY SECTIONS
2'
12'
12'
12'
14'
3½" AC
Profile Grade
Type C Curb
Slope 0.02/Ft
11" Aggregate Base
GLENCOE ROAD
TYPICAL SECTION AT RAILROAD CROSSING
ROADWAY SECTION TAPERS BOTH DIRECTIONS
4'8½"
TYPICAL RAILROAD SECTION NEAR PROPOSED X-ING
Scale: 1" = 10'
South Rail
RAILROAD PROFILE
Scale:
195
190
185
205
200
1205
202.05
192.03
192.03
-2.7%
+3.28%
-1.10%
100' V.C.
100' V.C.
250' V.C.
+80
120
+50
GLENCOE ROAD PROFILE
L = 110

OREGON DEPT OF TRANSPORTATION
P.U.C. MAP & PROFILE
GRADE CROSSING OF RAILROAD
GLENCOE-WEST UNION ROAD SECTION
CITY OF NORTH PLAINS WASHINGTON COUNTY
534 - 1970
SURVEY BY E.C. PURDY, RES. LOC. EGNR APRIL 12, 1979

DRAWING NO. 98-17-16

9361

L.

AGR

STATE OF OREGON **INTEROFFICE MEMO**

Highway Division
DEPT. TELEPHONE

TO: Ken Rolfe
Region 1 R/W Supervisor

DATE: April 15, 1980

FROM: Adele L. Egan
Right of Way Office Unit Supv.

MISC. CONTRACTS and
AGREEMENTS No. 6469

SUBJECT:

Services AGR 156
Glenco Rd.-W. Union Rd. Sec.
Washington County

Attached is an original copy of the subject agreement for transmittal to the county and a copy for your files.

The project will be programmed.

AE
mp
Attach.

cc: Comm. Serv., w/orig.
Finance, w/c
Ed Hardt, w/c
Local Gov't Programs, w/c
Description, w/c
Relocation, w/c
Property Management, w/c
Title, w/c

5/12/80
Note to
Adele -
not on
May report
on 6-5-80 Report

9361

Wash.

STATE OF OREGON
HIGHWAY DIVISION - ODOT

INTEROFFICE MEMO
LOC 8

TO: FILES

DATE: April 2, 1980

Gene M Finley

FROM: Gene M. Finley
Hydraulics Specialist

SUBJECT: McKay Creek Bridge
Glencoe Road-West Union Road
Washington County

file copy o.b.

1 Versteeg ✓
Anderson
2 Christensen Don
Olson
3 Sullivan JWS
Terpin
4 Trout
Wakerlig

RECEIVED
APR 2 1980
ROAD DESIGN SECTION

Do Not File ☐
Return To
Bring Up /
Action

The proposed project will replace an existing 164-foot, timber structure located 450± feet upstream from the proposed site.

HYDROLOGY

McKay Creek is a north-south tributary of the Tualatin River and drains an area of approximately 39.0 square miles above the proposed bridge site.

The frequency vs. discharge relationship listed below was determined by interpolating between values on drainage areas of 41.3 square miles and 36.0 square miles contained in the June 1969 report by the Corps of Engineers entitled "Flood Plain Information Tualatin River and Tributaries, Washington County.

Recurrence Interval	Peak Flow
100-year	6,320 cfs
50-year	5,540 cfs
25-year	4,700 cfs
10-year	3,660 cfs
5-year	2,900 cfs

HYDRAULIC DESIGN

The 100-year flood of 6,320 cfs was used as the design flood to conform with Washington County's Flood Plain Policy. For the purpose of hydraulic design in this study, a "reference section" was established 165 feet upstream from the existing bridge. At the reference section it is estimated that the design discharge of 6,320 cfs creates a highwater elevation for the existing condition of 170.8 feet including 1.3 feet of backwater, and roadway overflow will occur.

A three-span prestressed slab structure with 2:1 end slopes was assumed as the replacement bridge. It was determined that a 100-foot structure with a 60-foot center span and a waterway opening of 860± square feet will create a design highwater elevation of 169.4 feet (MSL) including 0.5-foot of backwater at the proposed site.

Eriksen
File A Copy

Construction of the proposed project will shift the backwater to a point 450 feet downstream from the existing bridge. Because of the flood plain side slopes, this shifted backwater will flood only a small additional area between the existing bridge and the proposed bridge. There are no residents closer than 150± feet of the 100-year flood zone.

Upstream, along the northwest end of the existing bridge, there are several buildings close to the 100-year flood zone. Removal of the existing bridge and approach fills will reduce the highwater 1.0-foot. Because of a flatter flood plain side slope in this area, this highwater reduction represents a greater reduction of the 100-year flood zone and improves the condition close to the buildings.

Removal of the existing bridge, or removal of the existing bridge and approach fills, will drop the highwater elevation to 170.2 feet (MSL) and 169.8 feet (MSL), respectively, at the reference section. This information is listed below:

	H.W. Elev. at Refer. Section	H.W. Elev. 560± Feet Downstream from Refer. Section
Existing Condition	170.8 ft. (MSL)	169.1 ft. (MSL)
Replacement project Constructed and Existing Bridge Removed	170.2 ft. (MSL)	169.4 ft. (MSL)
Replacement project Constructed and Existing Bridge and Approach Fills Removed	169.8 ft. (MSL)	169.4 ft. (MSL)

If the bridge ends and piers were skewed parallel to the direction of flow, it would eliminate the need for the proposed channel change.

RIPRAP

It is suggested that the fill slopes be protected with a one-foot blanket of class 50 loose riprap. A filter blanket will not be required. The riprap should be placed in a toe trench.

GMF:ge

cc: Frank Terpin w/att.
Walt Hart "
J. Davis "
✓D. Christensen "
H. Schell, FHWA "
E. Hardt "

HYDRAULIC DATA

		DESIGN FLOOD	INTERMEDIATE REGIONAL FLOOD	MAXIMUM FLOOD YEAR ( )
Discharge–	cfs	6320	6320	
	m^3/s			
Frequency –yrs.		100	100	
H.W. Elevation Natural Channel	ft.	168.9		
	m.			
H.W. Elevation Channel Change	ft.			
	m.			
Average Velocity	fps	7.3		
	mps			

NOTE FOR A CANAL: "DESIGN FLOOD" = Design Flow
"Discharge" = Capacity

REMARKS:

OREGON STATE HIGHWAY DIVISION
HYDRAULICS UNIT

McKAY CREEK BRIDGE
GLENCOE RD- WEST UNION RD
WASHINGTON COUNTY

COMPILED BY:
GENE M. FINLEY

DATE:
APRIL 1,1980

9361

2

U. S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

3-6-80

FEDERAL AID PROJECT NO.
R A685(1) & RS-A-686(1)

STATE PROJECT NO.
See below

FROM:
G. L. Green, Div. Administrator

PROGRAM NO.

ITEM NO.
80233 & 80234

COUNTY NAME
Washington

PROGRAM STAGE (Check)
☐ 1. ☐ 2.

TO:

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, OR

3/14/80
Orig

RECEIVED
STATE HWY ENGR
MAR 14 '80
REFER TO
Moehring
FOR

Info	Inves	R/D	D/R	Sign	Act	File

DATE PS&E APPROVED

DATE AUTHORIZATION EFFECTIVE
3-6-80

FEDERAL ROUTE NUMBER
Secondary A685 & 686

STATE ROUTE NUMBER
County Roads

GENERAL LOCATION:
Glencoe Road - West Union Road

GENERAL DESCRIPTION OF WORK:
Program Change

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

PRELIMINARY ENGINEERING TO DETERMINE
☐ LOCATION ONLY

PRELIMINARY ENGINEERING FOR SURVEY AND PLAN
☐ PREPARATION

☒ OTHER *(Specify)* Program Change
See below

☐ ACQUISITION OF RIGHT-OF-WAY

CONSTRUCTION - ADVERTISE FOR RECEIPT
☐ OF BIDS

☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of 2-22-80, I approve the revised Preliminary Engineering costs to a TEC of $93,500 with Federal participation limited to $80,220.

(Increase RS-685(1) TEC $14,070 - F.F. $12,403
RS-686(1) TEC $19,430 - F.F. $17,127

DATE
3-6-80

SIGNATURE OF APPROVING OFFICIAL
G. L. Green,

TITLE
Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U. S. GOVERNMENT PRINTING OFFICE: 1976-631-888

9361

Form E-39 (Rev. 9-71)

OREGON STATE HIGHWAY DIVISION

AUTHORITY FOR SURVEY

Section Glencoe Road-West Union Road

Highway Glencoe and West Union Road

County Washington

Date January 28, 1980

Authorization No. 3

Survey Prefix 534-1970 (Assigned by Salem office)

Description of termini, route, length, etc.:

On West Union Road the westerly end is located at the intersection of Commercial Street and Glencoe Road in the City of North Plains. The easterly end is located 2,500 feet east of Glencoe Road. On Glencoe Road the northerly terminus is at the intersection of Glencoe Road and old West Union Road. The southerly end of the survey is at the intersection of Glencoe Road and Cottage Street in the City of North Plains. The overall length is 0.82 mile.

Purpose of survey:

Realign county roads, provide 32' to 36' road bed and new structure on McKay Creek.
Perform field survey, prepare plans, specifications and estimate.

RS-A695(1)
RS-A686(1)
4-6-78
3-6-80

Category 3M
FASC

Estimate of cost:

Resident Engr.	901	46,000
Citizens involvement	902	1,700
Final Design	905	7,500
Bridge Design	906	7,000
R/W Descriptions	909	7,000
Public Hearing	980	2,000
Training	950	1,000
Soils & Geology	910	1,700
Signing	911	1,300
R/W liaison & reloc.	913	2,000
Utility liaison	914	1,400
Recon. & Hydrology	918	5,000
Proj. Mgmt.	920	200
Specifications	921	1,500
Adm. Services	922	200
Environmental	923	5,000
Foundation Inves.	926	3,000

Total estimated cost of survey	$ 93,500
Previous authorization	
Additional authorization requested	
Additional authorization approved (Salem)	
Total all authorizations approved (Salem)	

INSTRUCTIONS

Submit four copies to Salem. After approval by the Assistant State Highway Engineer, one copy will be sent to the Regional Engineer and one copy to the Resident Engineer.

This form does not constitute authority for making survey until approved and returned.

Submit separate order for each survey.

RECEIVED
APR 4 1980
LOCATION SECTION

Requests made by:

Phillip Lewellyn, Costs & Records Engineer
Field Engineer

Recommended for Approval:

Regional Engineer

Recommended for Approval:

Frank E.
Location Engineer

Approved:

Assistant State Highway Engineer

SP*23604-734

1981 Wallace Br.-Willamina ECL 9362
Sec. of the Willamina-Sheridan
Hwy. (Grading and paving)

9362 jc cc: OSHD (L. W. Rulien)

STATE COPY

U.S. Department of Transportation
Federal Highway Administration

FINAL ACCEPTANCE REPORT

REGION NO. 10	REPORT NO. 2	COUNTY Polk and Yamhill	DIVISION Oregon
DATE OF REPORT April 2, 1986	REPORT MADE BY 4 2 86 W. H. Kappus, Area Engineer		PROJECT NO. SR-124(3)
COMPLETION DATE (Actual) 9/21/82	ACCEPTANCE DATE BY CONRTACT AGENCY December 14, 1984	TIME ELAPSED 100 %	CONTRACT TIME 250 CWD

LOCATION

SEE BELOW

The FHWA-47, Statement of Materials and Labor Used by Contractors on Highway Construction Involving Federal Funds, has been submitted. (Projects over $500,000)
A copy of the State's materials certificate is attached to the Division office copy of this report.
There is compliance with section 1.23 of the Regulations pertaining to encroachments on the right-of-way.

REMARKS: *The project has been completed in reasonably close conformity with the approved plans and specifications including authorized changes and extra work.*

WALLACE BRIDGE - WILLAMINA E.C.L.
WILLAMINA - SHERIDAN
Grading and Paving

This project provided for the widening and overlay of the subject two-lane road section. This included the construction of a concrete retaining wall, sidewalks and curbs.

Work started on November 19, 1981 and was completed September 21, 1982. There were no major overruns or underruns.

A final inspection of the completed project was made on October 6, 1982.

- WHK -

NOTED
W. E. SCHWARTZ
wy
4/9

RECEIVED
TAT HWY ENGR
APR 8 '86
REFER TO
Fredrickson
FO
Info | Inves | R/D | D/R | [illegible] | Act | File

ACCEPTANCE OF PROJECT IS RECOMMENDED		ACCEPTED BY FEDERAL HIGHWAY ADMINISTRATION	
SIGNATURE William H. Kappus		SIGNATURE G. K. Hessner	
TITLE Area Engineer	DATE 4/4/86	TITLE Field Operations Engineer	DATE 4/4/86

FORM FHWA 1446B (Rev. 2-84) PREVIOUS EDITIONS MAY BE USED.

9362

January 24, 1985

Industrial Indemnity Co.
421 SW Sixth Avenue
Portland, OR 97204

CON 5
#9362

Gentlemen or Ladies:

On December 20, 1984, we wrote to you concerning release of final payment on Contract No. 9362 awarded to Wildish Corvallis Construction Co. for work on the Wallace Bridge-Willamina E.C.L. Section of the Willamina-Sheridan Highway in Polk and Yamhill Counties.

The total contract amount is $111,326.72 including $246.44 for work performed under force account.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

kjm
cc: Wildish Corvallis Construction Co.
PO Box 987
Corvallis, OR 97339

bc: C. O. Fredrickson
Walt Hart
Bill Anhorn

9362 1-15-85

REPORT OF ACTION UNDER DELEGATED AUTHORITY BY

ASSISTANT STATE HIGHWAY ENGINEER

On behalf of the Commission and under delegated authority, the following contracts were accepted as being completed according to specifications:

Contractor and Contract No.	Section and County	Acceptance Date
Linn County Electric Co. Contract No. 9692	Merlin-Galice Rd. @ Monument Dr. Josephine County	12/10/84
Copeland Paving, Inc. Contract No. 9612	S. 7th St.-Parkdale Dr. (Grants Pass) Josephine County	12/11/84
Stach Construction Co. Contract No. 9481	Hudson Slough Bridge Douglas County	12/14/84
Wildish Corvallis Const. Co. Contract No. 9362	Wallace Br.-Willamina E.C.L. Polk and Yamhill Counties	12/14/84
Riedel International, Inc. Contract No. 9573	SE 97th Ave.-SE 122nd Ave., Unit I Clackamas County	12/17/84
Dirt & Aggregate Intch., Inc. Contract No. 9864	The Dalles-Calif. Hwy. Guardrail Proj. Wasco County	12/28/84
Copeland Paving, Inc. Contract No. 9783	Wild Park Lane-Reeves Creek Josephine County	12/28/84
Sims Electric of Medford, Inc. Contract No. 9751	Redwood Hwy. (6th & 7th Sts.) and "G" St. (Grants Pass) Josephine County	1/3/85
Sims Electric of Medford, Inc. Contract No. 9340	Medford Traffic Signal Jackson County	1/4/85
Klamath Pacific Corp. Contract No. 9767	District 11 Rock Production Klamath, Lake and Harney Counties	1/7/85
Portable Rock Production Co., Inc. Contract No. 9766	District 14 Rock Production Harney and Malheur Counties	1/7/85
Oakridge Sand and Gravel Contract No. 9763	District 13 Rock Production Baker and Wallowa Counties	1/7/85

Contractor and Contract No.	Section and County	Acceptance Date
Lundeen Coating Corporation Contract No. 9817	Breitenbush River Bridge Marion County	1/11/85
R. J. Taggard Const. Contract No. 9815	Santiam Jct. Rock Production Linn and Marion Counties	1/11/85

EXPENDITURE RECAP

	ABOVE PROJECTS	FY TO DATE
Original Authorization	$6,745,322.23	$110,616,838.80
Anticipated Costs	$6,905,933.82	$113,200,146.91
% Overrun (Underrun)	+1.02%	+1.02%

January 15, 1985

W. E. Schwartz, P.E.
Asst. State Highway Engineer

9362

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to File No.: CON 5

DATE: November 8, 1984

TO: Oregon Transportation Commission

ORIGINAL SIGNED BY WENDELL E. SCHWARTZ

FROM: H. S. Coulter, P.E., P.L.S.
State Highway Engineer

SUBJECT: Request for Increase in Project Authorization
Wallace Br.-Willamina E. City Limits Section
Willamina-Sheridan Highway, Polk & Yamhill Counties
Contract No. 9362

This federal aid project has been completed and it is now apparent that the final cost will exceed the project authorization by $102,100 or 8 percent. The authorization was previously increased at the meeting on November 16, 1982, based on the cost of emergency traffic control measures and flattening of slopes.

Despite flattening of the excavation slopes on this project, an unstable condition remained after completion of the contract work. This condition eventually led to a separate contract for slide repair. In the interim, it was necessary for State forces to perform extraordinary slide maintenance and patrol activities to ensure the safety of the traveling public. This slide maintenance work added more than $23,000 to the cost of the project.

The balance of the overrun consists primarily of construction engineering charges. The slide which occurred required acquisition of additional right of way which necessitated additional engineering expenses to design and to lay out. Extraordinary travel expenses were incurred by the engineering crew due to the project location in relationship to the crew's headquarters.

There are sufficient funds available in the category of work and all the increase, except $87,735, is eligible for federal participation.

I recommend that the authorization be increased by $102,100.00 to a new total of $1,439,100.00. This matter will be on the consent calendar for the November 20 meeting.

bc: Fred Miller
R. W. Gormsen
C. O. Fredrickson
V. E. Skoog
D. O. Christensen
George Bell

Form 734-3122

STATE OF OREGON **INTEROFFICE MEMO**

Highway Construction 378-6318 FILE: CON 5

TO: W. E. Schwartz
Ass't. State Highway Engineer

DATE: November 8, 1984

O. B. Jackmond

FROM: O. B. Jackmond, P.E., P.L.S.
Contract Administration Engineer

SUBJECT: Request for Increase in Project Authorization
Wallace Br.-Willamina E. City Limits Section
Willamina-Sheridan Highway, Polk & Yamhill Counties
Contract No. 9362

This federal aid project has been completed and it is now apparent that the final cost will exceed the project authorization by $102,100 or 8 percent. The authorization was previously increased at the meeting on November 16, 1982, based on the cost of emergency traffic control measures and flattening of slopes.

Despite flattening of the excavation slopes on this project, an unstable condition remained after completion of the contract work. This condition eventually led to a separate contract for slide repair. In the interim, it was necessary for State forces to perform extraordinary slide maintenance and patrol activities to ensure the safety of the traveling public. This slide maintenance work added more than $23,000 to the cost of the project.

The balance of the overrun consists primarily of construction engineering charges. The slide which occurred required acquisition of additional right of way which necessitated additional engineering expenses to design and to lay out. Extraordinary travel expenses were incurred by the engineering crew due to the project location in relationship to the crew's headquarters.

There are sufficient funds available in the category of work and all the increase, except $87,735, is eligible for federal participation.

Attached is a rough draft letter to the Transportation Commission requesting an increase of $102,100.00. Also attached is a copy of the Expected Overrun of Project Authorization form.

OBJ:HHP:mk

Attach.

cc: D. O. Christensen
C. W. Elroy
B. M. Walton
W. F. Cobine

NOTED
W. E. SCHWARTZ

RECEIVED
STATE HWY ENGR
NOV 7 '84
REFER TO
FOR
Info Invest R/D D/R Sign Act File

Contains Recycled Materials

9362 +

TO BE COMPLETED BY FHWA	U.S. Department of Transportation **Federal Highway Administration**	Form Approved; O M B No. 04-R2089
MONTHLY TRANSACTION NUMBER 7-272	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	State Oregon
PROJECT REPORT NUMBER	7-30-84	County Polk & Yamhill
MODIFICATION NUMBER 9		Project Number SR-124(3)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on November 10, 19 81, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,409,749.00	$ 1,412,101.00
Federal funds	$ 1,243,116.00	$ 1,245,190.00
Other revisions		

This modification is made for the following reasons:

To include increase in construction and construction engineering costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 30th day of July, 19 84.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Manager, Program Section
(Title)

XXBy For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 7-83)

Previous editions are obsolete

OREGON STATE HIGHWAY DIVISION
SALEM, OREGON JULY 24, 1984

FEDERAL AID PROJECT NO. SR-124(3)

Wallace Bridge - Willamina E.C.L.
Willamina - Sheridan Highway
Polk and Yamhill Counties

REVISED PROJECT AGREEMENT ESTIMATE

TYPE CODE 6201
Grading and Paving (Sta. 29+50 to Sta. 148+00)

ITEM	UNIT PRICE	ORIGINAL QUANTITY	ORIGINAL AMOUNT	REVISED QUANTITY	REVISED AMOUNT
12-inch Culvert Pipe	$ 12.00	158	$ 1,896.00	250	$ 3,000.00
24-inch Sewer Pipe	40.00	4	160.00	8	320.00
Extra for Pipe Under Pavement	15.00	22	330.00	47	705.00
End Pieces, Type "C" (PA #302)	80.00			2	160.00
Remove and Haul Slide Material (F.A. #1)					246.44
		SUBTOTALS	$ 2,386.00		$ 4,431.44

Increase	$ 2,045.44
Subtotal from Revised Project Agreement Estimate of August 16, 1983	1,225,869.20
Subtotal	$1,227,914.64
Engineering	184,186.36
Total	$1,412,101.00

Length of Project ------------------ 2.23 miles	
Cost of roadway per mile	$ 633,229.15
Federal Funds (88.18%)	$1,245,190.00
State Funds	166,911.00
Total	$1,412,101.00

Group 1: 99%; Group 8: 1%
Contract No. 9362
Prefix: 127-1974
Prefix: 127-1002

WH:me

9362

STATE COPY

TO BE COMPLETED BY FHWA	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State Oregon
MONTHLY TRANSACTION NUMBER 8-84		County Polk & Yamhill
PROJECT REPORT NUMBER	MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT 8-19-83	Project Number SR-124(3)
MODIFICATION NUMBER 7		

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on November 10, 19 81, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,404,000.00	$ 1,409,749.00
Federal funds	$ 1,238,047.00	$ 1,243,116.00
Other revisions		

This modification is made for the following reasons: to include increase in construction costs and construction engineering costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 19th day of August, 1983.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By D Edwa

~~for~~ Manager, Program Section
(Title)

XRX For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen. File

Oregon State Highway Division
Salem, Oregon August 16, 1983

Federal-Aid Project No. SR-124(3)

Wallace Bridge-Willamina ECL
Willamina-Sheridan Highway

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6201
Grading and Paving (Sta. 29+50 to Sta. 148+00)

Subtotal of previous estimate of May 31, 1983	$ 1,220,869.20

Additional Items

Drainage Work (S.F.O. #9)	All Required		$ 5,000.00
		Increase	5,000.00
		Subtotal	1,225,869.20
		Engineering	183,879.80
		Total	$ 1,409,749.00

Length of Project	2.23 mi.
Cost of Roadway Per Mile	$ 632,174.43

Federal Funds	$ 1,243,116.00
State Funds	166,633.00
Total	$ 1,409,749.00

Group 1 99%; Group 8 1%
Contract No. 9362
Prefix: 127-1974
Prefix: 127-1002

9362

A

TO BE COMPLETED BY FHWA

MONTHLY TRANSACTION NUMBER
6-16

PROJECT REPORT NUMBER

MODIFICATION NUMBER
6

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT

6-3-83

State
Oregon

County
Polk & Yamhill

Project Number
SR-124(3)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on November 10, 19 81, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,391,400.00	$ 1,404,000.00
Federal funds	$ 1,226,936.00	$ 1,238,047.00
Other revisions		

This modification is made for the following reasons: to include increase in construction costs, and construction engineering costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 3rd day of June, 19 83.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By Larry C. Potter

Manager, Program Section
(Title)

XXX By For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)
For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen File

Oregon State Highway Division
Salem, Oregon May 31, 1983

Federal-Aid Project No. SR-124(3)

Wallace Bridge-Willamina E.C.L.
Willamina-Sheridan Highway

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6201
Grading and Paving (Sta. 29+50 to Sta. 148+00)

Subtotal of previous estimate of April 11, 1983			$ 1,209,949.20
Previous Estimate			
General Excavation	9,200 Cu. Yd.	7.80	$ 71,760.00
Revised Estimate			
General Excavation	10,600 Cu. Yd.	7.80	$ 82,680.00
		Increase	$ 10,920.00
		Subtotal	1,220,869.20
		Engineering	183,130.80
		Total	$ 1,404,000.00

Length of Project	2.23 mi.
Cost of Roadway Per Mile	$ 629,596.41
Federal Funds	$ 1,238,047.00
State Funds	165,953.00
Total	$ 1,404,000.00

Group 1 99% Group 8 1%
Contract No. 9362
Prefix: 127-1974
Prefix: 127-1002

9362

8

TO BE COMPLETED BY FHWA MONTHLY TRANSACTION NUMBER 5-129	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State Oregon
PROJECT REPORT NUMBER	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	County Polk & Yamhill
MODIFICATION NUMBER 5	5-13-83	Project Number SR-124(3)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on November 10, 19 81, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,386,630.00	$ 1,391,400.00
Federal funds	$ 1,222,730.00	$ 1,226,936.00
Other revisions		

This modification is made for the following reasons: to include increase in construction engineering costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 13th day of May, 1983.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By Gary A. Potter
Manager, Program Section
(Title)

~~By~~ X For: H.S. Coulter, P.E.
State Highway Engineer
(Title)

By
(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)
For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen. File

Oregon State Highway Division
Salem, Oregon May 6, 1983

Federal-Aid Project
No. SR-124(3)

Wallace Bridge-Willamina ECL
Willamina-Sheridan Highway
Polk & Yamhill Counties

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6201
Grading & Paving (Sta. 29+50 to Sta. 148+00)

Subtotal of previous estimate of April 11, 1983		$ 1,209,949.20
	Subtotal	$ 1,209,949.20
	Engineering	181,490.80
	Total	$ 1,391,400.00

Length of Project ------------- 2.23 mi.
Cost of Roadway Per Mile ------$623,946.18

Federal Funds -----------------	$ 1,226,936.00
State Funds -------------------	164,464.00
Total	$ 1,391,400.00

Group 1 99%; Group 8 1%
Contract No. 9362
Prefix: 127-1974
Prefix: 127-1002

9362

STATE COPY B

TO BE COMPLETED BY FHWA

MONTHLY TRANSACTION NUMBER 4-72

PROJECT REPORT NUMBER

MODIFICATION NUMBER #6

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT

4-18-83

State Oregon

County Polk & Yamhill

Project Number SR-124(3)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on November 10, 1981, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,380,000.00	$ 1,386,630.00
Federal funds	$ 1,216,884.00	$ 1,222,730.00
Other revisions		

This modification is made for the following reasons: To include increase in construction costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 18th day of April, 1983.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By Larry A. Potter

Program Section Manager
(Title)

ByXX For H.S. Coulter

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen File

Oregon State Highway Division
Salem, Oregon April 11, 1983

Federal-Aid Project
No. SR-124(3)

Wallace Bridge - Willamina E.C.L.
Willamina - Sheridan Highway
Polk & Yamhill Counties

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6201
Grading and Paving (Sta. 29+50 to Sta. 148+00)

Subtotal of previous estimate of February 8, 1983			$ 1,203,319.20
Previous Estimate			
General Excavation	8,350 Cu.Yd.	7.80	$ 65,130.00
Revised Estimate			
General Excavation	9,200 Cu.Yd.	7.80	$ 71,760.00
		Increase	$ 6,630.00
		Subtotal	1,209,949.20
		Engineering	176,680.00
		Total	$ 1,386,630.00

Length of Project	2.23 mi.
Cost of Project Per Mile	$621,807.17
Federal Funds	$ 1,222,730.00
State Funds	163,900.00
Total	$ 1,386,630.00

Group 1: 99%; Group 8: 1%
Contract No.: 9362
Prefix: 127-1974
Prefix: 127-1002

9362

STATE COPY 6

TO BE COMPLETED BY FHWA	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State Oregon
MONTHLY TRANSACTION NUMBER 3-179	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	County Polk and Yamhill
PROJECT REPORT NUMBER		
MODIFICATION NUMBER 4	3-21-83	Project Number SR-124(3)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on November 10, 1981, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$1,365,572.00	$1,380,000.00
Federal funds	$1,204,760.00	$1,216,884.00
Other revisions		

This modification is made for the following reasons: To include increase in construction costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 21st day of March, 1983.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Acting Program Section Manager
(Title)

~~By~~ For: H. S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)
For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen File

Oregon State Highway Division
Salem, Oregon March 15, 1983

Federal-Aid Project
No. SR-124(3)

Wallace Bridge-Willamina E.C.L.
Willamina-Sheridan Highway
Polk and Yamhill Counties

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6201
Grading and Paving (Sta. 29 + 50 to Sta. 148 + 00)

Subtotal of Previous Estimate of February 8, 1983			$1,188,889.20
Previous Estimate			
General Excavation	6,500 Cu. Yd.	7.80	50,700.00
Revised Estimate			
General Excavation	8,350 Cu. Yd.	7.80	65,130.00
		Increase	$ 14,430.00
		Subtotal	1,203,319.20
		Engineering	176,680.80
		TOTAL	$1,380,000.00

Length of Project:	2.23 miles
Cost of Project Per Mile:	$618,834.08
Federal Funds:	$1,216,884.00
State Funds:	163,116.00
TOTAL	$1,380,000.00

Group 1: 99%; Group 8: 1%
Contract No. 9362
Prefix: 127-1974
Prefix: 127-1002

9362

DIVISION FILE COPY

B

TO BE COMPLETED BY FHWA MONTHLY TRANSACTION NUMBER	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State Oregon
PROJECT REPORT NUMBER 2-101	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	County Polk & Yamhill
MODIFICATION NUMBER 3	2-11-83	Project Number SR-124(3)

The Project Agreement for the above-referenced project entered into between the undersigned parties

and executed by the Division Administrator on November 10, 19 81,

is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,354,572.00	$ 1,365,572.00
Federal funds	$ 1,194,461.00	$ 1,204,160.00
Other revisions		

This modification is made for the following reasons: to include increase in construction costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 11 th day of February, 1983.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Acting Program Section Manager
(Title)

XBXX For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen File

Oregon State Highway Division
Salem, Oregon February 8, 1983

Federal-Aid Project
No. SR-124(3)

Wallace Bridge-Willamina E.C.L.
Willamina-Sheridan Highway
Polk & Yamhill Counties

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6201
Grading and Paving (Sta. 29+50 to Sta. 148+00)

Subtotal of previous estimate of July 15, 1982	$1,177,889.20

Previous Estimate

Flagman	1,900 Hr.	20.00	$ 38,000.00

Revised Estimate

Flagman	2,450 Hr.	20.00	$ 49,000.0

Increase	$ 11,000.00
Subtotal	$1,188,889.20
Engineering	176,682.80
TOTAL	$1,365,572.00

Length of Project ------------ 2.23 mi.
Cost of Project Per Mile -----$612,364.12

Federal Funds ----------------$1,204,160.00
State Funds ------------------ 161,412.00
TOTAL $1,365,572.00

Group 1 99%; Group 8 1%
Contract No. 9362
Prefix: 127-1974
Prefix: 127-1002

9362

STATE COPY

2

TO BE COMPLETED BY FHWA MONTHLY TRANSACTION NUMBER 7-216	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State Oregon
PROJECT REPORT NUMBER	MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT	County Polk & Yamhill
MODIFICATION NUMBER 2	7/21/82	Project Number SR-124(3)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on November 10, 1981, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,305,020.00	$ 1,354,572.00
Federal funds	$ 1,150,766.00	$ 1,194,461.00
Other revisions		

This modification is made for the following reasons: to include increase in construction costs, and construction engineering costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 21st day of July, 1982.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By ______________________

Program Management Engineer
(Title)

XXX For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By ______________________

____
(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By ______________________
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen. File

Oregon State Highway Division
Salem, Oregon July 15, 1982

Federal-Aid Project
No. SR-124(3)

Wallace Bridge - Willamina E.C.L.
Willamina - Sheridan Highway
Polk & Yamhill Counties

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6201
Grading and Paving (Sta. 29+50 to Sta. 148+00)

Subtotal of previous estimate of October 22, 1981 $1,134,801.00

Previous Estimate

Flagman	1,100 Hr.	20.00	$ 22,000.00
Cement Treated Base Mixture	9,600 Ton	10.85	104,160.00
12-inch Sewer Pipe	804 Lin. Ft.	13.20	10,612.80
			$ 136,772.80

Revised Estimate

Flagman	1,900 Hr.	20.00	$ 38,000.00
Cement Treated Base Mixture	11,700 Ton	10.85	126,945.00
12-inch Sewer Pipe	1,130 Lin. Ft.	13.20	14,916.00
			$ 179,861.00

Increase	$ 43,088.20
Subtotal	$1,177,889.20
Engineering	176,682.80
Total	$1,354,572.00

Length of Project ------------- 2.23 mi.
Cost of Project Per Mile ------ $607,431.39

Federal Funds -----------------$1,194,461.00
State Funds ------------------- 160,111.00
Total $1,354,572.00

Group 1 99%; Group 8 1%
Contract No. 9362
Prefix: 127-1974
Prefix: 127-1002

4362

STATE COPY

TO BE COMPLETED BY FHWA MONTHLY TRANSACTION NUMBER 6-205	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State Oregon
PROJECT REPORT NUMBER	MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT	County Polk & Yamhill
MODIFICATION NUMBER 1	June 23, 1982	Project Number SR-124(3)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on November 10, 1981, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,238,792.00	$ 1,305,020.00
Federal funds	$ 1,092,366.00	$ 1,150,766.00
Other revisions		

This modification is made for the following reasons: to include increase in construction costs, and construction engineering costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 23rd day of June, 1982.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By D H Moehring

Program Management Engineer
(Title)

XXX For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen. File

Oregon State Highway Division
Salem, Oregon June 18, 1982

Federal-Aid Project
No. SR-124(3)

Wallace Bridge-Willamina E.C.L.
Willamina-Sheridan Highway
Polk & Yamhill Counties

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6201
Grading and Paving (Sta. 29+50 to Sta. 148+00)

Subtotal of previous estimate of October 22, 1981 $1,101,148.20

Additional Items

Temp. Pvm't Striping (P.A. #2)	8,625 Lin. Ft.	0.12	$ 1,035.00
Stripe Removal (P.A. #2)	4,375 Lin. Ft.	0.40	1,750.00
Temp.-Type 2A G.R. (P:A. #3)	12,000 Lin. Ft.	0.91	10,920.00
Temp.-Type 1 Anchors (P.A. #3)	20 Each	42.50	850.00
16' Metal Gate (P.A. #4)		All Required	1,000.00
Stone Embankment (P.A. #6)	1,000 Cu. Yd.	2.30	2,300.00
Slide Removal & Rock Inlay (P.A. #7)		All Required	2,201.00
Temp. Traffic Signal Barrier (P.A. #8)		All Required	13,597.00
			$ 33,653.00

Increase	$ 33,653.00
Subtotal	$1,134,801.00
Engineering	170,219.00
TOTAL	$1,305,020.00

Length of Project ------------ 2.23 mi.
Cost of Project Per Mile------$585,210.76

Federal Funds	$1,150,766.00
State Funds	154,254.00
TOTAL	$1,305,020.00

Group 1 99%; Group 8 1%
Contract No. 9362
Prefix: 127-1974
Prefix: 127-1002

9362

STATE COPY 2.

TO BE COMPLETED BY FHWA 11-82	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL-AID PROJECT AGREEMENT 11-10-81	STATE Oregon COUNTY Polk & Yamhill PROJECT NO. SR-124(3)

The State, through its Highway Agency, having complied, or hereby agreeing to comply, with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) the Regulations issued pursuant thereto and, (3) the policies and procedures promulgated by the Federal Highway Administrator relative to the above designated project, and the Federal Highway Administration having authorized certain work to proceed as evidenced by the date entered opposite the specific item of work, Federal funds are obligated for the project not to exceed the amount shown herein, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends only to project costs incurred by the State after the Federal Highway Administration authorization to proceed with the project involving such costs.

PROJECT TERMINI

Wallace Bridge - Willamina E.C.L.

PROJECT CLASSIFICATION OR PHASE OF WORK	EFFECTIVE DATE OF AUTHORIZATION	APPROXIMATE LENGTH *(Miles)*
HIGHWAY PLANNING AND RESEARCH (HP & R)		
PRELIMINARY ENGINEERING		
RIGHTS-OF-WAY		
CONSTRUCTION	8-26-81	2.23

OTHER *(Specify)*

FUNDS PRO RATA 88.18%

ESTIMATED TOTAL COST OF PROJECT $ 1,238,792.00	FEDERAL FUNDS $ 1,092,366.00

The State further stipulates that as a condition to payment of the Federal funds obligated, it accepts and will comply with the applicable provisions set forth on the reverse hereof.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)
By
Asst. State Highway Engineer
(Title)
XXX For: H.S. Coulter
State Highway Engineer
(Title)
By
(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
By
(Division Administrator)
For: Dale E. Wilken
Date executed by Division Administrator NOV [illegible] 1981

FORM PR-2 (REV. 10-75) PREVIOUS EDITIONS ARE OBSOLETE

AGREEMENT PROVISIONS

1. RESPONSIBILITY FOR WORK

a. Except for projects constructed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in compliance with the approved plans and specifications or project proposal which, by reference, are made a part hereof.

b. With regard to projects performed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in accordance with the terms of its approved Certification, or exceptions thereto as may have been approved by the Federal Highway Administration.

2. HIGHWAY PLANNING AND RESEARCH (HP&R) PROJECT. The State highway agency will (a) conduct or cause to be conducted, under its direct control, engineering and economic investigations of projects for future construction, together with highway research necessary in connection therewith, pursuant to the work program approved by the Federal Highway Administration and (b) prepare reports suitable for publication of the result of such investigations and research, but no report will be published without the prior approval of the Federal Highway Administration.

3. PROJECT FOR ADVANCE ACQUISITION OF RIGHTS-OF-WAY. In the event that actual construction of a road on this right-of-way is not undertaken by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

4. PRELIMINARY ENGINEERING PROJECT FOR PREPARATION OF RIGHT-OF-WAY PLANS OR FOR PREPARATION OF CONSTRUCTION PLANS, SPECIFICATIONS AND ESTIMATES. In the event that right-of-way acquisition for, or actual construction of the road for which this preliminary engineering is undertaken is not started by the close of the fifth fiscal year following the fiscal year in which this agreement is executed, the State highway. agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

5. INTERSTATE SYSTEM PROJECT. (a) The State highway agency will not add or permit to be added, without the prior approval of the Federal Highway Administration any points of access to, or exit from, the project in addition to those approved in the plans and specifications for the project. (b) The State highway agency will not permit automotive service stations, or other commercial establishments for serving motor vehicle users, to be constructed or located on the right-of-way of the interstate system. (c) The State highway agency will not after June 30, 1968, permit the construction of any portion of the Interstate Route on which this project is located, including spurs and loops, as a toll road without the written concurrence of the Secretary of Transportation or his officially designated representative. The term 'toll road' does not include toll bridges or toll tunnels.

6. PROJECT FOR CONSTRUCTION IN ADVANCE OF APPORTIONMENT. (a) This project authorized pursuant to 23 U.S.C. 115 as amended, will be subject to all procedures and requirements, and conform to the standards applicable to projects on the system on which located, financed with the aid of Federal funds. (b) No obligation of previously apportioned Federal funds is created by this agreement, its purpose and intent being to provide that, upon application by the State highway agency, and approval thereof by the Federal Highway Administration, any Federal-aid funds of the class designated by the project number prefix, apportioned to the State under 23 U.S.C. 104 subsequent to the date of this agreement, may be used to reimburse the State for the Federal share of the cost of work done on the project.

7. STAGE CONSTRUCTION. The State highway agency agrees that all stages of construction necessary to provide the initially planned complete facility, within the limits of this project, will conform to at least the minimum values set by approved AASHTO design standards applicable to this class of highways, even though such additional work is financed without Federal-aid participation..

8. BOND ISSUE PROJECT. Construction, inspection and maintenance of the project will be accomplished in the same manner as for regular Federal-aid projects. No present or immediate obligation is created by this Agreement against Federal funds, its purpose and intent being to provide aid to the State, as authorized by 23 U.S.C. 122, for retiring maturities of the principal indebtednesss of the bonds referred to below. When the State requests Federal reimbursement to aid in the retirement of such bonds, the request will be supported by the appropriate certification required by 23 CFR Part 140, Subpart F, and Volume 1, Chapter 4, Section 8 of the Federal-Aid Highway Program Manual or the alternative State procedure set forth in the State's Certificate, and payment of the authorized Federal share will be made from appropriate funds available. If in any year there is no unobligated balance of any apportioned Federal funds available from which payments hereunder may be made, there will be no obligation on the part of the Federal Government on account of bond maturities for that year. Funds available to the highway agency for this project are the proceeds of bonds issued by the governmental unit indicated on the attached tabulation, pursuant to the authority and in the amounts by date of issue and beginning date of maturities set forth therein.

9. SPECIAL HIGHWAY PLANNING AND RESEARCH PROJECT. The State Highway agency hereby authorizes the Federal Highway Administration to charge the State's pro rata share of costs incurred against funds apportioned to the State under 23 U.S.C. 307 (c), as amended. In the event a project is financed with both Federal-aid funds and State matching funds, the State agrees to advance to The Federal Highway Administration the State matching funds for its share of the estimated cost. For a National Pooled Fund study, the State hereby assigns its responsibility for the work to the Federal Highway Administration. For an Intra-Regional Cooperative Study, the State hereby assigns its responsibility for the work to the lead State for the study.

10. PARKING REGULATION AND TRAFFIC CONTROL. The State highway agency will not permit any changes to be made in the provisions for parking regulations and traffic control as contained in the agreement between the State and the local unit of Government referred to in the paragraph on "Additional Provisions," without the prior approval of the Federal Highway Administration, unless the State determines, and the Division Administrator concurs, that the local unit of Government has a functioning traffic engineering unit with the demonstrated ability to apply and maintain sound traffic operations and control.

Gen File

Oregon State Highway Division
Salem, Oregon October 22, 1981

Federal Aid Project
No. SR-124(3)

Wallace Bridge-Willamina E.C.L.
Willamina-Sheridan Highway
Polk and Yamhill Counties

PROJECT AGREEMENT ESTIMATE

Type Code 6201
Gradina and Pavina (Sta. 29+50 to Sta. 148+00)

Furnishing Field Laboratory	1 Each		$ 500.00
Mobilization		All Required	103,000.00
Temporary Protection and Direction of Traffic		All Required	2,400.00
Temporary Signs	529 Sq. Ft.	5.00	2,645.00
Temporary Barricades	12 Each	80.00	960.00
Temporary Plastic Safety Markers	60 Each	50.00	3,000.00
Flagmen	1,100 Hour	20.00	22,000.00
Pilot Car	350 Hour	22.00	7,700.00
Clearing and Grubbing		All Required	3,500.00
Removal of Structures and Obstructions		All Required	650.00
General Excavation	6,500 Cu. Yd.	7.80	50,700.00
Trench Excavation	710 Cu. Yd.	1.00	710.00
Finishing Roadbed and Slopes		All Required	6,200.00
Structure Excavation	1,000 Cu. Yd.	8.75	8,750.00
Speical Wall Backfill	110 Cu. Yd.	10.40	1,144.00
Aggregate Shoulders	1,050 Ton	11.00	11,550.00
Cement Treated Base Mixture	9.600 Ton	10.85	104,160.00
Portland Cement in CTB Mixture	530 Ton	78.00	41,340.00
Asphalt in Seal	20 Ton	250.00	5,000.00
Class "B" Asphalt Concrete Mixture	12,000 Ton	16.74	200,880.00
Class "B" Asphalt Concrete Mixture in Leveling	3,000 Ton	16.74	50,220.00
Asphalt Cement in Mixture	950 Ton	180.00	171,000.00
Asphalt in Tack Coat	15 Ton	250.00	3,750.00
Concrete in Wall and Stairway	690 Cu. Yd.	140.00	96,600.00
Reinforcement in Wall and Stairway	18,000 lb.	0.40	7,200.00
Pipe Handrail	40 Lin. Ft.	25.00	1,000.00
12-inch Culvert Pipe	158 Lin. Ft.	12.00	1,896.00

24-inch Culvert Pipe	6	Lin. Ft.	35.00	210.00
8-inch Sewer Pipe	346	Lin. Ft.	8.00	2,768.00
12-inch Sewer Pipe	804	Lin. Ft.	13.20	10,612.80
15-inch Sewer Pipe	268	Lin. Ft.	15.00	4,020.00
18-inch Sewer Pipe	308	Lin. Ft.	17.35	5,343.80
24-inch Sewer Pipe	4	Lin. Ft.	40.00	160.00
Extra for Pipe Under Pavement	22	Lin. Ft.	15.00	330.00
Installing 18-inch Pipe Under R.R.	34	Lin. Ft.	250.00	8,500.00
Concrete Manholes	4	Each	850.00	3,400.00
Concrete Inlets, Type G-2	8	Each	500.00	4,000.00
Concrete Inlets, Type CG-2	16	Each	525.00	8,400.00
4-inch Drain Pipe	758	Lin. Ft.	4.20	3,183.60
Filter Fabric	700	Sq. Yd.	1.00	700.00
Gravel in Drains	110	Cu. Yd.	10.00	1,100.00
Guard Rail, Type 2A	1,613	Lin. Ft.	10.00	16,130.00
Guard Rail, Type 3	100	Lin. Ft.	25.00	2,500.00
Guard Rail Ancors, Type 1	12	Each	350.00	4,200.00
Rail End Pieces, Type C	16	Each	80.00	1,280.00
Rail End Pieces, Terminal Connector	4	Each	100.00	400.00
Type 2 Fence	900	Lin. Ft.	3.00	2,700.00
Concrete Walks	300	Sq. Yd.	13.30	3,990.00
Sidewalk Ramps	12	Each	100.00	1,200.00
Concrete Driveways	200	Sq. Yd.	20.00	4,000.00
Concrete Curbs	1,730	Lin. Ft.	5.00	8,650.00
Extra for Asphalt Approaches	33	Each	75.00	2,475.00
Drainage Curbs	765	Lin. Ft.	2.00	1,530.00
Delineators, Type 2	50	Each	20.00	1,000.00
Delineators, Type 4	10	Each	12.00	120.00
Adjusting Manholes	12	Each	200.00	2,400.00
Adjusting Inlets	3	Each	260.00	780.00
Installing Speical Grate	1	Each	250.00	250.00
Membrane Waterproofing	540	Sq. Yd.	9.00	4,860.00
				$1,019,648.20

Anticipated Items

Railroad Protective Costs	All Required	$ 7,600.00
Permanent Signing	All Required	5,000.00
Permanent Pavement Striping	All Required	3,300.00
Roadside Seeding & Mulching	All Required	600.00
Asphalt Cement Adjustment	All Required	25,000.00
Temporary Traffic Protection at Retaining Wall Exc.	All Required	40,000.00
		$ 81,500.00
	SUBTOTAL	$1,101,148.20
	Engineering	137,643.80
	TOTAL	$1,238,792.00

Length of Project ------------------------- 2.23 mi.
Cost of Project Per Mile -----------------$555,512.11

Federal Funds (88.18%) ------------------$1,092,366.00
State Funds ---------------------------------- 146,426.00
TOTAL $1,238,792.00

Group 1 99%; Group 8 1%
Contract No. 9362
Prefix: 127-1974
Prefix: 127-1002

Wallace Bridge - Willamina E.C.L.
States Responsibility (Non Participating Items)

States Responsibility for Damages		All Required	$ 1,000.00
Furnishing and Installing Mailboxes	6 Each	100.00	600.00

157

9362

ROAD DESIGN SECTION 378-6558

D. O. Christensen
Region 2 Engineer, SALEM

April 24, 1984

W. H. Wakerlig
Right of Way Descriptions Supervisor

Wallace Bridge-Willamina E.C.L. Section
Willamina-Sheridan Highway
Polk and Yamhill Counties

We are forwarding herewith a reproducible map (9B-21-13) covering the subject survey for your verification, narrative, professional seal, signature and submittal to the county per ORS 209.250.

The narrative shall explain the purpose of the survey, the basis on which lines were established and which found monuments and deed elements controlled the lines established or reestablished.

If, the narrative is a separate document, the narrative and the map should be referenced to each other and the narrative should contain additional information as follows:

1. Location of survey by ¼ Section or Donation Land Claim, Township and Range.
2. Date of Survey.
3. Surveyor's Seal.
4. Surveyor's business name and address.

By: Vince Carrow
Vince Carrow
Sr. Design Draftsman

VC:rlr
Attachment

9362 F

STATE OF OREGON
Highway Division - Region 2

INTEROFFICE MEMO
378-2626

TO: W. E. Schwartz
ASSISTANT STATE HIGHWAY ENGINEER

DATE: February 2, 1984

FROM: Gerald W. Wimer Gerald Wimer
REGION 2 CONSTRUCTION ENGINEER

SUBJECT: Engineering Overrun
E. McMinnville Inter. Contract 9659 (36-1090)
Thorton Cr. Br. Contract 9601 (21-1013)
Wallace Br.-Willamina ECL Contract ~~[illegible]~~ (127-1002) 9362
Pudding R. Br. Contract 9373 (124-1064)

In your January 16 letter, you noted that the subject projects not only overran the original project authorization, but also incurred what you described as excessive engineering.

In reviewing with Project Managers Charles W. Elroy and Arvey D. Nelson, I find that all of the charges were appropriate. Please see their attached January 26 and January 31 reports.

Each of these projects sustained a substantial change during the project. All redesign engineering costs were charged to the construction engineering. It might be well to have a separate identification of engineering costs for substantial changes.

We could also require the contractor to do more materials testing. However, this would just change where the costs are charged, and not truly reduce overall costs.

Each of the Project Managers lists some other lesser possibilities. I think the significant item is that we continue to exert every effort possible at all levels to work toward engineering cost reduction. I believe one of the most significant increases in our engineering costs comes from our more detailed documentation requirements.

If I can provide any more detail on this matter, please let me know.

GWW/cal
Attachment

cc: C. O. Fredrickson
C. W. Elroy
A. D. Nelson

Cy- Fredrickson
2/17

RECEIVED
STATE HWY ENGR
FEB 2 '84
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

G. Wimer - You are now in a position to look at these documentation requirements & assess whether it is necessary to document & check to the extent we do. I have some reservations about the Region reviewer program & to the degree we do all this work. I also have some questions about our perception of inspection. I would like to talk to you about this general subject when you have had a chance to [illegible]

STATE OF OREGON

INTEROFFICE MEMO

TO: D. O. Christensen, P.E.
Region 2 Engineer

DATE: Jan. 26, 1984

Charles W. Elroy

FROM: Charles W. Elroy
Project Manager

REGION 2 ENGINEER
RECEIVED
JAN 27 1984
☐ T E ☐ RBE
☐ RE ☐ RCE ☐ PME ☐ RTE ☐ ROE
☐ ULE ☐ GFO ☐ RSO ☐ ENV ☐ RFE

SUBJECT: Overrun of Project Authorization
Contract No. 9548 (127-1002) Wallace Br.-Willamina ECL
Contract No. 9601 (21-1013) Thornton Creek

Attention: Gerald W. Wimer, P.E.
Region Construction Engineer

I hereby confirm that the engineering monies charged against the Wallace Bridge-Willamina ECL and Thornton Creek projects have been assessed appropriately and recommend the following towards avoiding future occurrences of engineering overruns:

1. Put the burden of material testing on the contractor with only random testing by the State. This would illiminate the need of large crews and most of the overtime.

2. Enforce our Standard Specifications (Sub-Section 105.08) and charge the contractor for re-establishing line and grade stakes when the initial points are destroyed.

3. Increase the engineering monies to take care of establishing and monumenting Right of Way after contracts have been awarded, as this requires additional engineering.

4. Small projects (except for length) require the same amount of testing and engineering layout as the larger projects and without the additional engineering monies. It is even worse when a contractor bids below the engineering estimate. Engineering precentages should be increased for these types of projects.

5. Costs to maintain a medium sized engineering crew runs approximately $20,000. per month. If a contractor is slow in completing his contract work, the engineering monies could rise to $120,000. in six months. These charges could go even higher if other projects do not lie within a close proximity of the one you are working on. This was the case on the Wallace Br.-Willamina ECL project where contract work continued for over a year.

I realize what I have said may sound like a lot of excuses, instead of admitting incompetence, but these facts are more of a reality than fiction.

9362

157

ROAD DESIGN SECTION 378-6558 ROW 3:1

J. B. Boyd, Manager
Right of Way Section

August 15, 1983

J. N. Versteeg
Road Design Engineer

Files 53627, 53628 & 53629
Wallace Bridge-Willamina E.C.L.
Willamina-Sheridan Highway
Polk County

Attached are descriptions (3 files), an authorization and right of way prints covering right of way required for the subject slide correction project.

By: ORIGINAL SIGNED BY W. H. WAKERLIG

W. H. Wakerlig
R/W Descriptions Supervisor

WHW:rlr
Attachments

rll 9362

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. SR-124(3)
2. STATE PROJECT NO. See below
2A. COUNTY NAME Polk & Yamhill

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

8-2-83

4. PROGRAM NO.
5. ITEM NO. 10034

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 6/29/83
8. FEDERAL ROUTE NUMBER Secondary 124
9. STATE ROUTE NUMBER Secondary 157

10. GENERAL LOCATION:
Wallace Bridge - Willamina ECL

11. GENERAL DESCRIPTION OF WORK
Drainage work

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED ON ~~AN AGREED PRICE AND/OR~~ FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

Contingent upon modification of Project Agreement if additional funds are required, I approve the advance authorization date of 6/29/83 as requested in Mr. Keasey's letter of 7/27/83 as being in the public interest for the use of State Forces to proceed with the above work. State Force Order No. 9 is approved for a TEC of $5,000 Federal Funds $4,409.

RECEIVED
STATE HWY ENGR
AUG 3 '83
REFER TO Potter
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Orig to
8/9

14. DATE 8/2/83
15. SIGNATURE OF APPROVING OFFICIAL G K Hessner
16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9362

157

ROAD DESIGN SECTION

DES 16

February 23, 1983

Charles W. Elroy
Project Manager

N. E. Mann
Design Team Supervisor

Wallace Bridge-Willamina E.C.L.
Willamina-Sheridan Highway
Polk and Yamhill Counties
Contract No. 9362

✓ Versteeg ✓
✓ Anderson
Adams
Olson
Sullivan
Terpin
Trout
Wakerlig

RECEIVED
FEB 23 1983
ROAD DESIGN
SECTION

Do Not File ☐
Return To
Bring Up / /
Action

It was with some interest we reviewed your Construction Narrative Report on this project.

In particular, our interest focused on the area of the wall construction. We knew this was a tight area with difficult traffic handling problems. Your Region people assured us they could do it.

You did it. Good job.

NEM:ja

cc C. O. Fredrickson

OREGON STATE HIGHWAY DIVISION

PROJECT MANAGER'S NARRATIVE REPORT

OF

WALLACE BRIDGE - WILLAMINA E.C.L.

WILLAMINA - SHERIDAN HIGHWAY

Located in

POLK & YAMHILL COUNTIES

CONTRACT NO 9362

Contractor: Wildish Corvallis Construction Co.

Charles W. Elroy

Project Manager: Charles W. Elroy

Page 1 of 5

1

2

4

RECEIVED

E27

INTRODUCTION:

This Federal-Aid Secondary roadway widening and overlay project FAP(SR-124(3)) is located on State Business Route #18, linking the Cities of Willamina and Sheridan in Polk and Yamhill Counties. With the Westerly terminus of the project at MP0.46 (STA 29+50) The Easterly terminus being MP 2.70 (STA 148+00) a distance of 2.24 Miles.

The Project was constructed for the following three fold purpose:

1. To improve Safety conditions

2. To increase Traffic flow

3. To minimize maintanance

Advertisement for construction bid proposals were issued in the middle of August 1981. Bid proposals were received and opened Thursday, September 17, 1981. Wildish Corvallis Construction Company of Corvallis, Oregon was the low bidder at $1,020,248.20 and was awarded Contract Number 9362 on September 23, 1981.Work commenced on November 19, 1981 and was completed September 21, 1982 with an elapsed time of 250 Calendar Days (Which was the Contract time limit) at a total cost of $1,357,000.00

TRAFFIC CONTROL:

Except for the following explanation of the unexpected addition of temporary traffic signals to the Contract, all traffic control items were handled without incident and in accordance with those detailed in the plans, Special Provisions, Standard Specifications and Uniform Manual on Traffic Control Devices.

During the process of removing the Gabions and excavating for the retaining wall footing (from station 59+75 through station 70+10 right of centerline) the roadway started breaking away creating a one way traffic situation. Flaggers with two way radios were used around the clock until temporary traffic signals were installed. Complete installation and removal was made by sub-contractor Hamilton Electric Inc. of Eugene, Oregon under Price Agreement No. #8 at a cost of $13,597.00

The elapsed time of Eight Days to install the temporary traffic signals was the prime reason for the large overrun in flagging Hours, and was also one of the reasons for less pilot car hours used.

ROADWAY:

Construction problems were limited to the following:

1. Re-sloping and Benching the cut slope Left of centerline from Station 58+00 through Station 63+00 which required additional Right-of-Way, Clearing, Grubbing and general excavation to make the project safe in this area.

2. Sub-excavation and backfilling with 3"-0 crushed Rock was needed to expedite the roadway widening along the Left side of the road in the vicinity of the retaining wall. This area was saturated with water from several underlying springs. It would have been preferable to wait until early Summer but it was imperative to get the roadway widened so two way traffic could be provided while constructing the retaining wall.

3. To further expedite the contract and also save on paving costs, the roadway typical section was changed (at the contractor's request) from Station 79+00 to Station 83+50. Nine inches of C T B and Seven inches of A.C. were used in lieu of Sixteen inches of A.C.

4. Flat drainage grades and considerable ground moisture prompted the use of more catch inlets and drain pipe to insure proper drainage.

STRUCTURE:

A few problems did occur during construction of the retaining wall.

1. For Safety, the wall was lengthened 50 feet on the Southerly terminal to keep from having too high of a drop off between the roadway shoulder and the Railroad Embankment after the concrete Barrier wall transition was in place.

2. The construction Superintendant for the wall would not change his Metal form liners after each Concrete pour and said he would correct the deformities during his concrete finishing. Most of these irregularities could have been taken care of by a good concrete finisher if they had started finishing while the concrete was still green. The contractor did not elect to do this, so consequently we ended up with a structurally sound wall but one that was esthetically poor.

Location

During the location stage of a construction project the O.S.H.D should make sure that the City officials are made aware of the following even if there is or is not a written agreement (City+State, or Federal City & State,) between parties of Government.

1. Construction plans be reveiwed throughly with the City Engineer and or the City Council.
2. Request a letter from the City stating they understand the drainage items proposed for installation, the paving limits on side Streets, the various City utilities that will require adjustment during drainage and paving installation, and the party or parties that will bear the cost of such adjustments.

Drainage Grades

Establishing gutter, top of curbs and sidewalk grades through most of the old Cities and Towns that have flat, or no drainage grades at all, I recommend as follows:

Due to the fact that the buildings are already in existance, establish a suitable grade at the building line, which in most cases is the property line, then work the grades down to the gutter line. this will provide adequate Sidewalk drainage, nice looking top of curb grades with the proper curb exposure which is necessary for future roadway overlays and also leave good grade controls for grading, paving and drainage of the roadway surface.

The cost of construction may increase but the benefits derived from this method of construction far outweighs the additional costs.

Type "C" Curbs

The standard Specifications for P.C.C.Curbs & Gutters should be revised to include the following Sub-Section heading and paragraph: 609:39 Line and Grade- The top face of finished curbs shall be True and straight, free from humps, sags or other irregularities. When a straight edge 10 Feet long is laid on the top or face of the curb the surface shall not vary more than 0.02 Foot fron the edge of the straight edge, except at grade changes or curves.

Delineators

The full length flexable delineators used on this project are not as effective as the steel post and White paddle boards with reflectors, for the following reasons;

1. The flexable delineators can be easily pushed sideways or be pulled out of the ground.(This could be corrected with an anchorage device)

2. The reflective quality of the reflector is greatly diminished with the presence of a light film of dust.

Working Relationships & Quality of Work

Adequate Supervision from both the contractor and His Subs was furnished throughout the Contract and above average working relations were encountered.

The quality of workmanship on some of the construction items were below average but the material incorporated except for class "B" A.C. in mixture and liguid asphalt met the Standard Specifications for the use intended. The contractor was assessed a price reduction of $1,882.18 for the material incorporated but not meeting all the specification requirements.

For a piece meal type of construction project, that was performed under heavy truck traffic with several of the usual unforseen construction additions to contend with, I feel the State, The F H W A, The City of Willamina and the Grand Ronde Railroad received a durable, Wider and Safer Roadway.

-Statement of Overruns and Underruns-

Project: Wallace Br. Willamina E C L
Highway: Willamina-Sheridan
County: Polk & Yamhill

Contract No.: 9362
Prefix: 127-1002
F.A. No. SR-124(3)

ITEM	Orig. Authorization	2nd. Authorization	Semi-Final	%(+or-)
Bid Items	1,020,248.20	1,059,000.00	1,083,782.45	+2.3
Anticipated Items	82,500.00	19,000.00	17,600.00	-07
Contingencies	49,623.67	79,000.00	35,392.04	-55
Engineering	88,219.86	180,000.00	220,000.00	+22
CREDITS	____________	__________		

All substantial changes were evalvated and only those listed below meaningfully affect the total Project cost.

INDIVIDUAL OVERRUNS AND UNDERRUNS

ITEM NO.	ITEM	UNIT	AUTHORIZATION	SEMI-FINAL	%(+or_)
BI-7	Flagmen	Hr.	1,100	2,456.50	+ 123%

An Overrun in flagging was due to Two items. 1) Around the clock flagging required until temporary signals were installed, due to the roadway breaking and sliding into the retaining wall. The cleanup intailed excavation and the use of Equipment and made the roadway too narrow for Two way traffic. 2) Increased No. of flaggers due to the congestion were required to Safely direct traffic through the Business district of Willamina.

ITEM NO.	ITEM	UNIT	AUTHORIZATION	SEMI-FINAL	%(+or_)
BI #8	Pilot Car	Hour	350	104.5	-70.1%

Underrun due to the use of additional flaggers & the use of Temp.Traffic Signals

BI#11	Gen. Ex.	Cu. Yd.	6500	15,457.60	+138%

Flattening of cut slopes from Sta. 58+00 thru Sta. 63+00 Lt. and installing a fallout bench for safety were the prime reasons for a substantial overrun.

BI#17	Cement treated Base Mixture	Ton	9,600	11,716.75	+22%

C.T.B. was used in lieu of class "B" A.C. for build up of the Roadway from Sta. 79+00 to Sta. 83+50. Unstable areas withis the travel lanes of roadway not covered by the contract quantities.

BI#18	Portland Cement in C.T.B Mix	Ton	530.00	670.65	+27%

See the explanation of overrun listed for the obove item.

BI#20	Class "B" Asphalt Conc. Mixture	Ton	12,000.00	10,472.21	-13%

Underrun was due to Typical Section change in depth of A.C. for roadway between Stations 79+00 - 83+50.

BI#22	Asphalt Cement in Mixture	Ton	950.00	774.86	-18%

1) See BI#20 for underrun also a small underrun on BI#21 A.C. Leveling.

2) The percentage of Asphalt Cement in mix was kept on the lower side of the tolerances.

ITEM NO.	ITEM	UNIT	AUTHORIZATION	SEMI-FINAL	%(+or-)
BI#24	Concrete in Wall and Stairway	Cu.Yd.	690.00	738.91	+ 7%

The Concrete Retaining Wall was extended 50' in length as the original Retaining Wall design length was determined by the length of existing Gabions, and had to be redesigned to meet a different grade.

BI#30	12"Sewer Pipe	Lin.Ft.	804.00	1,110.00	+14&

Additional pipes placed under Roadway to alleviate drainage problems throughout project.

PRICE AGREEMENTS 13 Total Totaling = 35,392.04

	Original Auth.	2nd. Authorization	Semi-Final	
Engineering	88,219.86	180,000.00	220,000.00	+22%

Listed as follows are the reasons for an estimated 22% overrun.

1. Over $10,000 of Eng'r. monies needed for laboratory tests and inspections.
2. Contractor not striving to get contract work done ahead of alloted Calendar work Days , even though work was allowed to continue during the Winter Months which added to Engineering expenses.
3. Contractor working in several areas at the same time. This required more engineering than was originally anticipated because of additional set up time of Engineering Crew.
4. Extra Engineering expenses occured due to locating existing buried utilities and readjusting grades of pipes and catch basins to accomadate these utilities as they were found within the business section of Willamina.
5. All of the anticipated Price Agreements added greatly to the Engineering overrun. P.A.#10 was the most costly as it required additional Engineering monies to locate, design, buy and set R/W and construct.

6. The project being 60 miles from the permanent headquarters required 3 Hours traveling time each Day. This travel time expense was mainly on an overtime basis of time plus one-half. This lost travel time plus the Contractor working long hours (Early and late) "With small Crews" added to the large Engineering overrun.

7. $20,000 charged to the Engineering Prefix by a prior Project Manager for the purpose of establishing construction center line.

8. Up to date Engineering instruments could have saved many hours of Engineering expenses as these instruments require less people to operate and less time is lost in having to wait for traffic to clear.

9362

FORM 81-734-[illegible]

OREGON STATE HIGHWAY DIVISION

FIELD ENGINEER'S WEEKLY REPORT

FOR CONSTRUCTION PROJECTS ONLY
CONSTRUCTION AND BRIDGE SECTION

SECTION: Wallace Bridge Willamina E.C.L.	WEEK ENDING: January 22, 1983	
	SECTION PREFIX: 127-1002	
HIGHWAY: Willamina-Sheridan	COUNTY: Polk & Yamhill	
NAME OF JOB: Wallace Bridge - Willamina ECL	KIND OF WORK: Grading and Paving	
CONTRACTOR: Wildish Corvallis Const. Co.	CONTRACT NUMBER: 9362	FEDERAL AID PROJECT NUMBER: SR-124-(3)
DATE OF CONTRACT: 9/23/81	DATE WORK STARTED: 11/19/81	ESTIMATED COMPLETION DATE:
AVERAGE FORCE ON PROJECT FOR THE WEEK: MEN: 0 SUPERVISION: 0	SPECIFIED WORK DAYS SPECIFIED CALENDAR/~~DAYS~~ work 250	WORK DAYS USED CALENDAR/~~DAYS~~ work USED 250
	SPECIFIED COMPLETION DATE	PERCENT OF TIME ELAPSED 100
PROJECT AUTHORIZATION: $ 1,240,591.73		PERCENT OF CONTRACT COMPLETED BASED ON ESTIMATED COST 100
EXCLUSIVE OF ENGINEERING: $ 1,152,371.80	ENGINEERING AUTHORIZATION $ 180,000.00	
ESTIMATED COST OF COMPLETED PROJECT, EXCLUSIVE OF ENGINEERING: $ 1,116,553.10	ENGINEERING COST TO DATE $ 225,000.00	PERCENT OF CONTRACT COMPLETED BASED ON TOTAL AUTHORIZATION 100
ESTIMATED PERCENT: ~~[illegible]~~ 2 %	PERCENT OF AUTHORIZATION 125 %	DATE PROJECT WAS COMPLETED: 9/21/82

ESTIMATED PERCENT COMPLETE (ROADWORK)

CLEARING	DRAINAGE	GRADING	BASE	OIL AND/OR PAVE.	MAT'L. PROD.		
100	100	100	100	100	100		

	GRADING	SURFACING	MAINTENANCE MATERIALS	OIL & BITUMINOUS MACADAM	PAVING
MILES IN PROJECT	1.69	1.69			2.24
MILES PARTIALLY COMPLETED					
MILES COMPLETED					
TOTAL ESTIMATED QUANTITIES (CONTRACT)	6500CY	9600T			15000T
TOTAL QUANTITIES CORRECTED TO DATE	14,000	11,700			13,260
ESTIMATED QUANTITIES MOVED OR PLACED TO DATE	14,000	11,700			13,260
AVERAGE DAILY QUANTITIES	0	0			0
AVERAGE DAILY QUANTITIES NECESSARY TO COMPLETE PROJECT ON TIME	0	0			0
NUMBER OF SHIFTS PER DAY	0	0			0
HOURS PER SHIFT	0	0			0 0

EQUIPMENT USED DURING THE WEEK:

ESTIMATED PERCENT COMPLETE (STRUCTURES)

BRIDGE NO.	16566							
PERCENT	100							

	WEATHER	WORK DAYS CHARGED	HOURS DELAY	CAUSE OF DELAY
SUNDAY Jan. 16	Showers	250		
MONDAY 17	Showers	"		
TUESDAY 18	Showers -A.M. Rain * P.M.	"		
WEDNESDAY 19	Rain-Showers	"		
THURSDAY 20	Showers-Clear	"		
FRIDAY 21		"		
SATURDAY 22		"		

CE K RECEIVED DR
CAE CA
POE LS
QCS JAN 24 1983 TC
CONSTRUCTION
SECTION

GENERAL DESCRIPTION OF ACTIVITIES FOR THE WEEK

SUNDAY 16	No Activity this Week
MONDAY 17	
TUESDAY 18	
WEDNESDAY 19	
THURSDAY 20	
FRIDAY 21	
SATURDAY 22	

REMARKS

Semi-Final 99% complete. Expect to submit on Tuesday January 25, 1983

This will be the last Weekley Report

SIGNED Charles W. Elroy, Project Manager LOCATION Newport

PRIME RESIDENT SUBMIT 2 COPIES WHEN B AND GRADING BOTH ARE INVOLVED. SUBMIT 3 COPIES

BP-7216

9362

B

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. SR-124(3)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Polk & Yamhill

3. FROM Dale E. Wilken, Division Administrator
FHWA - Oregon Division 12-7-82

4. PROGRAM NO.

5. ITEM NO. 10034

6. TO

Mr. H. S. Coulter
State Highway Engineer
Oregon State Highway Division
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 9/27/82

8. FEDERAL ROUTE NUMBER Secondary 124

9. STATE ROUTE NUMBER Secondary 157

10. GENERAL LOCATION:

Wallace Bridge - Willamina ECL Section

11. GENERAL DESCRIPTION OF WORK

Utility Adjustment

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* Utility Adjustment
See below

13. REMARKS

As requested by Mr. Swan's letter of 11-10-82, this will confirm the advance approval date of 9/27/82 to proceed with the actual adjustments to the City of Willamina's water valves, contingent upon modification of project agreement if additional funds are needed, on an actual cost basis estimated to be $965 - FF $851.

I approve the agreement with the City of Willamina.

Approval and participation for the eligible portion of the work authorized above is subject to the provisions of the Federal-aid Program Manual.

RECEIVED
STATE HWY ENGR
DEC 14 '82
REFER TO Moehring
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Orig 12/14

14. DATE 12/7/82

15. SIGNATURE OF APPROVING OFFICIAL

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9362

E. S. HUNTER

November 10, 1982

TO: D. E. Wilken, Division Administrator
Federal Highway Administration

for J L Gaither

FROM: D. E. Swan
Program Control Engineer

SUBJECT: Water Valve Box Adjustment
City of Willamina
Wallace Bridge-Willamina ECL Section
Willamina-Sheridan Highway
Polk County
Project No. SR 124(3)

RECEIVED
TECHNICAL SERVICES
MAY 20 '83
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Here is a copy of an estimate of cost to adjust the City of Willamina's water valves dated November 1, 1982.

A certification prepared by Don Bedford as to the City's rights in the land occupied by their facilities is in our files.

A copy of the relocation letter to the City dated June 26, 1981 was previously supplied to your office.

An appropriate permit for the utility's proposed relocation will be issued as required.

The State is not entitled to a credit for expired service life under the provisions of Paragraph 9b (1) (b) of PPM 30-4, as the relocation involves crossings of the project by the facilities.

There will be no betterment derived from the proposed adjustment of the City's facilities.

Your approval of the actual cost agreement, as evidenced above, and confirmation of your advanced authorization to proceed with the work as of September 27, 1982 under the provisions of PPM 30-4 and 30-4.1 is requested. Estimated cost to the State is $965.

JMC/DES/llr
Enclosure
cc: E. S. Hunter
Jack M. Cartwright
Don Bedford

9362

VICTOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION

IN REPLY REFER TO
FILE NO.: CON

DATE: November 8, 1982

TO: Oregon Transportation Commission

AGENDA
NOV 16 1982

1A-5 (b)

FROM: H. S. Coulter
State Highway Engineer

SUBJECT: Request for Increase in Project Authorization
Wallace Bridge-Willamina E.C.L.
Willamina-Sheridan Hwy., Polk and Yamhill Counties
Contract No. 9362

Construction of this secondary grading and paving project was completed on September 21 and it is apparent that the final cost will exceed the project authorization by $96,408.27 or 7.8 percent.

Two major unanticipated conditions developed on this project to cause cost overruns of several items. Excavation for a retaining wall removed support from the adjacent roadbed and resulted in an emergency condition which required around-the-clock flagging until alternative protective devices could be installed. This was primarily responsible for $16,000 overrun in flagging costs. Subsequent provision and removal of temporary guardrail required an additional $10,920, and installation and removal of a temporary traffic signal system and related traffic control devices added another $13,597 to the cost of the project.

The second condition which contributed heavily to the cost overrun was the necessity to flatten out slopes on a 1,000 foot section to remove unstable material which would otherwise slide onto the highway. The original slopes for widening were made on 1/2:1 slope which proved to be too steep for the type of material existing in the upper strata. Additional excavation added $62,832 to contract costs.

The extra work cited above generated extra engineering expenses. Extraordinary travel expenses were also incurred by the engineering crew due to the project location in relationship to the project management headquarters. The engineering expense overran by more than $90,000.

B

There are sufficient funds available in the category of work and all the increase, except $6,500, is eligible for federal participation.

I recommend that the authorization be increased by $96,408.27 to a new total of $1,337,000. This matter will be on the consent calendar for the November 16 meeting.

OBJ:mk st

bc Fred D. Miller
R. W. Gormsen
C. T. Keasey
V. E. Skoog
C. O. Fredrickson
George Bell

STATE OF OREGON | **INTERO ICE MEMO**
Highway Construction | 378-6318 | FILE: CON 5

TO: W. E. Schwartz, P.E., P.L.S.
Ass't. State Highway Engineer

DATE: October 18, 1982

O. B. Jackmond

FROM: O. B. Jackmond, P.E., P.L.S.
Contract Administration Engineer

SUBJECT: Request for Increase in Project Authorization
Wallace Bridge-Willamina E.C.L.
Willamina-Sheridan Hwy., Polk & Yamhill Counties
Contract No. 9362

Construction of this secondary grading and paving project was completed on September 21, 1982 and it is apparent that the final cost will exceed the project authorization by $96,408.27 or 7.8 percent.

Two major unanticipated conditions developed on this project to cause cost overruns of several items. Excavation for a retaining wall removed support from the adjacent roadbed and resulted in an emergency condition which required around-the-clock flagging until alternative protective devices could be installed. This was primarily responsible for $16,000 overrun in flagging costs. Subsequent provision and removal of temporary guardrail required an additional $10,920, and installation and removal of a temporary traffic signal system and related traffic control devices added another $13,597 to the cost of the project.

The second condition which contributed heavily to the cost overrun was the necessity to flatten cut slopes on a 1,000 foot section to remove unstable material which would otherwise slide onto the highway. The original slopes for widening were made on 1/2:1 slope which proved to be too steep for the type of material existing in the upper strata. Additional excavation added $62,832 to contract costs.

The extra work cited above generated extra engineering expenses. Extraordinary travel expenses were also incurred by the engineering crew due to the project location in relationship to the project management headquarters. The engineering expense overran by more than $90,000.

There are sufficient funds available in the category of work and all the increase except $6,500 is eligible for federal participation. PCRB approval is not required.

Attached is a rough draft letter to the Transportation Commission requesting an increase of $96,408.27. Also attached is a copy of the Expected Overrun of Project Authorization form.

OBJ:HHP:mk

Attach.

cc: C. O. Fredrickson
C. W. Elroy
R. D. Church
D. E. Swan

NOTED
W. E. SCHWARTZ

RECEIVED
STATE HWY ENGR
NOV 3 '82
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

81-125-1387

9362 2

ROW 18-4

September 29, 1982

TO: D. E. Wilken, Division Administrator
Federal Highway Administration
ATTENTION: William H. Kappus, Area Engineer

FROM: Jack M Cartwright
Jack M. Cartwright
Utility Relocation Coordinator

SUBJECT: Federal Participation Eligibility Date
Water Valve Adjustment
City of Willamina
Wallace Bridge - Willamina ECL Section
Willamina - Sheridan Highway
✓ Polk County
Project No. ~~RS-454(4)~~) SR-124(3)

Dear Mr. Kappus:

Confirmation of your verbal authorization for the City of Willamina to proceed with the relocation of their water valves facilities in conflict with this project as of September 27, 1982 is requested. An estimate of cost is being prepared by the City. Rough estimate of cost is $1,000. The estimate, upon receipt will be forwarded for your review and approval by separate letter. Federal participation in the cost of the relocation work is subject to FHWA's review and approval of the estimate of cost.

Advanced authorization date of
September 27, 1982 is approved

William H. Kappus
William H. Kappus, Area Engineer

JMC/llr
cc: ✓ E. S. Hunter
D. E. Swan
C. O. Fredrickson
Don Thurston
Don Bedford
Pete Gonzalez

RECEIVED
TECHNICAL SERVICES
OCT 8 '82
REFER TO
FOR
Info Inves R/D D/R Sign Act File

H
NOTED
E S HUNTER

RECEIVED
OCT 1 1982
RR & UTILITY UNIT

9362 157

ROAD DESIGN SECTION 378-6558 ROW 3:1

J. E. Boyd, Manager
Right of Way Section

August 5, 1982

J. H. Versteeg
Road Design Engineer

Files 52881, 52882, 52887,
52917 and 52918
Wallace Bridge-Willamina ECL Section
Willamina-Sheridan Highway
Polk County

Attached are descriptions (5 files), an authorization and right of way prints covering right of way required for the subject project, which is presently under contract.

Please note that permits of entry have been obtained for areas covered under files 52917 and 52918.

By: R

Robert R. Rounds
R/W Descriptions Coordinator

RRR:rlr
Attachments

9362

8-26-81

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO.
SR-124(3)

2. STATE PROJECT NO.
See below

2A. COUNTY NAME
Polk and Yamhill

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO.
10034

6. TO

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE
8/26/81

8. FEDERAL ROUTE NUMBER
Secondary 124

9. STATE ROUTE NUMBER
Secondary 157

10. GENERAL LOCATION:
Wallace Bridge - Willamina E.C.L. Section

11. GENERAL DESCRIPTION OF WORK
Grade, drain, high type pavement

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY,
☒ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

As requested in Mr. Swan's letters of July 2, 1981 and August 24, 1981 you are now authorized to proceed with actions necessary to advance to completion the physical construction provided for by the above project at a total estimated cost of $1,165,000 Federal Funds $1,027,300 in accordance with the approved Certification Acceptance Plan. If you subsequently find that exceptions to the procedure will be needed or that your proposed design standards are lower than the minimum design as approved, this office should be notified of such proposed exceptions and reasons thereof.

I accept the certification of Mr. Rod Henry dated July 30, 1981 that provisions of FHPM 7-5-1 have been complied with.

(This is a 20% limitation project)

Orig to 9361

RECEIVED
STATE HWY ENGR
AUG 27'81
REFER TO
FOR

Info	Invest	[illegible]	[illegible]	Sign	Act	File
					X	

14. DATE
8/26/81

15. SIGNATURE OF APPROVING OFFICIAL

16. TITLE
for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9362

157

ENVIRONMENTAL REVIEW CHECKLIST

ALL CLEAR 7/28/81
Donald L Dout

~~Tom~~

1/2

Sept. 3, 1981 Bid Letting ____ All Clear Deadline

SECTION Wallace Bridge-Willamina ECL
Highway Willamina-Sheridan
County Polk Region 2
Type of Work G-P-Overlay Funds FAS (RRR)
State ___ Consultant ___ Plans Avail. ___ Yes ___ No

Const Noise ✓

	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR	2 EXC
DOCUMENTS:						
EIS	☒	☐	☐	☐	☐	
Negative Declaration	☒	☐	☐	☐	☐	
Project Assessment	☒	☐	☐	☐	☐	
Write-off Letter	☒	☐	☐	☐	☐	
PERMITS:						
Division of State Lands	☒	☐	☐	☐	☐	
D.O.G.M.I.	☒	☐	☐	☐	☐	
Corps of Engineers	☒	☐	☐	☐	☐	
Coast Guard	☒	☐	☐	☐	☐	
Co. Conditional Use	☒	☐	☐	☐	☐	
NPS Air Pollution	☒	☐	☐	☐	☐	
NPS Water Pollution	☒	☐	☐	☐	☐	
	☐	☐	☐	☐	☐	
	☐	☐	☐	☐	☐	
CULTURAL:						
Cultural Survey	☐	☒	☐	☐	☒	
Cultural Salvage	☒	☐	☐	☐	☐	
NOISE:						
Noise Study	☐	☒	☐	☐	☒	

9362

L

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

July 2, 1981

In Reply Refer to
File No.:

TO: Dale E. Wilken
Division Administrator
Federal Highway Administration

**Original Signed By
D. E. Swan**

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 10034
Project No. SR-124 (3)
Wallace Bridge - Willamina E.C.L. Section
Polk and Yamhill Counties

Attached data consists of PR-1 form with project maps.

I request authorization to proceed with actions necessary to advance the physical construction provided for by the project at an estimated total cost of $ 1,165,000 with an obligation of $ 1,027,300 in Federal funds in accordance with Oregon's approved Certification Acceptance Plan.

This project is expected to be funded from the 20% of the FY'81 limitation withheld from distribution until after August 1, 1981.

DRH/lms
Attachments

cc: C.O. Fredrickson (Region 2)
General Files

Form 734 3122

9362 10-1-80 157

LOCATION PROSPECTUS
OREGON DEPARTMENT OF TRANSPORTATION
LOCATION UNIT

NOTE: SHADED AREAS TO BE COMPLETED IN SALEM OFFICE

DATE

PREFIX

1 - IDENTIFICATION

PROJECT NAME Wallace Bridge - Willamina ECL

HIGHWAY NAME Willamina-Sheridan

HIGHWAY NUMBER 157

REGION 2	ADMINISTRATIVE DISTRICT 3	COUNTY Polk	CITY
LENGTH 2.2	MILEPOST NUMBER 0.5 TO 2.7	☒ RURAL	☒ URBAN

LOCAL GOVERNMENT PROJECT? ☐ YES ☒ NO

IF YES, UNIT OF GOVERNMENT

TYPE OF FUNDS ☐ FAI ☐ FAP ☒ FAS ☐ STATE ☐ FAUS ☐ OTHER

METHOD OF CONSTRUCTION ☒ CONTRACT ☐ STATE FORCE ☐ OTHER

TYPE OF WORK ☒ GRADING ☒ PAVING ☐ STRUCTURE ☐ SIGN ☐ SIGNAL ☐ ILLUMINATION ☐ ROADSIDE IMPROVEMENT ☐ OTHER

PROJECT DESCRIPTION

The westerly end of the survey is where this highway leaves the Salmon River at Wallace Bridge. The easterly end is the east city limits of Willamina. The length is 2.2 miles. The purpose of the project is to overlay the existing roadway, widen in some areas, and regarde the street section where the curb exposure is insufficient. The programmed estimate is $900,000.

REFERRED TO
Beard
Stoudenmeyer
Cole ✓
Mana
Eriksen
Watson
Dorn
Leu
Hager
Discuss
Do File Copy
Due
[✓ Return]
BY FINAL DESIGN ENGINEER

1 Versteeg ✓
Anderson ✓
2 Christ...
3 Olson
Sullivan
T...
...
4 Wickersham

RECEIVED
OCT 06 1980
ROAD DESIGN SECTION

Do Not File ☐
Return To
Assigned ___/___
Action

2 - TRAFFIC DATA

EXISTING AVERAGE DAILY TRAFFIC (YEAR-VOLUME) 1979, 3,000 - 5900

PROJECTED AVERAGE DAILY TRAFFIC (YEAR-VOLUME)

LEVEL OF SERVICE	A	B	C	D	E	F
EXISTING	☐	☐	☐	☐	☐	☐
PROPOSED	☐	☐	☐	☐	☐	☐

DESIGN SPEED (MPH) N/A

DESIGN STANDARDS AASHTO Min.

TRAFFIC ANALYSIS ☐ LIGHT ☒ MEDIUM ☐ HEAVY

APPROVED
Frank E. Perpine
Location Engineer
Date 10/1/80

FORM 734-1730 (12-78) Page 1

3 - FEATURES	EXISTING NUMBER AND WIDTH	PROPOSED NUMBER AND WIDTH
TRAVEL LANES	2 - (12')	2 - (12')
SHOULDERS	2 - (2'±)	* 2 - (4')
MEDIANS		— — —
PARKING LANES		— — —
SIDEWALKS		— — —
BIKEWAYS		Shldr. Bikeway
INTERCHANGES		— —
OTHER:		

*AASHTO Min. = 8' Shldrs.

	YES	NO	MAYBE
Channelization	☐	☒	☐
Frontage Roads	☐	☒	☐
Traffic Signals	☐	☒	☐
Signing	☐	☒	☐
Illumination	☐	☒	☐
Structures	☐	☒	☐
Stage Construction	☐	☒	☐
Pedestrian Crossing	☐	☒	☐
Rest Area	☐	☒	☐
Truck Scale Site	☐	☒	☐
Landscaping	☐	☒	☐
Drainage	☒	☐	☐
River ______	☐	☒	☐
Stream ______	☒	☐	☐
Storm Sewer	☒	☐	☐
Sanitary Sewer	☐	☐	☐
Right of Way	☐	☒	☐
Simple Acquisition	☐	☒	☐
Complex Acquisition	☐	☒	☐
Relocations	☐	☒	☐

	YES	NO	MAYBE
Right of Way (cont.) Improvements	☐	☒	☐
Access Control	☐	☒	☐
Railroad Crossing	☒	☐	☐
At Grade	☒	☐	☐
Separated	☐	☒	☐
Railroad Encroachment	☒	☐	☐
Permits	☐	☐	☒
Conditional Use	☐	☒	☐
Flood Plain	☐	☒	☐
Irrigation District	☐	☒	☐
Water District	☐	☒	☐
Drainage District	☐	☒	☐
Div. of State Lands	☐	☐	☒
Dept. of Geology & Min. Ind.	☐	☐	☒
Corps of Engineers	☐	☒	☐
Coast Guard	☐	☒	☐
DEQ NPS Air Pollution	☐	☒	☐
DEQ NPS Water Pollution	☐	☒	☐
Building	☐	☒	☐
Fish & Wildlife Approval	☐	☐	☒

3 - FEATURES (cont.)

	YES	NO	MAYBE		YES	NO	MAYBE
Agreements (City-County Etc.)	☐	☐	☒	Hydraulics Study	☐	☐	☒
Environmental Assessment	☒	☐	☐	Soils Investigation	☒	☐	☐
Statewide Assessment	☐	☒	☐	Airport Clearance	☐	☒	☐
Negative Declaration	☐	☒	☐	Economic Analysis	☐	☒	☐
Environmental Impact Statement	☐	☒	☐	Requires Field Survey	☒	☐	☐
4-F Statement	☐	☒	☐	Old Survey Available	☒	☐	☐
Citizen Advisory Committee	☐	☒	☐	Requires Vicinity Map	☒	☐	☐
Public Hearing ________	☐	☒	☐	Requires Photogrammetry	☐	☒	☐
Borrow Source	☐	☒	☐	Requires Reconnaissance Survey	☐	☒	☐
Material Source	☐	☒	☐	Reconnaissance Available	☐	☒	☐
Utilities	☐	☐	☒	Design Review	☒	☐	☐

Type power, utility, water, gas, sewer, railroad

4 - WORK ITEMS

		TO BE PERFORMED BY		
		APPLICANT	STATE	CONSULTANT
PRELIMINARY ENGINEERING		☐	☒	☐
RIGHT-OF-WAY	N/A	☐	☐	☐
CONSTRUCTION ENGINEERING		☐	☒	☐

5 - DURATION TIMES (MONTHS)

	FLOAT	ACTIVE
RECONNAISSANCE SURVEY	( )	N/A
DRAFT ENVIRONMENTAL IMPACT STATEMENT	( )	N/A
CORRIDOR APPROVAL	( )	N/A
FIELD SURVEY	(16)	2
PRELIMINARY DESIGN	( )	N/A
DESIGN APPROVAL/FINAL EIS	( )	N/A
RIGHT-OF-WAY DESCRIPTIONS	( )	N/A
RIGHT-OF-WAY ACQUISITION	( )	N/A
P.S. & E. DOCUMENTS	( )	5

RECOMMENDED CONSTRUCTION DATE	1982 (Region)	F 4Q'81 (Salem)

6 - SUGGESTED BASE DESIGN

ITEM	NEW WORK	OVER EXISTING
A/C pavement	4"	4"
Level course	1"	--
Base - Cement treated base or cement treated soil	10"	--

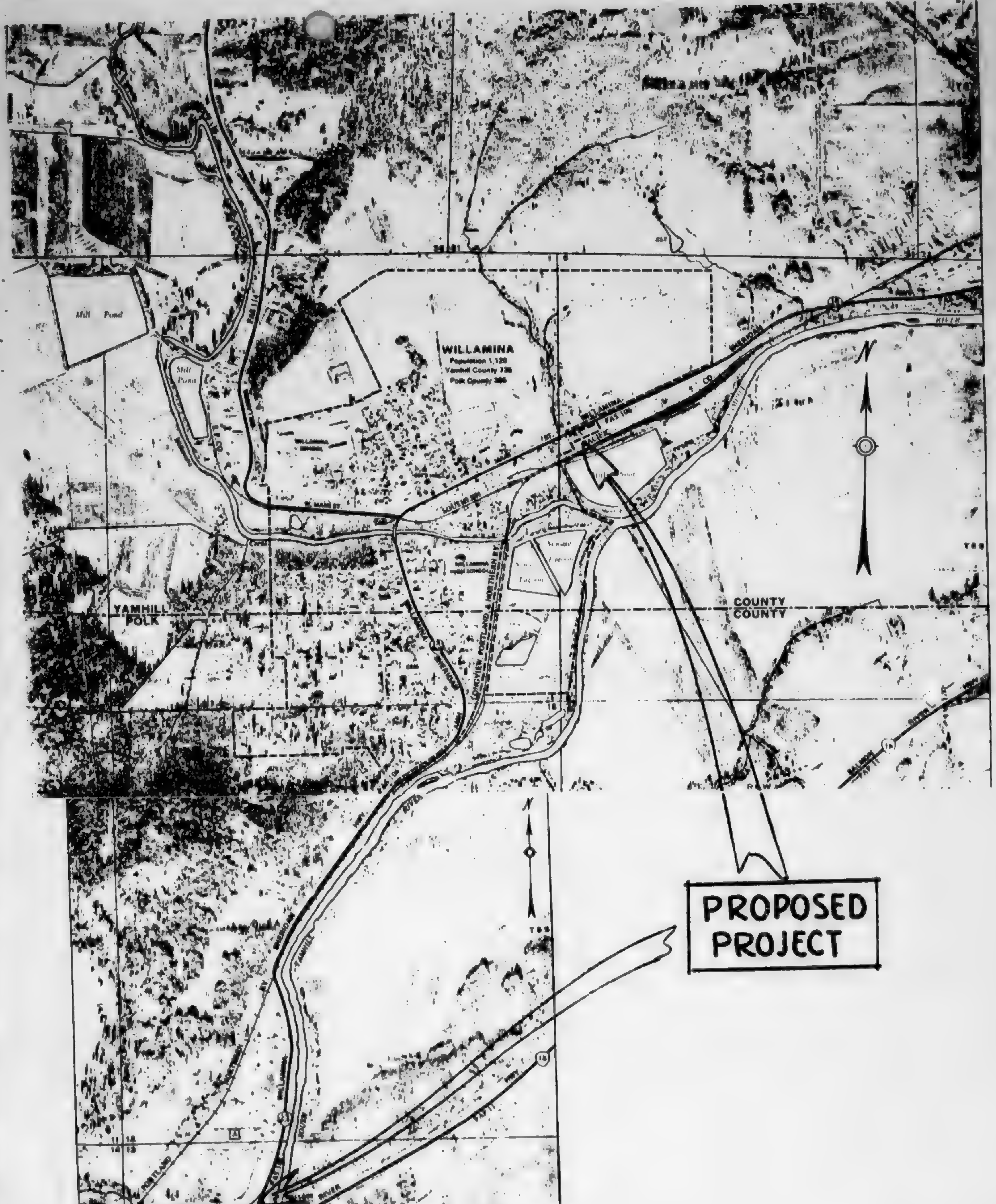
7 - TYPICAL SECTION AND LOCATION

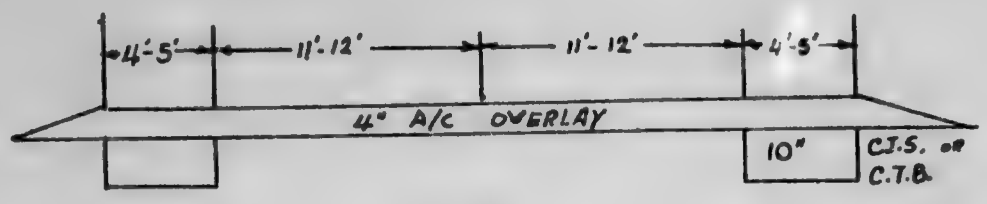
Attach 8½ x 11 inch sheets for general location map and typical section (roadway & structure).

8 - PROJECT COST ESTIMATES

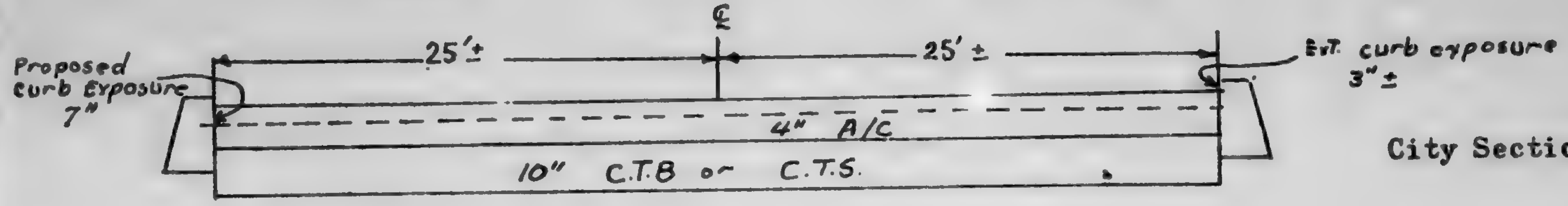
	REGION	SALEM
PRELIMINARY ENGINEERING		27.000
RIGHT OF WAY		
TRAFFIC CONTROL		
ILLUMINATION		
STRUCTURES		
RAILROAD		
ROADWAY	646,000	
OTHER		
ENGINEERING & CONTINGENCIES	254,000	
PROJECT TOTAL H.I.P. = 900.000		927.000

SUBMITTED BY


Mill Pond
Mill Pond
WILLAMINA
Population 1,120
Yamhill County 735
Polk County 385
WILLAMINA HIGH SCHOOL
SOUTHERN
PACIFIC
FAS 106
SHERIDAN
RIVER
YAMHILL
POLK
COUNTY
COUNTY
LONGVIEW, PORTLAND & NORTHERN RY
N
N
PROPOSED
PROJECT
SALEM


4'-5'
11'-12'
11'-12'
4'-5'
4" A/C OVERLAY
10"
C.T.S. or C.T.B.

Rural Section


℄
25'±
25'±
Proposed curb Exposure 7"
ExT. curb exposure 3"±
4" A/C
10" C.T.B or C.T.S.

City Section

9362 2

Form FHWA 121 (6/79)

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

THE OREGON DIVISION - Salem
UNITED STATES GOVERNMENT

memorandum

Subject: Oregon Project RS-124(-)
Wallace Bridge-Willamina ECL
Willamina-Sheridan Highway
Polk (and Yamhill) County

Date: June 13, 1980

From: G. L. Green, Division Administrator

Reply to Attn. of: HFO.2-OR

To: Mr. G. A. Potter, Manager, Environmental Section, OSHD

The subject project category request submitted with your June 11, 1980, letter has been reviewed.

We concur with your finding that the proposed project should be classified as Category 3, Categorical Exclusion.

NOTED
E. S. HUNTER

The proposed standards, design, and other specific details contained in the project category request will be subject to future reviews at the appropriate stage during project development.

Original Signed By
VERNON V. CUSACK
Program Operation
Engineer
G. L. Green

cc:
✓OSHD (E S Hunter, Tech Svcs)
OSHD (Env, Reg II)

RECEIVED
TECHNICAL SERVICES
JUN 16 '80
REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

1981 Roberts Creek-Dillard 9363
Inchg. Sec. of Pacific Hwy.
(Grad, pav, bar, str, & sign.) #4

9363

J

TO BE COMPLETED BY FHWA	U.S. Department of Transportation **Federal Highway Administration**	Form Approved; O M B No. 04-R2089
MONTHLY TRANSACTION NUMBER 2-33	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	**State** Oregon
PROJECT REPORT NUMBER	2-7-89	**County** Douglas
MODIFICATION NUMBER 6		**Project Number** IR-5-2(91)113

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15, 19 81, is hereby modified as follows:

	Former amount	Revised amount	
Estimated total cost of project	$ 6,929,163	$ 6,755,365	
Federal funds	$ 4,868,368	$ 4,868,368	(042)
	1,455,041	1,301,786	(044)
Other revisions			

This modification is made for the following reasons: To deobligate Appn Code 044 funds for use on other projects.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 7TH day of FEB, 19 '89.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By Joseph A. Speight for

MANAGER, PROGRAM SECTION
(Title)

~~By~~ XXX FOR: DONALD E. FORBES, P.E.

STATE HIGHWAY ENGINEER
(Title)

By ____________________

____
(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By ____________________
(Division Administrator)

FOR: DALE E. WILKEN

Form PR-2A
(Rev. 7-83)

Previous editions are obsolete

Oregon State Highway Division
Salem, Oregon January 31, 1989

Federal-aid Project No. IR-5-2(91)113

Roberts Creek-Dillard Interchange
Pacific Highway
Douglas County

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6204
IR Funding (Sta. 2890+50 to 2948+50)(Sta. 3026+00 to 3161+18.90)

Subtotal as on previous estimate of August 8, 1986	$ 1,255,725.00
Decrease in Construction Costs	(174,196.00)
Subtotal	$ 1,081,529.00
Engineering	162,229.00
Total	$ 1,243,758.00

Type Code 6204
I Funding (Sta. 2948+50 to 3026+00)

Total as on previous estimate of August 8, 1986	$ 5,284,081.00

Type Code X481
Structure #7835 (Sta. 2891+05 to 2893+35)

Total as on previous estimate of August 8, 1986	$ 53,105.00

Type Code X481
Structure #7835A (Sta. 2890+05 to 2892+85)

Total as on previous estimate of August 8, 1986	$ 53,609.00

Type Code X281
Structure #7839 (Sta. 3119+45 to 3120+70)

Total as on previous estimate of August 8, 1986	$ 48,212.00

Type Code X281
Structure #7839A (Sta. 3119+60 to 3121+10)

Total as on previous estimate of August 8, 1986	$ 232,526.00

Length of Roadway (I) ------------ 1.470 mi.
Length of Roadway (IR) ----------- 3.504 mi.
Length of Structure ------------- 0.073 mi.
Total 5.127 mi.

Cost of Roadway (I) -------------- $3,594,612.93
Cost of Roadway (IR)-------------- $ 354,953.77

SUMMARY OF FUNDS

DESCRIPTION	APPN CODE	Pro-Rata	TOTAL COST	FEDERAL FUNDS	STATE FUNDS
Roadway	042	92.22%	$ 5,284,081.00	$ 4,872,979.00	$ 411,102.00
Roadwa	044	88.18%	1,243,758.00	1,096,745.00	147,013.00
Structures	044	88.18%	232,526.00	205,041.00	27,485.00
SUBTOTAL			$ 6,760,365.00	$ 6,174,765.00	$ 585,600.00
Guardrail Salvage	042	92.22%	(5,000.00)	(4,611.00)	(389.00)
TOTAL			$ 6,755,365.00	$ 6,170,154.00	$ 585,211.00

Sub. Job 010 = 0%; Sub. Job 011 = 78%; Sub. Job 020 = 0%; Sub. Job 021 = 22%
Contract No. C09363
Prefix: C610-1921
Prefix: C610-1006

DCN:bkw

9363

N

Form Approved: OMB No. 2125-0529
Exp. Date 8/31/85

TO BE COMPLETED BY FHWA	U.S. Department of Transportation **Federal Highway Administration**	State Oregon
MONTHLY TRANSACTION NUMBER 8-73 + 74	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	County Douglas
PROJECT REPORT NUMBER	8-12-86	Project Number IR-5-2(91)113
MODIFICATION NUMBER 5		

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15, 19 81, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 6,947,277	$ 6,929,163
	~~4,872,979 (042)~~	~~4,872,979 (042)~~
Federal funds	$ 1,471,014 (044)	$ 1,455,041 (044)
Other revisions		4868,368.00 (042)

This modification is made for the following reasons:

To release federal funds for use on other projects.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 12TH day of AUG, 19 86

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By Donald L. Trout
for
Manager, Program Section
(Title)

XXX For: Larry Rulien

State Highway Engineer
(Title)

By ______________________

____
(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By ______________________
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 7-83)

Previous editions are obsolete

Gen file

Oregon State Highway Division
Salem, Oregon August 8, 1986

Federal-Aid Project No. IR-5-2(91)113

Roberts Creek - Dillard Interchange
Pacific Highway
Douglas County

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6204
IR Funding (Sta. 2890+50 to 2948+50)(Sta. 3026+00 to 3161+18.90)

ITEM	UNIT PRICE	ORIGINAL QUANTITY	ORIGINAL AMOUNT	REVISED QUANTITY	REVISED AMOUNT	
Temporary Barricades	$ 50.00	60	$ 3,000.00	43	$2,150.00	
Flagmen	1.00	5,000	5,000.00	1,336	1,336.00	
Temporary Slope Drains	5.00	720	3,600.00	0	0.00	
Temporary Scour Holes	100.00	12	1,200.00	2	200.00	
Temporary Drainage Curbs	3.00	3,000	9,000.00	0	0.00	
			$21,800.00		$ 3,686.00	
					Decrease	$ 18,114.00
Subtotal of Previous Estimate of October 3, 1984						1,435,670.00
					Total	$1,417,556.00

Type Code 6204
Interstate Funding (Sta. 2948+50 to 3026+00)

Total as on Estimate of October 3, 1984 $5,284,081.00

Type Code X481
Structure #7835 (Sta. 2891+05 to 2893+35)

Total as on Estimate of October 3, 1984 $ 53,105.00

Type Code X481
Structure #7835A (Sta. 2890+50 to 2892+85)

Total as on Estimate of October 3, 1984 $ 53,609.00

Type Code X281
Structure #7839 (Sta. 3119+45 to 3120+70)

Total as on Estimate of October 3, 1984 $ 48,212.00

Type Code X281
Structure #7839A (Sta. 3119+60 to 3121+10)

Total as on Estimate of October 3, 1984 $ 232,526.00

Length of Roadway (I) ------------------------ 1.470 miles
Length of Roadway (IR) ----------------------- 3.504 miles
Length of Structure -------------------------- 0.073 miles
Total 5.127 miles

Cost of Roadway (I) -------------------------- $3,594,612.93
Cost of Roadway (IR) ------------------------- $ 404,553.66

SUMMARY OF FUNDS

Description	Appn Code	Pro-Rata	Total Cost	Federal Funds	State Funds
Roadway	042	92.22%	$5,284,081	$4,872,979	$411,102
Roadway	044	88.18%	1,417,556	1,250,000	167,556
Structures	044	88.18%	232,526	205,041	27,485
SUBTOTAL			$6,934,163	$6,328,020	$606,143
Guardrail Salvage			(5,000)	(4,611)	(389)
TOTAL			$6,929,163	$6,323,409	$605,754

Sub-Job 010 = 0%; Sub-Job 011 = 77%; Sub-Job 020 = 0%; Sub-Job 021 = 23%
Contract No. C09363
Prefix: C610-1921
Prefix: C610-1006

DDB.me

93-3

STATE COPY

TO BE COMPLETED BY FHWA	U.S. Department of Transportation **Federal Highway Administration**	Form Approved; O M B No. 04-R2089
MONTHLY TRANSACTION NUMBER 10-33		State Oregon
PROJECT REPORT NUMBER		County Douglas
MODIFICATION NUMBER 4		Project Number IR-I-5-2(91)113

MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT

10-2-84

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15, 1981, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 6,829,136	$ 6,947,277
Federal funds	4,764,029 (042) $ 1,471,014 (044)	4,872,979 (042) $ 1,471,014 (044)
Other revisions		

This modification is made for the following reasons: to include increased construction costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 2nd day of October, 1984.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Manager, Program Section
(Title)

XXX For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 7-83)

Previous editions are obsolete

OREGON STATE HIGHWAY DIVISION
SALEM, OREGON OCTOBER 3, 1984

FEDERAL AID PROJECT NO. I-IR-5-2(91)113

ROBERTS CREEK-DILLARD INTERCHANGE
PACIFIC HIGHWAY
DOUGLAS COUNTY

REVISED PROJECT AGREEMENT ESTIMATE

TYPE CODE 6204
INTERSTATE FUNDING (STA. 2948+50 to STA. 3026+00)

ITEM	UNIT PRICE	ORIGINAL QUANTITY	ORIGINAL AMOUNT	REVISED QUANTITY	REVISED AMOUNT
Claim Settlement, Pave Median Area (PA #37)	$ ----	----	----	100%	$ 15,141.00
Claim Settlement (PA #38)	----	----	----	100%	103,000.00

Increase	$ 118,141.00
Subtotal of Previous Estimate	4,617,934.27
Subtotal	$4,736,075.27
Engineering	548,005.73
Total	$5,284,081.00

TYPE CODE 6204
IR FUNDING (STA. 2890+50 to STA. 2948+50)
(STA. 3026+00 to STA. 3161+18.9)

Total as on estimate of August 10, 1983	$1,435,670.00

TYPE CODE X481
ROBERTS CR. STR., BR. #7835 (STA. 2891+05 to STA 2893+35)

Total as on estimate of October 9, 1981	$ 53,105.00

TYPE CODE X481
ROBERTS CR. STR., BR. #7835A
(STA. 2890+50 to STA. 2892+85)

Total as on estimate of October 9, 1981	$ 53,609.00

TYPE CODE X281
CLARK BRANCH INT. STR., BR. #7839
(STA. 3119+45 to STA. 3120+70)

Total as on estimate of October 9, 1981		$ 48,212.00

TYPE CODE X281
CLARK BRANCH INT. STR., BR. #7839A
(STA. 3119+60 to STA. 3121+10)

Total as on estimate of October 9, 1981		$ 51,764.00
	Subtotal	$ 206,690.00
	Engineering	25,286.00
	Total	$ 232,526.00

Length of Roadway (I)	1.470 mi.
Length of Roadway (IR)	3.504 mi.
Length of Structure	0.073 mi.
Total	5.127 mi.

Cost of Roadway Per Mile (I)	$3,594,612.93
Cost of Roadway Per Mile (IR)	$ 409,723.17

SUMMARY OF FUNDS

Description	Coding	Appn Code	Total Cost	Federal Funds	State Funds
Roadway	042	92.22	$ 5,284,081.00	$ 4,872,979.00	$ 411,102.00
Roadway	044	88.18	1,435,670.00	1,265,973.00	169,697.00
Structures	044	88.18	232,526.00	205,041.00	27,485.00
Subtotal			$ 6,952,277.00	$ 6,343,993.00	$ 608,284.00
Guard Rail Salvage			(5,000.00)	(4,611.00)	(389.00)
Total			$ 6,947,277.00	$ 6,339,382.00	$ 607,895.00

Group 1 77%; Group 2 23%
Contract No. 9363
Prefix: 610-1921
Prefix: 610-1006
WH:bkb

9363

STATE COPY

P

TO BE COMPLETED BY FH MONTHLY TRANSACTION NUMBER 5-113	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State Oregon
PROJECT REPORT NUMBER	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	County Douglas
MODIFICATION NUMBER 3	5-18-84	Project Number I-5-2(91)113

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15, 19 81 is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 6,816,286	$ 6,829,136
Federal funds	4,752,096 (042) $ 1,471,014 (044)	4,764,029 (042) $ 1,471,014 (044)
Other revisions		

This modification is made for the following reasons: to include increase in construction costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 18th day of May, 1984.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

For Manager, Program Section
(Title)

XXX For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)
For: Dale E. Wilken

Form PR-2A
(Rev. 10-78)

Previous editions are obsolete

Gen. File

OREGON STATE HIGHWAY DIVISION
SALEM, OREGON MAY 11, 1984

FEDERAL AID PROJECT NO. I-IR-5-2(91)113

ROBERTS CREEK-DILLARD INTERCHANGE
PACIFIC HIGHWAY
DOUGLAS COUNTY

REVISED PROJECT AGREEMENT ESTIMATE

TYPE CODE 6204
INTERSTATE FUNDING (STA. 2948+50 TO STA. 3026+00)

ITEM	UNIT PRICE	ORIGINAL QUANTITY	ORIGINAL AMOUNT	REVISED QUANTITY	REVISED AMOUNT
Moving Temporary Barrier	$ 2.00	8,400	$16,800.00	14,870	$ 29,740.00

Increase	$ 12,940.00
Subtotal of Previous Estimate	4,604,994.27
Subtotal	$4,617,934.27
Engineering	548,005.73
Total	$5,165,940.00

TYPE CODE 6204
IR FUNDING (STA. 2890+50 to STA. 2948+50)
(STA. 3026+00 to STA. 3161+18.9)

Total the same as previous estimate of August 10, 1983 — $1,435,670.00

TYPE CODE X481
ROBERTS CR. STR., BR. #7835 (STA. 2891+05 to STA. 2893+35)

Total the same as previous estimate of October 9, 1981 — $ 53,105.00

TYPE CODE X481
ROBERTS CR. STR., BR. #7835A (STA. 2890+50 to STA. 2892+85)

Total the same as previous estimate of October 9, 1981 — $ 53,609.00

TYPE CODE X281
CLARK BRANCH INT. STR., BR. #7839 (STA. 3119+45
to STA. 3120+70)

Total the same as previous estimate of October 9, 1981 $ 48,212.00

TYPE CODE X281
CLARK BRANCH INT. STR., BR. #7839A (STA. 3119+60
to STA. 3121+10)

Total the same as previous estimate of October 9, 1981 $ 51,764.00

Subtotal	$ 206,690.00
Engineering	25,286.00
	$ 232,526.00

Length of Roadway (I)---------------- 1.470 mi.
Length of Roadway (IR) -------------- 3.504 mi.
Length of Structure ----------------- 0.073 mi.
Total 5.127 mi.

Cost of Roadway Per Mile (I) ------- $
Cost of Roadway Per Mile (IR) ------ $ 409,723.17

SUMMARY OF FUNDS

Description	Coding	Pro-Rata	Total Cost	Federal Funds	State Funds
Roadway	042	92.22	$ 5,165,940.00	$ 4,764,029.00	$ 401,911.00
Roadway	044	88.18	1,435,670.00	1,265,973.00	169,697.00
Structures	044	88.18	232,526.00	205,041.00	27,485.00
Subtotal			$ 6,834,136.00	$ 6,235,043.00	$ 599,093.00
Guard Rail Salvage			(5,000.00)	(4,611.00)	(389.00)
Total			$ 6,829,136.00	$ 6,230,432.00	$ 598,704.00

Group 1 - 77%; Group 2 - 23%
Contract No. 9363
Prefix: 610-1921
Prefix: 610-1006
RHZ:bkb

9363 5

STATE COPY

TO BE COMPLETED BY FHWA MONTHLY TRANSACTION NUMBER 8-111 + 112	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State OREGON
PROJECT REPORT NUMBER	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	County DOUGLAS
MODIFICATION NUMBER 2	8-19-83	Project Number I-IR-5-2(91)113

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15, 19 81, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 6,715,238 4,575,984 (042)	$ 6,816,286 4,747,485 (042)
Federal funds	$ 1,545,977 (044)	$ 1,471,014 (044)
Other revisions		

This modification is made for the following reasons: To include increase in construction costs, and construction engineering costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 19th day of August, 19 83.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By Larry A. Potter

Manager, Program Section
(Title)

~~By~~ FOR: H. S. Coulter

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen File

OREGON STATE HIGHWAY DIVISION
SALEM, OREGON AUGUST 10, 1983

FEDERAL AID PROJECT NO. I-IR-5-2(91)113

ROBERTS CREEK-DILLARD INTCHGE. SECTION
PACIFIC HIGHWAY IN DOUGLAS COUNTY

REVISED PROJECT AGREEMENT ESTIMATE

TYPE CODE 6204
INTERSTATE FUNDING (Sta. 294+50 to Sta. 302+00)

Subtotal of previous estimate of April 4, 1983 $ 4,443,172.00

PREVIOUS ESTIMATE

Class "B" Asphalt Concrete Mix	17,500	Ton	12.00	$ 210,000.00
Loose Riprap, Class 100	730	Cu. Yd.	12.00	8,760.00
				$ 218,760.00

REVISED ESTIMATE

Class "B" Asphalt Concrete Mix	21,700	Ton	12.00	$ 260,400.00
Loose Riprap, Class 100	2,000	Cu. Yd.	12.00	24,000.00
Class "C" Asphalt Concrete (P.A. #7)	4,147	Ton	12.00	49,764.00
Screen State Owned Rock (P.A. #32)	44,530	Ton	0.50	22,265.00
Asphalt Lined Ditch (P.A. #33)	220	Ton	46.00	10,120.00
Cement Treated Base Mix (P.A. #34)	1,155	Ton	12.15	14,033.25
				$ 380,582.25
			Increase	$ 161,822.25
			SUBTOTAL	$ 4,604,994.27
			Engineering	548,005.73
			TOTAL	$ 5,153,000.00

TYPE CODE 6204
IR FUNDING (Sta. 2890+50 to Sta. 2948+50)(Sta. 3026+00 to Sta. 316+18.9)

Subtotal of previous estimate of April 4, 1983 $ 1,358,847.00

PREVIOUS ESTIMATE

Class "B" Asphalt Concrete Mix	36,900	Ton	12.00	$ 442,800.00

REVISED ESTIMATE

Class "B" Asphalt Concrete Mix	29,816	Ton	12.00	$ 357,792.00
			Decrease	$ 85,008.00
			SUBTOTAL	1,273,839.00
			Engineering	161,831.00
			TOTAL	$ 1,435,670.00

TYPE CODE X481
ROBERTS CR. STR., BR. #7835 (Sta. 2891+05 to Sta. 2893+35)

Total the same as previous estimate of October 9, 1981 $ 53,105.00

TYPE CODE X481
ROBERTS CR. STR., BR. #7835A (Sta. 2890+50 to Sta. 2892+85)

Total the same as previous estimate of October 9, 1981 $ 53,609.00

TYPE CODE X281
CLARK BRANCH INT. STR., BR. #7839 (Sta. 3119+45 to Sta. 3120+70)

Total the same as previous estimate of October 9, 1981 $ 48,212.00

TYPE CODE X281
CLARK BRANCH INT. STR., BR. #7839A (Sta. 3119+60 to Sta. 3121+10)

Total the same as previous estimate of October 9, 1981 $ 51,764.00

SUBTOTAL	$	206,690.00
Engineering		25,286.00
TOTAL	$	232,526.00

Length of Roadway (I) ------------------	1.470 mi.
Length of Roadway (IR) -----------------	3.504 mi.
Length of Structure --------------------	0.073 mi.
TOTAL	5.127 mi.

Cost of Roadway Per Mile (I) -----------	$3,505,442.17
Cost of Roadway Per Mile (IR) ----------	$ 409,723.17

SUMMARY OF FUNDS

DESCRIPTION	CODING	PRO-RATA	TOTAL COST	FEDERAL FUNDS	STATE FUNDS
Roadway	042	92.22	$5,153,000	$4,752,096	$400,904
Roadway	044	88.18	1,435,670	1,265,973	169,787
Structures	044	88.18	232,526	205,041	27,485
TOTAL			$6,821,286	$6,223,110	$598,176
Salvage Guard Rail (Credit $0.56/lb.)		All Required	$ (5,000)	$ (4,611)	$ (389)
			$6,816,286	$6,218,499	$597,787

Group 1: 77% Group 2: 23%
Contract No.: 9363
Prefix: 610-1921
Prefix: 610-1006

9363

STATE COPY B

TO BE COMPLETED BY FHWA	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State Oregon
MONTHLY TRANSACTION NUMBER 4-15 + 16		County Douglas
PROJECT REPORT NUMBER	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT** 4-7-83	Project Number I-5-2(91)113
MODIFICATION NUMBER 1		

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15, 19 81, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 6,398,768	$ 6,715,238
Federal funds	4,343,317(042) $ 1,489,388(044)	4,575,984(042) $ 1,545,977(044)
Other revisions		

This modification is made for the following reasons: To include increase in construction costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 7th day of April, 1983.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By Gary A. Potter

Program Section Manager
(Title)

~~By~~ H. S. Coulter

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen. File

Oregon State Highway Division
Salem, Oregon April 4, 1983

Federal-Aid Project
No. I-IR-5-2(91)113

Roberts Creek - Dillard Intchge. Section
Pacific Highway in Douglas County

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6204
Interstate Funding (Sta. 2948+50 to Sta. 3026+00)
Subtotal of previous estimate of October 9, 1981 $ 4,190,876.00

Previous Estimate

Cement Treated Base	68,500	Ton	5.00	$ 342,500.00
Conc. in Walls & Box Culv.	200	Cu.Yd.	300.00	60,000.00
Reinforcement in Walls & Box Culv.	29,500	Lbs.		29,500.00
6" Drain Pipe	4,715	Lin.Ft.	4.00	18,860.00
Guard Rail, Type 2A	31,388	Lin.Ft.	5.50	172,634.00
Type 2 Fence	1,700	Lin.Ft.	4.00	6,800.00
Loose Riprap Class 100	730	Cu.Yd.	12.00	8,760.00
				$ 639,054.00

Revised Estimate

Cement Treated Base	70,690	Ton	5.00	$ 353,450.00
Conc. in Walls & Box Culv.	300	Cu.Yd.	300.00	90,000.00
Reinforcement in Walls & Box Culv.	50,000	Lbs.	1.00	50,000.00
6" Drain Pipe	6,200	Lin.Ft.	4.00	24,800.00
Guard Rail Type 2A	32,375	Lin.Ft.	5.50	178,062.50
Type 2 Fence	5,750	Lin.Ft.	4.00	23,000.00
Loose Riprap Class 100	2,000	Cu.Yd.	12.00	24,000.00
Slide Excavation (P.A. #21)	13,500	Cu.Yd.	3.50	47,250.00
Remove Striping (E.W.O. #2)			All Required	31,195.50
Slide Correction (E.W.O. #5)			All Required	69,592.00
				$ 891,350.00

Increase	$ 252,296.00
Subtotal	4,443,172.00
Engineering	523,859.00
Total	$ 4,967,031.00

Type Code 6204
IR Funding (Sta. 2890+50 to Sta. 2948+50) (STa. 3026+00 to Sta. 3161+18.9)

Subtotal of previous estimate of October 9, 1981	$ 1,294,673.00

Additional Items

Stage Construction		All Required	$ 16,750.00
General Excavation (PA#18)	15,600 Cu.Yd.	3.04	47,424.00
		Increase	$ 64,174.00
		Subtotal	1,358,847.00
		Engineering	161,834.00
		Total	$ 1,520,681.00

Type Code X481
Roberts Cr. Str., Br. #7835 (Sta. 2891+05 to Sta. 2893+35)
Total the same as previous estimate of October 9, 1981 $ 53,105.00

Type Code X481
Roberts Cr. Str., Br. #7835A (Sta. 2890+50 to Sta. 2892+85)
Total the same as previous estimate of October 9, 1981 $ 53,609.00

Type Code X281
Clark Branch Int. Str., Br. #7839 (Sta. 3119+45 to Sta. 3120+70)
Total the same as previous estimate of October 9, 1981 $ 48,212.00

Type Code X281
Clark Branch Int. Str., Br. #7839A (Sta. 3119+60 to Sta. 3121+10)
Total the same as previous estimate of October 9, 1981 $ 51,764.00

Subtotal	$ 206,690.00
Engineering	25,286.00
Total	$ 232,526.00

Length of Roadway(I) ---------------	1.470 mi.
Length of Roadway(IR) --------------	3,504 mi.
Length of Structure ----------------	0.073 mi.
Total ----------------------------	5,127 mi.
Cost of Roadway Per Mile (I) -------	$3,378,932.65
Cost of Roadway Per Mile (IR) ------	424,297.15

SUMMARY OF FUNDS

Description	Coding	Pro-Rata	Total Cost	Federal Funds	State Funds
Roadway	042	92.22	$ 4,967,031	$ 4,580,595	$ 386,436
Roadway	044	88.18	1,520,681	1,340,936	179,745
Structures	044	88.18	232,526	205,041	27,485
Total			$ 6,720,238	$ 6,126,572	$ 593,666
Salvage Guard Rail (Credit $0.56/lb.)		All Required	(5,000)	(4,611)	(389)
			$ 6,715,238	$ 6,121,961	$ 593,277

Group 1: 77%; Group 2: 23%
Contract No.: 9363
Prefix: 610-1921
Prefix: 610-1006

93103

STATE COPY

OMB No. 04-R2089

L

TO BE COMPLETED BY FHWA MONTHLY TRANSACTION NO. 10-91 & 10-90	U. S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION **FEDERAL-AID PROJECT AGREEMENT** 10-15-81	State Oregon County Douglas Project No. I-IR-5-2(91)113

The State, through its Highway Agency, having complied, or hereby agreeing to comply, with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) the Regulations issued pursuant thereto and, (3) the policies and procedures promulgated by the Federal Highway Administrator relative to the above designated project, and the Federal Highway Administration having authorized certain work to proceed as evidenced by the date entered opposite the specific item of work, Federal funds are obligated for the project not to exceed the amount shown herein, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends only to project costs incurred by the State after the Federal Highway Administration authorization to proceed with the project involving such costs.

PROJECT TERMINI

Roberts Creek-Dillard Intchge.

PROJECT CLASSIFICATION OR PHASE OF WORK	EFFECTIVE DATE OF AUTHORIZATION	APPROXIMATE LENGTH *(Miles)*
HIGHWAY PLANNING AND RESEARCH (HP & R)		
PRELIMINARY ENGINEERING		
RIGHTS-OF-WAY		
CONSTRUCTION	8-26-81	5.127
OTHER *(Specify)*		

FUNDS

ESTIMATED TOTAL COST OF PROJECT	FEDERAL FUNDS
$ 6,398,768.00	4,343,317.00 (042) $ 1,489,388.00 (044)

The State further stipulates that as a condition to payment of the Federal funds obligated, it accepts and will comply with the applicable provisions set forth on the reverse hereof.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By D.J. Moberg

Asst. State Highway Engineer
(Title)

XXXBy For: H.S. Coulter

State Highway Engineer
(Title)

By

(Title)

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Date executed by Division Administrator OCT 15 1981

Form PR-2 (Rev. 10-75) PREVIOUS EDITIONS ARE OBSOLETE

AGREEMENT PROVISIONS

1. RESPONSIBILITY FOR WORK

a. Except for projects constructed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in compliance with the approved plans and specifications or project proposal which, by reference, are made a part hereof.

b. With regard to projects performed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in accordance with the terms of its approved Certification, or exceptions thereto as may have been approved by the Federal Highway Administration.

2. HIGHWAY PLANNING AND RESEARCH (HP&R) PROJECT. The State highway agency will (a) conduct or cause to be conducted, under its direct control, engineering and economic investigations of projects for future construction, together with highway research necessary in connection therewith, pursuant to the work program approved by the Federal Highway Administration and (b) prepare reports suitable for publication of the result of such investigations and research, but no report will be published without the prior approval of the Federal Highway Administration.

3. PROJECT FOR ADVANCE ACQUISITION OF RIGHTS-OF-WAY. In the event that actual construction of a road on this right-of-way is not undertaken by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

4. PRELIMINARY ENGINEERING PROJECT FOR PREPARATION OF RIGHT-OF-WAY PLANS OR FOR PREPARATION OF CONSTRUCTION PLANS, SPECIFICATIONS AND ESTIMATES. In the event that right-of-way acquisition for, or actual construction of the road for which this preliminary engineering is undertaken is not started by the close of the fifth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

5. INTERSTATE SYSTEM PROJECT. (a) The State highway agency will not add or permit to be added, without the prior approval of the Federal Highway Administration any points of access to, or exit from, the project in addition to those approved in the plans and specifications for the project. (b) The State highway agency will not permit automotive service stations, or other commercial establishments for serving motor vehicle users, to be constructed or located on the right-of-way of the interstate system. (c) The State highway agency will not after June 30, 1968, permit the construction of any portion of the Interstate Route on which this project is located, including spurs and loops, as a toll road without the written concurrence of the Secretary of Transportation or his officially designated representative. The term 'toll road' does not include toll bridges or toll tunnels.

6. PROJECT FOR CONSTRUCTION IN ADVANCE OF APPORTIONMENT. (a) This project authorized pursuant to 23 U.S.C. 115 as amended, will be subject to all procedures and requirements, and conform to the standards applicable to projects on the system on which located, financed with the aid of Federal funds. (b) No obligation of previously apportioned Federal funds is created by this agreement, its purpose and intent being to provide that, upon application by the State highway agency, and approval thereof by the Federal Highway Administration, any Federal-aid funds of the class designated by the project number prefix, apportioned to the State under 23 U.S.C. 104 subsequent to the date of this agreement, may be used to reimburse the State for the Federal share of the cost of work done on the project.

7. STAGE CONSTRUCTION. The State highway agency agrees that all stages of construction necessary to provide the initially planned complete facility, within the limits of this project, will conform to at least the minimum values set by approved AASHTO design standards applicable to this class of highways, even though such additional work is financed without Federal-aid participation..

8. BOND ISSUE PROJECT. Construction, inspection and maintenance of the project will be accomplished in the same manner as for regular Federal-aid projects. No present or immediate obligation is created by this Agreement against Federal funds, its purpose and intent being to provide aid to the State, as authorized by 23 U.S.C. 122, for retiring maturities of the principal indebtednesss of the bonds referred to below. When the State requests Federal reimbursement to aid in the retirement of such bonds, the request will be supported by the appropriate certification required by 23 CFR Part 140, Subpart F, and Volume 1, Chapter 4, Section 8 of the Federal-Aid Highway Program Manual or the alternative State procedure set forth in the State's Certificate, and payment of the authorized Federal share will be made from appropriate funds available. If in any year there is no unobligated balance of any apportioned Federal funds available from which payments hereunder may be made, there will be no obligation on the part of the Federal Government on account of bond maturities for that year. Funds available to the highway agency for this project are the proceeds of bonds issued by the governmental unit indicated on the attached tabulation, pursuant to the authority and in the amounts by date of issue and beginning date of maturities set forth therein.

9. SPECIAL HIGHWAY PLANNING AND RESEARCH PROJECT. The State Highway agency hereby authorizes the Federal Highway Administration to charge the State's pro rata share of costs incurred against funds apportioned to the State under 23 U.S.C. 307 (c), as amended. In the event a project is financed with both Federal-aid funds and State matching funds, the State agrees to advance to The Federal Highway Administration the State matching funds for its share of the estimated cost. For a National Pooled Fund study, the State hereby assigns its responsibility for the work to the Federal Highway Administration. For an Intra-Regional Cooperative Study, the State hereby assigns its responsibility for the work to the lead State for the study.

10. PARKING REGULATION AND TRAFFIC CONTROL. The State highway agency will not permit any changes to be made in the provisions for parking regulations and traffic control as contained in the agreement between the State and the local unit of Government referred to in the paragraph on "Additional Provisions," without the prior approval of the Federal Highway Administration, unless the State determines, and the Division Administrator concurs, that the local unit of Government has a functioning traffic engineering unit with the demonstrated ability to apply and maintain sound traffic operations and control.

6-File

Oregon State Highway Division
Salem, Oregon October 9, 1981

Federal Aid Project
No. I-IR-5-2(91)113

Roberts Creek-Dillard Intchge. Section
Pacific Highway
Douglas County

PROJECT AGREEMENT ESTIMATE

Type Code 6204
Interstate Funding (Sta. 2948+50 to Sta. 3026+00)

Furnishing Field Laboratory	1	Each	2,000.00	$ 2,000.00
Mobilization	80	%	All Required	224,000.00
Temporary Protection and Direction of Traffic	80	%	All Required	86,400.00
Temporary Signs	1,885	Sq. Ft.	6.00	11,310.00
Temporary Barricades	60	Each	50.00	3,000.00
Temporary Continuous Rail Traffic Barriers, Reflectorized	300	Lin. Ft.	5.00	1,500.00
Temporary Concrete Barriers, Reflectorized	8,400	Lin. Ft.	12.00	100,800.00
Moving Temporary Concrete Barriers	8,400	Lin. Ft.	2.00	16,800.00
Temporary Plastic Safety Markers	45	Each	10.00	450.00
Oversize Advance Constr. Signs	2	Each	3,000.00	6,000.00
Sequential Arrow Signs	2	Each	1,000.00	2,000.00
Flagman	5,000	Hour	1.00	5,000.00
Temporary Illumination			All Required	130,000.00
Temporary Slope Drains	720	Lin. Ft.	5.00	3,600.00
Temporary Scour Holes	13	Each	100.00	1,200.00
Temporary Drainage Curbs	3,000	Lin. Ft.	3.00	9,000.00
Clearing and Grubbing	95	%	All Required	9,500.00
Removal of Structures & Obstructions	75	%	All Required	30,000.00
General Excavation	293,650	Cu. Yd.	2.30	675,395.00
Rock Inlay	103,500	Cu. Yd.	4.50	465,750.00
Rock Ditch Protection	1,760	Cu. Yd.	6.00	10,560.00
Woven Filter Fabric	11,150	Sq. Yd.	2.00	22,300.00
Trench Excavation	2,430	Cu. Yd.	8.00	19,440.00
Finishing Roadbed & Slopes	90	%	All Required	900.00
Watering	2,000	M-Gal.	8.00	16,000.00
Structure Excavation	70	Cu. Yd.	20.00	1,400.00
Aggregate Shoulders	14,000	Ton	4.00	56,000.00
Cement Treated Base Mixture	68,500	Ton	5.00	342,500.00
Portland Cement in CTB Mixture	4,100	Ton	90.00	369,000.00

Asphalt in Seal	170	Ton	220.00	37,400.00
Class "B" Asphalt Concrete Mixture	17,500	Ton	12.00	210,000.00
Asphalt Cement in Mixture	1,050	Ton	180.00	189,000.00
Asphalt in Tack Coat	10	Ton	300.00	3,000.00
Concrete in Walls and Box Culverts	200	Cu. Yd.	300.00	60,000.00
Reinforcement in Walls & Box Culverts	29,500	lbs.	1.00	29,500.00
12-Inch Culvert Pipe	810	Lin. Ft.	10.00	8,100.00
18-Inch Culvert Pipe	128	Lin. Ft.	15.00	1,920.00
12-Inch Sewer Pipe	2,160	Lin. Ft.	10.00	21,600.00
18-Inch Sewer Pipe	122	Lin. Ft.	15.00	1,830.00
12-Inch Slotted Drain Pipe	140	Lin. Ft.	40.00	5,600.00
36-Inch Welded Steel Pipe	266	Lin. Ft.	80.00	21,280.00
48-Inch Concrete or 54-Inch Metal Pipe	140	Lin. Ft.	80.00	11,200.00
Cap and Backfill 48-Inch Culvert Pipe			All Required	1,000.00
Concrete Manhole	1	Each	1,500.00	1,500.00
Special Drop Manhole	1	Each	5,000.00	5,000.00
Special Inlet	1	Each	1,000.00	1,000.00
Concrete Inlets, Type G-1	50	Each	400.00	20,000.00
Concrete Inlets, Type G-2	23	Each	600.00	13,800.00
Concrete Inlets, Type G-2M	6	Each	800.00	4,800.00
Concrete Inlets, Type B	1	Each	450.00	450.00
6-Inch Drain Pipe	4,715	Lin. Ft.	4.00	18,860.00
8-Inch Drain Pipe	1,770	Lin. Ft.	5.00	8,850.00
Filter Fabric	5,900	Sq. Yd.	2.00	11,800.00
Gravel in Drains	1,115	Cu. Yd.	15.00	16,725.00
Guard Rail, Type 2A	31,388	Lin. Ft.	5.50	172,634.00
Guard Rail, Type 3	125	Lin. Ft.	20.00	2,500.00
Guard Rail Anchors, Type 1	43	Each	300.00	12,900.00
Extra for Guard Rail Br. End Connections	7	Each	200.00	1,400.00
Rail End Pieces, Type B	19	Each	50.00	950.00
Rail End Pieces, Type C	17	Each	80.00	1,360.00
Type 2 Fence	1,700	Lin. Ft.	4.00	6,800.00
Concrete Barrier	17,700	Lin. Ft.	9.00	159,300.00
Paved Culvert End Slopes	179	Sq. Ft.	10.00	1,790.00
Drainage Curbs	1,940	Lin. Ft.	4.00	7,760.00
Loose Riprap, Class 50	680	Cu. Yd.	12.00	8,160.00
Loose Riprap, Class 100	730	Cu. Yd.	12.00	8,760.00
Loose Riprap, Class 700	150	Cu. Yd.	18.00	2,700.00
Loose Riprap, Class 2000	355	Cu. Yd.	25.00	8,875.00
Filter Blanket	210	Cu. Yd.	12.00	2,520.00
Delineators Type 2	115	Each	20.00	2,300.00
Delineators Type 3	20	Each	20.00	400.00
Delineators Type 4	90	Each	12.00	1,080.00
Capping Inlets	3	Each	100.00	300.00

Roadside Seeding & Mulching	12	Acre	550.00	6,600.00
Structural Excavation	120	Cu. Yd.	18.00	2,160.00
Special Wall Backfill	75	Cu. Yd.	15.00	1,125.00
Fiber Filter	164	Sq. Yd.	8.00	1,312.00
Furnish Pile Driving Equipment			All Required	10,000.00
Furnish HP 10x42 Steel Piling	1,050	Lin. Ft.	15.00	15,750.00
Drive Steel Piles	1,050	Lin. Ft.	3.00	3,150.00
Prestressed Concrete Pannels	46	Each	300.00	13,800.00
Wall Anchor System			All Required	15,000.00
Removal of Existing Sign Installations	30	%	All Required	600.00
Wood Sign Posts	60	%	All Required	1,800.00
Move Modify & Reinstall Existing Signs	40	%	All Required	1,400.00
			SUBTOTAL	$3,801,206.00

Anticipated Items

Permanent Pavement Striping			All Required	$ 5,700.00
Temporary Pavement Striping			All Required	8,300.00
Remove Pavement Striping (Exist. & Temp.)			All Required	6,000.00
Temporary Erosion Control			All Required	10,000.00
Asphalt Cement Adjustment	32	%	All Required	49,600.00
On-the-Job Trainees (6-6,000 hr. @ $0.80)			All Required	4,800.00
State Furnished Aggregate			All Required	305,270.00
				$ 389,670.00
			SUBTOTAL	$4,190,876.00
			Engineering	523,859.00
			TOTAL	$4,714,735.00

Type Code 6204
IR Funding (Sta. 2890+50 to Sta. 2948+50)(Sta. 3026+00 to Sta. 3161+18.9)

Mobilization	20	%	All Required	$ 56,000.00
Temporary Protection and Direction of Traffic	20	%	All Required	21,600.00
Temporary Signs	965	Sq. Ft.	6.00	5,790.00
Temporary Continuous Rail Traffic Barriers, Reflectorized	1.950	Lin. Ft.	5.00	9,750.00
Temporary Concrete Barriers, Reflectorized	3,000	Lin. Ft.	12.00	36,000.00
Moving Temporary Concrete Barriers	3,600	Lin. Ft.	2.00	7,200.00
Flagman	1,500	Hour	1.00	1,500.00
Clearing and Grubbing	5	%	All Required	500.00

Roadside Seeding & Mulching	12	Acre	550.00	6,600.00
Structural Excavation	120	Cu. Yd.	18.00	2,160.00
Special Wall Backfill	75	Cu. Yd.	15.00	1,125.00
Fiber Filter	164	Sq. Yd.	8.00	1,312.00
Furnish Pile Driving Equipment			All Required	10,000.00
Furnish HP 10x42 Steel Piling	1,050	Lin. Ft.	15.00	15,750.00
Drive Steel Piles	1,050	Lin. Ft.	3.00	3,150.00
Prestressed Concrete Pannels	46	Each	300.00	13,800.00
Wall Anchor System			All Required	15,000.00
Removal of Existing Sign Installations	30	%	All Required	600.00
Wood Sign Posts	60	%	All Required	1,800.00
Move Modify & Reinstall Existing Signs	40	%	All Required	1,400.00
			SUBTOTAL	$3,801,206.00

Anticipated Items

Permanent Pavement Striping			All Required	$ 5,700.00
Temporary Pavement Striping			All Required	8,300.00
Remove Pavement Striping (Exist. & Temp.)			All Required	6,000.00
Temporary Erosion Control			All Required	10,000.00
Asphalt Cement Adjustment	32	%	All Required	49,600.00
On-the-Job Trainees (6-6,000 hr. @ $0.80)			All Required	4,800.00
State Furnished Aggregate			All Required	305,270.00
				$ 389,670.00
			SUBTOTAL	$4,190,876.00
			Engineering	523,859.00
			TOTAL	$4,714,735.00

Type Code 6204

IR Funding (Sta. 2890+50 to Sta. 2948+50)(Sta. 3026+00 to Sta. 3161+18.9)

Mobilization	20	%	All Required	$ 56,000.00
Temporary Protection and Direction of Traffic	20	%	All Required	21,600.00
Temporary Signs	965	Sq. Ft.	6.00	5,790.00
Temporary Continuous Rail Traffic Barriers, Reflectorized	1.950	Lin. Ft.	5.00	9,750.00
Temporary Concrete Barriers, Reflectorized	3,000	Lin. Ft.	12.00	36,000.00
Moving Temporary Concrete Barriers	3,600	Lin. Ft.	2.00	7,200.00
Flagman	1,500	Hour	1.00	1,500.00
Clearing and Grubbing	5	%	All Required	500.00

Removal of Structures and Obstructions	25	%	All Required	10,000.00
General Excavation	1,450	Cu. Yd.	2.30	3,335.00
Rock Ditch Protection	1,015	Cu. Yd.	6.00	6,090.00
Trench Excavation	1,345	Cu. Yd.	8.00	10,760.00
Finishing Roadbed & Slopes	10	%	All Required	100.00
Watering	100	M-Gal.	8.00	800.00
Structure Excavation	80	Cu. Yd.	20.00	1,600.00
Aggregate Shoulders	5,850	Ton	4.00	23,400.00
Class "B" Asphalt Concrete Mixture	36,900	Ton	12.00	442,800.00
Asphalt Cement in Mixture	2,220	Ton	180.00	399,600.00
Asphalt in Tack Coat	50	Ton	300.00	15,000.00
Concrete Ditch Lining	470	Sq. Ft.	6.00	2,820.00
12-Inch Culvert Pipe	330	Lin. Ft.	10.00	3,300.00
18-Inch Culvert Pipe	82	Lin. Ft.	15.00	1,230.00
24-Inch Culvert Pipe	16	Lin. Ft.	40.00	640.00
12-Inch Sewer Pipe	3,100	Lin. Ft.	10.00	31,000.00
18-Inch Sewer Pipe	163	Lin. Ft.	15.00	2,445.00
12-Inch Slotted Drain Pipe	260	Lin. Ft.	40.00	10,400.00
Extra for Pipe Under Pavement	2,770	Lin. Ft.	10.00	27,700.00
Bedding Material	270	Cu. Yd.	20.00	5,400.00
Concrete Inlets, Type G-2M	2	Each	800.00	1,600.00
Concrete Inlets, Type G-2MA	4	Each	800.00	3,200.00
Guard Rail, Type 1	213	Lin. Ft.	5.00	1,065.00
Paved Culvert End Slopes	31	Sq. Ft.	10.00	310.00
12-Inch Culvert End Slope/Grate	3	Each	400.00	1,200.00
Loose Riprap, Class 700	650	Cu. Yd.	18.00	11,700.00
Filter Blanket	340	Cu. Yd.	12.00	4,080.00
Rock Gabions	190	Cu. Yd.	60.00	11,400.00
Roadside Seeding & Mulching	1	Acre	550.00	550.00
Removal of Existing Sign Installation	70	%	All Required	1,400.00
Wood Sign Posts	40	%	All Required	1,200.00
Sign Support Footings			All Required	1,500.00
Breakaway Sign Posts			All Required	6,500.00
Exit Number Sign Supports			All Required	1,500.00
Type "A" Signs in Place	100	Sq. Ft.	25.00	2,500.00
Type "D" Signs in Place	32	Sq. Ft.	12.00	384.00
Type "H" Signs in Place	27	Sq. Ft.	12.00	324.00
Move, Modify and Reinstall Existing Signs	60	%	All Required	2,100.00
			SUBTOTAL	$1,189,273.00
Anticipated Items				
Asphalt Cement Adjustment	68	%	All Required	$ 105,400.00
				$ 105,400.00
			SUBTOTAL	$1,294,673.00
			Engineering	161,834.00
				$1,456,507.00

Type Code X481
Roberts Cr. Str., Br. #7835 (Sta. 2891+05 to Sta. 2893+35)

Steel Sheet Piling	462 Lin. Ft.	24.00	11,088.00
Reinforced Concrete Bridge End Panels	153 Sq. Yd.	60.00	9,180.00
Class 1 Preparation, Bridge No. 7835	783 Sq. Yd.	12.00	9,396.00
Class 2 Preparation, Bridge No. 7835	23 Sq. Yd.	100.00	2,300.00
Concrete Resurfacing	783 Sq. Yd.	27.00	21,141.00
			$ 53,105.00

Type Code X481
Roberts Cr. Str., Br. #7835A (Sta. 2890+50 to Sta. 2892+85)

Steel Sheet Piling	483 Lin. Ft.	24.00	$ 11,592.00
Reinforced Concrete Bridge End Panels	153 Sq. Yd.	60.00	9,180.00
Class 1 Preparation, Bridge No. 7835A	783 Sq. Yd.	12.00	9,396.00
Class 2 Preparation, Bridge No. 7835A	23 Sq. Yd.	100.00	2,300.00
Concrete Resurfacing	783 Sq. Yd.	27.00	21,141.00
			$ 53,609.00

Type Code X281
Clarks Branch Int. Str., Br. #7839 (Sta. 3119+45 to Sta. 3120+70)

Steel Sheet Piling	504 Lin. Ft.	24.00	$ 12,096.00
Reinforced Concrete Bridge End Panels	194 Sq. Yd.	60.00	11,640.00
Class 1 Preparation, Bridge No. 7839	584 Sq. Yd.	12.00	7,008.00
Class 2 Preparation, Bridge No. 7839	17 Sq. Yd.	100.00	1,700.00
Concrete Resurfacing	584 Sq. Yd.	27.00	15,768.00
			$ 48,212.00

Type Code X281
Clark Branch Int. Str., Br. #7839A (Sta. 3119+60 to Sta. 3121+10)

Steel Sheet Piling	651 Lin. Ft.	24.00	$ 15,624.00
Reinforced Concrete Bridge End Panels	210 Sq. Yd.	60.00	12,600.00
Class 1 Preparation, Bridge No. 7839A	560 Sq. Yd.	12.00	6,720.00
Class 2 Preparation, Bridge No. 7839A	17 Sq. Yd.	100.00	1,700.00
Concrete Resurfacing	560 Sq. Yd.	27.00	15,120.00
			$ 51,764.00
		SUBTOTAL	$ 206,690.00
		Engineering	25,836.00
		TOTAL	$ 232,526.00

Length of Roadway (I)	1.470 mi.
Length of Roadway (IR)	3.584 mi.
Length of Structure	0.073 mi.
TOTAL	5.127 mi.

Cost of Roadway Per Mile (I)	$3,207,302.72
Cost of Roadway Per Mile (IR)	406,391.46

Work Retained in Program Status
(Not included in amounts below)

Slide Correction	All Required	$ 150,000.00
Reshaping Existing Slope Benches	All Required	6,000.00
Install Drainage at Equipment Pass, Sta. 3013	All Required	3,000.00
	SUBTOTAL	$ 163,500.00

SUMMARY OF FUNDS

Description	Coding	Pro Rata	Total Cost	Federal Funds	State Funds
Roadway	042	92.22	$4,714,735	$4,347,928	$366,807
Roadway	044	88.18	1,456,507	1,284,347	172,160
Structures	044	88.18	232,526	205,041	27,485
SUBTOTAL			$6,403,768	$5,837,316	$566,452
Salvage Guard Rail (Credit $0.56/lb.) All Required			(5,000)	(4,611)	(389)
TOTAL			$6,398,768	$5,832,705	$566,063

Group 1-77%; Group 2-23%
Contract No. 9363
Prefix: 610-1921
610-1006

Roberts Creek-Dillard Intchge. Section
Pacific Highway
Douglas County

State Responsibility (Nonparticipating Items)

State Responsibility for Damages	All Required	$	6,000.00

9363 ic cc: OSHD (Rulien)

U.S. Department of Transportation
Federal Highway Administration

FINAL ACCEPTANCE REPORT

STATE COPY

REGION NO. 10	**REPORT NO.** 8	**COUNTY** Douglas	**DIVISION** Oregon
DATE OF REPORT 6/5/87	**REPORT MADE BY** 6-5 87 Richard R. Arnold Area Engineer		**PROJECT NO.** I-IR-5-2(91)113
COMPLETION DATE (Actual) 8/5/83	**ACCEPTANCE DATE BY CONRTACT AGENCY** 4/18/85	**TIME ELAPSED** 100 %	**CONTRACT TIME** 600 CD 34 CD Extension

LOCATION

Roberts Creek - Dillard Interchange, Pacific Hwy (I-5)

The FHWA-47, Statement of Materials and Labor Used by Contractors on Highway Construction Involving Federal Funds, has been submitted. (Projects over $500,000)

A copy of the State's materials certificate is attached to the Division office copy of this report.

There is compliance with section 1.23 of the Regulations pertaining to encroachments on the right-of-way.

REMARKS: *The project has been completed in reasonably close conformity with the approved plans and specifications including authorized changes and extra work.*

ROBERTS CREEK - DILLARD INTERCHANGE
PACIFIC HWY I-5)

This project provided for the construction of 5.08 miles of AC overlay, CTB, roadbed grading, structure revisions and incidental work common to this type of project.

A contract in the amount of $5,197,169 was awarded to R. A. Hatch, Bend, Oregon on 9/30/81. Work began on 10/22/81 and was completed in reasonably close conformance with the approved plans and specifications, including approved changes, on 8/5/83.

A total of 634 calendar workdays were used in completing the work, as compared with the 600 calendar workdays allowed under the contract. A 34 day time extension was approved 9/8/83 and no liquidated damages were assessed.

An explanation of significant overruns and underruns is attached to the Division Office copy of this report.

- RRA -

RECEIVED
STATE HWY ENGR
JUN 9'87
REFER TO Fredrickson
FOR

Info	Inves	R/D	D R	Sign	Act	File

ag 6/16

ACCEPTANCE OF PROJECT IS RECOMMENDED	**ACCEPTED BY FEDERAL HIGHWAY ADMINISTRATION**
SIGNATURE Richd R. Arnold	**SIGNATURE** John T. [illegible]
TITLE Area Engineer — **DATE** 6/8/87	**TITLE** District Engineer — **DATE** 5/9/87

FORM FHWA 1446B
(Rev. 2-84)

PREVIOUS EDITIONS MAY BE USED.

7363

Yellow

REPORT OF SETTLEMENT OR DISPOSITION
CASES OTHER THAN CONDEMNATION

L- 8435

R-

Reported to Commission:

Name of Case: R.A. Hatch v. State

Cause of Action: Breach of Contract County: Douglas

Demands of Plaintiff: $323,000 + $21,000 + 813

Settlement: $98,000 + 15,000

REMARKS: This claim concerns the placement of a haul structure on I-5 between Cottage Grove and Roseburg. The Assistant Resident Engineer told Hatch he could cross the median with equipment. Hatch deleted the haul structure from his bid. The Resident refused to allow his crossing. Hatch claimed $323,000 for the structure plus impact cost. Settlement of $98,000 represents the cost of the haul structure. Included are 6 precast deck slabs valued at $10,000 which Hatch may purchase if we do not need them. An allied claim of $21,000 for pit development was also settled for $15,000. Claim of $813 was dropped.

Signature of Attorney

Concurrence of Chief Counsel

cc: John McCulloch
M. M. Mead
Adele Egan
Marilyn McHugh

9363

N

September 3, 1985

CON 5
#9363

Luoma, Kelley, Wolke, Mays & Pollaczek
Law Offices
Suite 206 Professional Center
P.O. Box 1608
Roseburg, OR 97470

Attn: William C. Wolke

This is in response to your letter of July 26, 1985, concerning Contract No. 9363 with R. A. Hatch Co. for work on Roberts Creek-Dillard Interchange Section of the Pacific Highway in Douglas County.

On August 7, a copy of the performance bond was mailed you covering this contract.

The contract was accepted by the State Highway Division on April 18, 1985.

Robert W. Gormsen
COMMISSION SERVICES

FKN:arc

GEORGE LUOMA
DONALD S. KELLEY
WILLIAM C. WOLKE
KAREN G. MAYS
PETER POLLACZEK

LAW OFFICES
LUOMA, KELLEY, WOLKE, MAYS & POLLACZEK
SUITE 206 PROFESSIONAL CENTER
POST OFFICE BOX 1608
ROSEBURG, OREGON 97470

TELEPHONE 672-5544
AREA CODE 503
1012 S.E. OAK AVENUE

July 26, 1985

Department of Transportation
State Highway Division
Attention: Robert Gormsen
Commission Services
Transportation Building
Salem, OR 97310

RE: Roberts Creek - Dillard Interchange
State Highway Division Contract No. 9363

Gentlemen:

Could you please furnish us a copy of the public construction bond in this project? Also, can you advise on the actual date of acceptance of the project by the Department of Transportation?

We enclose a stamped, self-addressed envelope for your use and we thank you in advance for your cooperation.

Very truly yours,

LUOMA, KELLEY, WOLKE,
MAYS & POLLACZEK

William C. Wolke

WCW:plc
Enclosure
cc: Roseburg Paving Co., P. O. Box 1427, Roseburg, OR 97470

RECEIVED
JUL 29 1985
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

#9363

files

GEORGE LUOMA
DONALD S. KELLEY
WILLIAM C. WOLKE
KAREN G. MAYS
PETER POLLACZEK

LAW OFFICES
LUOMA, KELLEY, WOLKE, MAYS & POLLACZEK
SUITE 206 PROFESSIONAL CENTER
POST OFFICE BOX 1608
ROSEBURG, OREGON 97470

TELEPHONE 672-5544
AREA CODE 503
1012 S.E. OAK AVENUE

July 26, 1985

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Department of Transportation
State Highway Division
Attention: Robert Gormsen
Commission Services
Transportation Building
Salem, OR 97310

R. A. Hatch Co.
P. O. Box 6179
Bend, OR 97708

Industrial Indemnity Company
Attention: Bond Department
421 S. W. 6th Avenue
Portland, OR 97204

Secretary of State
State Capitol Building
Salem, OR 97310

RE: Robert Creek - Dillard Interchange
State Highway Division Contract No. 9363

Dear Ladies and Gentlemen:

This firm represents Roseburg Paving Co. of Roseburg, Oregon, on whose behalf notice is given that Roseburg Paving Co. has a claim for paving, labor and materials performed and furnished for the above described project in the sum of $101,898.82 against the bond taken from R. A. Hatch Co. principal and Industrial Indemnity Company surety for the work of highway improvement on Interstate 5 between Roberts Creek and Dillard Interchange OSHD contract number 9363. This claim draws interest at nine percent (9%) per annum from July 10, 1985.

claim filed 1/21/85

Both under the public construction bond and under the contract between R. A. Hatch Co. and Roseburg Paving Co. there is provision for payment of attorney's fees to the prevailing party. This letter serves as notice to R. A. Hatch Co. that if this claim is not paid in full within ten (10) days of Hatch's receipt of this notice, we have been instructed to file suit on the public construction bond and seek not only the amount of the claim but also interest, court costs, disbursements and reasonable attorney's fees.

Very truly yours,
ROSEBURG PAVING CO.

By
John Loosley, President

LUOMA, KELLEY, WOLKE, MAYS & POLLACZEK

William C. Wolke

RECEIVED
JUL 29 1985
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

WCW:plc
cc: Roseburg Paving Co., P. O. Box 1427, Roseburg, OR 97470

No resp nec. as claim filed.

9363

June 12, 1985

Industrial Indemnity Company
421 SW Sixth Avenue
Portland, OR 97204

CON 5
#9363

Gentlemen or Ladies:

On April 26, 1985, we wrote to you concerning release of final payment on Contract No. 9363 awarded to R. A. Hatch Co. for work on the Roberts Creek-Dillard Interchange Section of Pacific Highway in Douglas County.

The total contract amount is $5,700,897.07 including $174,586.04 for work performed under force account.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

kjm
cc: R. A. Hatch Co.
PO Box 6179
Bend, OR 97708

bc: C. O. Fredrickson
Walt Hart
James J. Gix

NUI
W. E. SCHWARTZ

RECEIVED
STATE HWY ENGR
MAY 21 '85
REFER TO
FOR
Info | Invest | R/D | S/R | Sign | Act | File

REPORT OF ACTION UNDER DELEGATED AUTHORITY BY

ASSISTANT STATE HIGHWAY ENGINEER

On behalf of the Commission and under delegated authority, the following contracts were accepted as being completed according to specifications:

Contractor and Contract No.	Section and County	Acceptance Date
Abhe & Svoboda, Inc. Contract No. 9738	Columbia River (Astoria) Bridge Clatsup County	4/16/85
Akerman & Wathey, Inc. dba Oregon Landscape Maint. Contract No. 9671	Allen Blvd. Intch. Washington County	4/16/85
John A. Pfeifer Const. Co. dba Badger Excavation Contract No. 9715	Hatchet Creek Slide Coos County	4/16/85
R. L. Coats Contract No. 9474	John Day-Prairie City Grant County	4/16/85
Benton Electric, Inc. Contract No. 9749	Corvallis-Newport Hwy. @ SW 53rd St. (Corvallis) Benton County	4/16/85
The Kaspac Corp. dba Kaspac Industries Contract No. 9548	Lincoln City Pavement Marking Lincoln County	4/16/85
Weaver Construction Co. Contract No. 9807	Grande Ronde R. (Upper Perry) Br. Union Counth	4/16/85
R. A. Hatch Co. Contract No. 9363	Roberts Cr.-Dillard Intch. Douglas County	4/18/85
R. A. Hatch Co. Contract No. 9550	NW 14th Ave.-NW 26th Ave. (Portland) Multnomah County	4/19/85
Tice Electric Co. Contract No. 9771	Cascade Hwy. N. @ Johnson Cr. Blvd. Clackamas County	4/19/85
Tice Electric Co. Contract No. 9822	SE 82nd Ave. @ SE Causey Rd. Clackamas County	4/19/85
Hamilton Electric, Inc. Contract No. 9826	Ore. Coast Hwy. @ W. Devils Lake Rd. Lincoln County	4/23/85

Contractor and Contract No.	Section and County	Acceptance Date
Hoffman Construction Co. Contract No. 9294	Justice Center, Phase 3 (Ptld.) Multnomah County	5/01/85
L T Contractors, Inc. Contract No. 9792	District 13 Oiling Project Baker & Wallowa Counties	5/03/85
Hamilton Construction Co. Contract No. 9620	Willamete R. (Marquam) Br. Multnomah County	5/03/85
W. G. Moe & Sons, Inc. Contract No. 9758	Slick Rock Creek Bridge Lincoln County	5/03/85
Rogers Asphalt Paving Co. Contract No. 9820	Trout Creek-Prairie Creek Wallowa County	5/07/85

EXPENDITURE RECAP

	ABOVE PROJECTS	FY TO DATE
Original Authorization	$ 63,435,162.96	$ 189,416,957.37
Anticipated Costs	$ 64,277,637.94	$ 193,272,632.11
% Overrun (Underrun)	+1.3%	+2.0%

May 8, 1985

W. E. Schwartz
W. E. Schwartz, P.E.
Asst. State Highway Engineer

9363

April 26, 1985

Industrial Indemnity Company
421 SW Sixth Avenue
Portland, OR 97204

COM 5
#9363

Gentlemen or Ladies:

Contract No. 9363 awarded to R. A. Hatch Co. for work on the Roberts Creek-Dillard Interchange Section of Pacific Highway in Douglas County was completed on February 28, 1984, and accepted by the State Highway Division on April 18, 1985.

Final payment will be released to the contractor as soon as payment processing can be completed, but not before May 1, 1985.

You have been previously notified of claims filed against the performance bond on this contract some of which have been paid.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

kjm
cc: R. A. Hatch Co.
PO Box 6179
Bend, OR 97709

bc: C. O. Fredrickson
Walt Hart
V. E. Skoog (Attn: Frank Griffin)
James J. Gix

9363 CL 1985-0013

VICTOR ATIYEH
GOVERNOR

Department of Transportation

TRANSPORTATION BUILDING, SALEM, OREGON 97310

CON 9363

IN REPLY REFER TO
FILE NO.:

January 25, 1985

FILED
JAN 30 1985
BARBARA ROBERTS
SECRETARY OF STATE

Luoma, Kelley, Wolke, Mays & Pollaczek
Law Offices
Suite 206, Professional Center
P. O. Box 1608
Roseburg, OR 97470

Attention: William C. Wolke

Gentlemen or Ladies:

This will acknowledge your letter of January 21, 1985, on behalf of Roseburg Paving Company filing a claim against the following Highway Division contract:

FILED BY:	Roseburg Paving Co.
AMOUNT:	$101,898.82
FOR:	Labor and materials
AGAINST (Prime contractor)	R. A. Hatch Co.
CONTRACT NO.:	9363
PROJECT:	Roberts Creek-Dillard Interchange Section, Pacific Highway, Douglas County
SURETY:	Industrial Indemnity Co.
AGENT:	Corroon & Black of Oregon

We will advise the surety and the contractor of the receipt of this claim. We will also forward it to the Secretary of State for filing.

Please advise this office when your client's claim has been paid.

Sincerely,
ORIGINAL SIGNED
ROBERT W. GORMSEN

Robert W. Gormsen
COMMISSION SERVICES

RECEIVED
JAN 31 1985
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

vep 1-31-85

FKN:js
cc: R. A. Hatch Co.
P. O. Box 6179
Bend, OR 97708

Industrial Indemnity Co.
421 S. W. 6th
Portland, OR 97204

bc: ✓ Secretary of State - Please acknowledge receipt of the attached claim on the enclosed copy of this letter.

731-0188

GEORGE LUOMA
DONALD S. KELLEY
WILLIAM C. WOLKE
KAREN G. MAYS

LAW OFFICES
LUOMA, KELLEY, WOLKE & MAYS
SUITE 206 PROFESSIONAL CENTER
POST OFFICE BOX 1608
ROSEBURG, OREGON 97470

TELEPHONE 672 5544
AREA CODE 503

January 21, 1985

CERTIFIED
P 547 429 888
MAIL

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Department of Transportation
State Highway Division
Attention: Robert Gormsen
Commission Services
Transportation Building
Salem, OR 97310

R. A. Hatch Co.
P. O. Box 6179
Bend, OR 97708

Department of Transportation
State Highway Division
P. O. Box 1128
Roseburg, OR 97470

Industrial Indemnity Company
Attention: Bond Department
421 S. W. 6th Avenue
Portland, OR 97204

RE: Roberts Creek - Dillard Interchange
State Highway Division Contract No. 9363

Gentlemen:

This firm represents Roseburg Paving Co. of Roseburg, Oregon, on whose behalf notice is given that Roseburg Paving Co. has a claim for paving, labor and materials performed and furnished for the above described project in the sum of $101,898.82 against the bond taken from R. A. Hatch Co. principal and Industrial Indemnity Company surety for the work of highway improvement on Interstate 5 between Roberts Creek and Dillard Interchange OSHD contract number 9363.

Very truly yours,

ROSEBURG PAVING CO.

By Jean Loosley
Jean Loosley, Secretary

LUOMA, KELLEY, WOLKE,
MAYS & POLLACZEK

William C. Wolke

RECEIVED
JAN 23 1985

WCW:plc
cc: Roseburg Paving Co., P. O. Box 1427, Roseburg, OR 97470

9363

July 5, 1984

Levi J. Smith
Lawyer
200 Market Building, Suite 453
Portland, Oregon 97201

Re: R. A. Hatch Co. v. State of Oregon
Douglas County Circuit Court No. L83-2029

Dear Levi:

I have received word from Bryant Jackman that Bob Hatch and the State have reached an agreement concerning disposition of the six concrete slabs located in Roseburg. A price agreement memorializing the settlement has been forwarded to Bob for signature. I have pursuant to our telephone conversation and your letter of June 20 forwarded the Stipulated Order of Dismissal, and I am enclosing herewith an executed copy of the Order for your records.

Thanks for your kind assistance in disposing of this matter.

Very truly yours,

William F. Cloran
Assistant Attorney General

WFC:le

IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF DOUGLAS

R. A. HATCH CO., an Oregon corporation,

Plaintiff,

vs.

STATE OF OREGON by and through the Transportation Commission,

Defendant.

No. L83-2029

STIPULATED ORDER OF DISMISSAL

This matter coming on regularly before this Court for an order of dismissal, and it appearing that the within entitled matter has been fully compromised and settled, and the court being fully advised in the premises;

NOW THEREFORE, IT IS HEREBY ORDERED AND ADJUDGED that the within matter be, and the same is hereby dismissed with prejudice.

DATED this ______ day of June, 1984.

____
Circuit Court Judge

IT IS SO STIPULATED:

____
Levi J. Smith (Bar No. 70135)
Attorney for Plaintiff

William L Cloran
____
William M. Cloran (Bar No. 72050)
Attorney for Defendant

LEVI J. SMITH, P. C.
LAWYER
200 MARKET BUILDING, SUITE 453
200 S.W. MARKET STREET
PORTLAND, OREGON 97201

(503) 241-8230

June 20, 1984

Mr. William F. Cloran
Assistant Attorney General
100 State Office Building
Salem, Oregon 97310

Re: R. A. Hatch Co. v. State of Oregon
Douglas County Circuit Court No. L83-2029

Dear Bill:

Enclosed is an original and two copies of a stipulated order of dismissal. When you have signed it please pass the original on to the court with the postcards notifying us of conforming information, and return an executed copy to me for my records.

Please let me know if you have any questions. Thanks for your cooperation.

Sincerely,

Levi J. Smith

LJS:js
cc: Robert A. Hatch

9363

May 31, 1984

Levi Smith
Attorney at Law
453 200 Market Building
200 S. W. Market Street
Portland, Oregon 97201

Re: R. A. Hatch Co. v. State of Oregon
Douglas County Circuit Court No. L83-2029

Dear Mr. Smith:

Please be advised that Al Vohland will be available for depositions during the month of June. Ron Busey is available in June except for the period between June 11 and June 15. Since I am also unavailable during the period from the 11th to the 15th and on the 29th, I would recommend that depositions be scheduled for some time between Monday, June 18 and Thursday, June 28. Please contact me at 378-6313 for arrangements.

Very truly yours,

William F. Cloran
Assistant Attorney General

WFC:mj

9363

LEVI J. SMITH, P. C.
LAWYER
200 MARKET BUILDING, SUITE 453
200 S.W. MARKET STREET
PORTLAND, OREGON 97201
(503) 241-8230

April 25, 1984

Mr. William F. Cloran
Assistant Attorney General
100 State Office Building
Salem, Oregon 97310

Re: R. A. Hatch Co. v. State of Oregon
Douglas County Circuit Court No. L83-2029

Dear Mr. Cloran:

I would like to depose Ron Busey and Al Vohland, the Project Manager and Assistant Project Manager on the above job. Can you provide me with suitable dates three to six weeks away?

I would also like to review whatever documents the state views as the agency file with regard to this claim. It would be helpful to review that prior to depositions. If you wish me to file a formal notice to produce, please let me know soon and I will do so.

Please give me a call if you have any questions.

Sincerely,

Levi J. Smith

LJS:js
cc: Robert A. Hatch

9363

F

rll

U. S. DEPARTMENT OF TRANSPORT[illegible]ON
FEDERAL HIGHWAY ADMINIST[illegible]ON

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. I-IR-5-2(91)113

2. STATE PROJECT NO. See Below

2A. COUNTY NAME Douglas

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division
3-17-84

4. PROGRAM NO.

5. ITEM NO. 90226

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 1-3-84

8. FEDERAL ROUTE NUMBER Interstate 5

9. STATE ROUTE NUMBER Primary 1

10. GENERAL LOCATION:
Roberts Creek - Dillard Interchange Section

11. GENERAL DESCRIPTION OF WORK
Credit to project

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* See Below

13. REMARKS

As requested by Mr. Fredrickson's letter of 3-9-84 I approve the credit for 8,262 ton of class "E" aggregate at $3.43 per ton for a total cost of $28,338.66 - Federal Fund $26,071 (SFO #15).

RECEIVED
STATE HWY ENGR
MAR 29 '84
REFER TO Potter
FOR

Info	Inves	R/D	D/R	Sign	Act	File

[illegible]

14. DATE 3-19-84

15. SIGNATURE OF APPROVING OFFICIAL Robert B. Holloway

16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9363

rll

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

F

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO.: I-IR-5-2(91)113

2. STATE PROJECT NO.: See Below

2A. COUNTY NAME: Douglas

3. FROM:
Dale E. Wilken, Division Administrator
FHWA - Oregon Division
3-14-84

4. PROGRAM NO.:

5. ITEM NO.: 90226

6. TO:

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE: 8/8/83

8. FEDERAL ROUTE NUMBER: Interstate 5

9. STATE ROUTE NUMBER: Primary 1

10. GENERAL LOCATION:

Roberts Creek - Dillard Interchange

11. GENERAL DESCRIPTION OF WORK

Furnish and install delineators on median barrier

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY

☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION

☐ ACQUISITION OF RIGHT-OF-WAY

☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS

☒ CONSTRUCTION PROCEED ON FORCE ACCOUNT BASIS

☐ OTHER *(Specify)*

13. REMARKS

Contingent upon modification of Project Agreement if additional funds are required, I approve the advance authorization date of 8/8/83 as requested in Mr. Keasey's letter of 10/17/83 as being cost effective for the use of State forces to proceed with the above work. State Force Order No. 13 is approved for a TEC of $2,450 Federal Funds $2,259.

RECEIVED
STATE HWY ENGR
MAR 29 '84
REFER TO Potter
FOR
Info Inves R/D D/R Sign Act File

Orig. to
3/29

14. DATE: 3-14-84

15. SIGNATURE OF APPROVING OFFICIAL: Robert B. Hathaway

16. TITLE: for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9363 3-6-84

IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF DOUGLAS

Case No. L83-2029

R. A. HATCH CO.,
an Oregon corporation,
Plaintiff,

v.

STATE OF OREGON, by and through
the Transportation Commission,
Defendant.

ANSWER

Comes now defendant and makes Answer to the Complaint in the captioned matter. Any matter not specifically admitted is denied. For the convenience of the court, Answers are in series following the same numbering and system as the Complaint and refer to the corresponding paragraph of the Complaint unless otherwise indicated. Defendant answers as follows:

FIRST CLAIM FOR RELIEF

I

Admitted.

II

Admitted.

III

Denied. Plaintiff was obligated to perform the work as required by the contract. Defendant's project manager demanded that plaintiff comply with the contract terms. Plaintiff selected erection of a "haul structure" as means of doing so.

DEPARTMENT OF JUSTICE
JUSTICE BUILDING
SALEM, OREGON 97310
PHONE 378-4400

Defendant denies that the haul structure was the only manner in which plaintiff could comply but admits that construction of the haul structure was a reasonable means of providing a way to cross the highway and reverse direction of construction equipment while maintaining the traffic flows required by the contract. Defendant denies that plaintiff incurred expenses in the amounts set out and denies that plaintiff performed any work required by the contract for which it was not fully compensated at the agreed upon contract price.

IV

Defendant admits that plaintiff was timely in the submission of its claim for alleged extra work and that defendant has refused to pay the claim.

V

The allegation is admitted for the purpose of this litigation.

VI

Denied. Defendant has not violated the contract and has paid all sums for which it is obligated.

VII

Denied as to both entitlement and the amount.

SECOND CLAIM FOR RELIEF

VIII

Defendant admits that plaintiff did perform contract work and it did erect the haul structure to assist it in doing so. Defendant denies any remaining allegations.

IX

Denied. Defendant avers that all work required by the contract was compensated for at the contract price. The contract required that plaintiff accomplish its work while maintaining specified traffic flows. The means for doing this was left to the plaintiff and the cost of doing it was included in the contract price.

X

Defendant admits that plaintiff erected a "haul structure" to facilitate its performance of its contractual obligations. Defendant denies the remaining allegations of paragraph X. Defendant denies that it received any benefit from plaintiff's work that was not fully compensated for at the agreed contract price.

XI

Denied. Any award made would be in derogation of the agreement between the parties and unjustly deprive defendant of the benefit of its bargain by unjustly enriching the plaintiff.

WHEREFORE, defendant prays that both of plaintiff's Claims for Relief be denied and that plaintiff take nothing.

Respectfully submitted,

DAVE FROHNMAYER
Attorney General

/s/ WILLIAM F. CLORAN
WILLIAM F. CLORAN OSB# 72050
Assistant Attorney General
Of Attorneys for Defendant
100 State Office Building
Salem, Oregon 97310
Telephone: 378-6313

CERTIFICATE OF SERVICE

I hereby certify that on the 6th day of March, 1984, I served a true copy of the within Answer which is well founded in law upon plaintiff's attorney, by depositing it in the United States Post Office at Salem, Oregon, postage prepaid, addressed as follows:

Levi J. Smith
Attorney at Law
200 Market Building, Suite 453
200 S. W. Market Street
Portland, Oregon 97201

/s/ WILLIAM F. CLORAN

William F. Cloran
Assistant Attorney General
Of Attorneys for Defendant
100 State Office Building
Salem, Oregon 97310
Telephone: 378-6313
O.S.B. No. 72050

mj

☐ Tax Court
☐ Supreme Court
☒ Circuit Court
☐ District Court
☐ U.S. District Court

Re: Hatch
v. State SO
Case No. L83-2029
Our File No.
Answer
(Title of Document)

☐ Signed ______, 19__
☑ Filed March 7, 1984
By Judge ______

Josie McLane
(Clerk's Sig.)

SP*[illegible]-137

9363 F

FORM 81-734-3001

OREGON STATE HIGHWAY DIVISION

FIELD ENGINEER'S WEEKLY REPORT

FOR CONSTRUCTION PROJECTS ONLY
CONSTRUCTION AND BRIDGE SECTION

SECTION: Roberts Cr-Dillard Intge

WEEK ENDING: Feb. 25, 1984

SECTION PREFIX: 610-1006

HIGHWAY: Pacific

COUNTY: DOUGLAS

NAME OF JOB: Roberts Cr-Dillard Intge

KIND OF WORK: Grading, Structures, Paving, Barriers, Signing

CONTRACTOR: R. A. Hatch Co.

CONTRACT NUMBER: 9363

FEDERAL AID PROJECT NUMBER: I-IR-5-2(91)113

DATE OF CONTRACT: Sept 30, 1981

DATE WORK STARTED: Oct 22, 1981

ESTIMATED COMPLETION DATE:

AVERAGE FORCE ON PROJECT FOR THE WEEK: MEN: 0 SUPERVISION: 0

SPECIFIED WORK DAYS

SPECIFIED CALENDAR DAYS 600

WORK DAYS USED

CALENDAR DAYS USED 634

SPECIFIED COMPLETION DATE

PERCENT OF TIME ELAPSED 106

PROJECT AUTHORIZATION: $ 6,589,456.38

PERCENT OF CONTRACT COMPLETED BASED ON ESTIMATED COST 100

EXCLUSIVE OF ENGINEERING: $ 6,120,517.26

ENGINEERING AUTHORIZATION $ 468,939.12

PERCENT OF CONTRACT COMPLETED BASED ON TOTAL AUTHORIZATION 99

ESTIMATED COST OF COMPLETED PROJECT, EXCLUSIVE OF ENGINEERING: $ 5,949,227.00

ENGINEERING COST TO DATE $ 596,300.00

DATE PROJECT WAS COMPLETED: 8-5-83

ESTIMATED PERCENT: OVERRUN UNDERRUN Underrun 2 %

PERCENT OF AUTHORIZATION 127 %

ESTIMATED PERCENT COMPLETE (ROADWORK)

CLEARING	DRAINAGE	GRADING	BASE	OIL AND/OR PAVE.	MAT'L. PROD.	CTB	
100	100	100		100		100	

	GRADING	SURFACING	MAINTENANCE MATERIALS	OIL & BITUMINOUS ~~XXXXXXXXX~~ CTB	PAVING
MILES IN PROJECT					
MILES PARTIALLY COMPLETED					
MILES COMPLETED					
TOTAL ESTIMATED QUANTITIES (CONTRACT)	295,100 cy			68,500 ton	54,400 ton
TOTAL QUANTITIES CORRECTED TO DATE	276,100			70,677	57,500
ESTIMATED QUANTITIES MOVED OR PLACED TO DATE	276,100			70,677	57,500
AVERAGE DAILY QUANTITIES	0			0	
AVERAGE DAILY QUANTITIES NECESSARY TO COMPLETE PROJECT ON TIME	0			0	0
NUMBER OF SHIFTS PER DAY	0			0	0
HOURS PER SHIFT	0			0	0

EQUIPMENT USED DURING THE WEEK:

ESTIMATED PERCENT COMPLETE (STRUCTURES)

BRIDGE NO.	7835	7835A	7839	7839A	7914A			
PERCENT	100	100	100	100	100			

		WEATHER	WORK DAYS CHARGED	HOURS DELAY	CAUSE OF DELAY
SUNDAY	19		0		
MONDAY	20		0		
TUESDAY	21		0		
WEDNESDAY	22		0		F
THURSDAY	23		0		
FRIDAY	24		0		8
SATURDAY	25		0		

RECEIVED
CONSTRUCTION SECTION
CM
CA
LS

GENERAL DESCRIPTION OF ACTIVITIES FOR THE WEEK

19 SUNDAY	No Activity
20 MONDAY	No Activity
21 TUESDAY	No Activity
22 WEDNESDAY	No Activity
23 THURSDAY	No Activity
24 FRIDAY	No Activity
25 SATURDAY	No activity

REMARKS

Project status: All contract work completed.

Needed for third notification: Certification of completion
Request for Final Inspection
Extra work approval

SIGNED Ronald V. Busey LOCATION Roseburg
Ronald V. Busey

PRIME RESIDENT SUBMIT 2 COPIES WHEN BRIDGES AND GRADING BOTH ARE INVOLVED. SUBMIT 3 COPIES

SP*F216

9363

2-15-84

IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF DOUGLAS

R. A. HATCH CO., an Oregon corporation, Plaintiff, vs. STATE OF OREGON by and through the Transporatation Commission, Defendant.	)	No. L83-2029 FIRST AMENDED COMPLAINT (FIRST CLAIM--BREACH OF CONTRACT; SECOND CLAIM--UNJUST ENRICHMENT)

Plaintiff alleges:

FIRST CLAIM FOR RELIEF

(Breach of Contract)

I.

At all times material plaintiff is and has been an Oregon corporation.

II.

On or about September 30, 1981, plaintiff entered into a contract with defendant, acting through the Transportation Commission, wherein plaintiff agreed to perform and complete the highway construction work associated with grading, paving, barriers, structures and signing at the Roberts Creek--Dillard Interchange on Interstate Highway I-5 in Douglas County, Oregon. Pursuant to the terms and conditions of that contract the defendant State of Oregon agreed to pay for the work performed.

III.

Pursuant to the contract with the State of Oregon, plaintiff was obligated to perform the work in a manner required of it by the project manager, an agent of defendant. After the entry into the contract, and contrary to what plaintiff had been told by defendant before entering into the contract, the project manager required plaintiff to erect at the site of the work a haul structure to facilitate the passage over the I-5 freeway of vehicles utilized by plaintiff in carrying out the work. The haul structure was the only approved means of passage over the freeway for vehicles, trucks, and equipment being utilized by plaintiff at the work site. Plaintiff necessarily and reasonably spent $100,000.00 to erect the haul structure. In connection with and subsequent to the erection, maintenance and utilization of this haul structure, and continuing at miscellaneous times and places on the project site, plaintiff was required by the project manager and his representatives, and by the existence of the haul structure, to perform the work in a manner which, had the haul structure had not been required, would not have been necessary to the successful completion of the work. In this regard, plaintiff was required to have the asphalt paving subcontractor utilize only the required haul structure as a means of crossing and reversing direction on the Interstate Highway I-5, all to the added expense to the plaintiff of $109,400.00; plaintiff was required to expend an additional $34,250.00 for the movement of trucks and equipment over the haul structure for the cement treated base portion of the project; plaintiff was required to expend the sum of $30,000.00 for the movement of rock over the haul structure at the location of the project, as well as miscellaneous expenses of some $50,000.00 having to do with the flow of men, materials and equipment on the work site, all of which was necessitated by limiting the passage over the freeway and reversal of direction at the project site to the haul structure.

The sum of $323,650.00 was the total sum reasonably expended by the plaintiff in doing the work required by the project manager. The above recited work was in addition to the work plaintiff was told it would have to perform prior to entering into the contract, and according to the contract, plaintiff was entitled to be paid for such additional work.

IV.

Timely written demand was made by plaintiff for payment of the above sum but the defendant has failed and refused to pay any part of said sum.

V.

Plaintiff has performed all other conditions imposed upon it by the contract.

VI.

Defendant's refusal to pay the above sum constitutes a knowing and material violation of its obligations under the contract.

VII.

Wherefore, as a direct result of defendant's breach of the contract, plaintiff has been damaged in the amount of $323,650.00.

SECOND CLAIM FOR RELIEF

(Unjust Enrichment)

VIII.

Following the entry of the contract with defendant on September 30, 1981, plaintiff performed certain work as referred to in paragraphs II and III above at the request and instance of defendant.

IX.

Defendant claims that said work was not covered by the contract entered into with plaintiff on September 30, 1981.

X.

The plaintiff did such work believing it was compelled to by its contractual relationship and the reasonable value of such work, the benefit of which has been received by the defendant, is $323,650.00.

XI.

It would be unjust and inequitable for defendant to receive the benefit of plaintiff's work without paying for it, and defendant would be unjustly enriched if it were permitted to receive such work without payment.

WHEREFORE, on its First Claim for Relief, plaintiff prays for a judgment against defendant in the amount of $323,650.00 plus its costs herein.

Alternatively, on its Second Claim for Relief, plaintiff prays for a judgment in the amount of the reasonable value of the work it provided to defendant, or $323,650.00.

/s/ Levi J. Smith

Levi J. Smith (Bar No. 70135)
Attorney for Plaintiff

CERTIFICATE — TRUE COPY

I hereby certify that the foregoing copy of First Amended Complaint *is a complete and exact copy of the original.*

Dated February 15, 19 84

Attorney(s) for Plaintiff

ACCEPTANCE OF SERVICE

Due service of the within .... *is hereby accepted on* ...., *19*......, *by receiving a true copy thereof.*

Attorney(s) for ....

CERTIFICATES OF SERVICE

Personal

I certify that on ...., *19*......, *I served the within* .... *on* .... *attorney of record for* .... *by personally handing to said attorney a true copy thereof.*

Attorney(s) for ....

At Office

I certify that on ...., *19*......, *I served the within* .... *on* .... *attorney of record for* ...., *by leaving a true copy thereof at said attorney's office with his/her clerk therein, or with a person apparently in charge thereof, at* ...., *Oregon.*

Attorney(s) for ....

Mailing

I hereby certify that I served the foregoing First Amended Complaint *on* Leslie B. Hampton, Assistant Chief Trial Counsel, *attorney(s) of record for* Defendant *on* February 15, 19 84, *by mailing to said attorney(s) a true copy thereof, certified by me as such, contained in a sealed envelope, with postage paid, addressed to said attorney(s) at said attorney(s) last known address, to-wit:* 100 State Office Building, Salem, Oregon 97310

and deposited in the post office at Portland, *Oregon, on said day.*

Dated February 15, 19 84

/s/ Levi J. Smith

Attorney(s) for Plaintiff

LEVI J. SMITH, P.C., Lawyer
200 Market Building, Suite 453
200 S. W. Market Street
Portland, Oregon 97201
(503) 241-8230

BACKING SHEET

9363

2-2-84

IN THE CIRCUIT COURT OF THE STATE OF OREGON FOR DOUGLAS COUNTY

R. A. HATCH CO., an Oregon corporation, Plaintiff, vs. STATE OF OREGON, by and through the Transportation Commission, Defendant.	Case No. L83-2029 ORDER

FILED
AT 4:25 O'CLOCK P M
FEB 4 1984
TRIAL COURT CLERK
BY JESSIE M. LARNER

Defendant's motion to make more definite and certain having been considered;

IT IS ORDERED:

Motions II and III are allowed; and,

Motion I is denied; and,

Plaintiff shall have 20 days to plead over; and,

Defendant shall have 20 days from Plaintiff's amended filing to respond.

Dated: February 2, 1984.

CIRCUIT JUDGE

Copy to:

Levi J. Smith
Attorney at Law
200 Market Building, Suite 453
200 S.W. Market Street
Portland, Or 97201

Leslie B. Hampton
Assistant Chief Trial Counsel
100 State Office Building
Salem, Or 97310

9363

1-17-84

IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF DOUGLAS

Case No. L83-2029

R. A. HATCH CO.,
an Oregon corporation,

Plaintiff,

v.

STATE OF OREGON, by and through
the Transportation Commission,

Defendant.

MOTION TO MAKE MORE DEFINITE AND CERTAIN
(Oral Agrument Not Requested)

The defendant State of Oregon, as a separate motion in each of the following paragraphs, moves the court for an order making portions of the Complaint more definite and certain. All of the following motions are on the grounds that the allegations moved against are so indefinite or uncertain that the precise nature of the charge is not apparent.

I

Defendant moves for an order making paragraph III, page 2, lines 3-6 which read:

> "After the entry into the contract, the project manager required plaintiff to erect at the site of the work a haul structure to facilitate the passage over the I-5 freeway of vehicles utilized by plaintiff in carrying out the work."

more definite and certain by setting out the time and place and manner (orally or in writing) by which defendant's project manager allegedly required plaintiff to erect a haul structure.

II

Defendant moves for an order requiring paragraph III, page 2, lines 6-11 which read as follows:

> "In connection with the erection, maintenance and utilization of this haul structure, plaintiff was required by the project manager to carry out certain other activities which, had the haul structure not been required, would not have been necessary to the successful completion of the work."

more definite and certain by setting out the time and place and manner (orally or in writing) by which defendant's project manager allegedly required plaintiff to carry out certain other activities; and by describing with particularity the nature of the "certain other activities."

III

Defendant moves for an order requiring paragraph III, page 2, lines 11-14 which read:

> "The cost to the plaintiff of the haul structure and related work required of it by the project manager was the sum of $323,650.00, * * * "

more definite and certain by separately stating the alleged cost of said haul structure and the alleged cost of the related work item or items.

///

///

///

///

///

///

In support of its motions, defendant State of Oregon relies on ORCP Rule 21 and cases interpretive thereof. Defendant further contends that under Rule 18 it is entitled to a plain and concise statement of the ultimate facts making up plaintiff's claim for relief.

Respectfully submitted,

DAVE FROHNMAYER
Attorney General

LESLIE B. HAMPTON OSB# 53037
Assistant Chief Trial Counsel
Of Attorneys for Defendant
100 State Office Building
Salem, Oregon 97310
Telephone: 378-6313

CERTIFICATE OF SERVICE

I hereby certify that on the 17th day of January, 1984, I served a true copy of the within Motion to Make More Definite and Certain which is well founded in law upon plaintiff's attorney, by depositing it in the United States Post Office at Salem, Oregon, postage prepaid, addressed as follows:

Levi J. Smith
Attorney at Law
200 Market Building, Suite 453
200 S. W. Market Street
Portland, Oregon 97201

Leslie B. Hampton
Assistant Chief Trial Counsel
Of Attorneys for Defendant
100 State Office Building
Salem, Oregon 97310
Telephone: 378-6313
O.S.B. No. 53037

mj

9363

LEVI J. SMITH, P. C.
LAWYER
200 MARKET BUILDING, SUITE 453
200 S.W. MARKET STREET
PORTLAND, OREGON 97201
(503) 241-8230

January 10, 1984

Mr. Leslie B. Hampton
Assistant Chief Trial Counsel
Department of Justice
Trial Division
Justice Building
Salem, Oregon 97310

Re: R. A. Hatch Co. vs. State of Oregon
Douglas County Circuit Court No. L83-2029
Multnomah County Circuit Court No. A8310-06153

Dear Mr. Hampton:

Regarding the above captioned cases, you need to make an appearance in each case. Please treat this letter as my intent to take a default in the above referenced matters unless an appearance is made within ten (10) days of the date of this letter.

Sincerely,

Levi J. Smith

LJS:js
cc: R. A. Hatch Co.

-9363

12-13-83

IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF DOUGLAS

R. A. HATCH CO., an Oregon corporation,

Plaintiff,

vs.

STATE OF OREGON, by and through the Transportation Commission,

Defendant.

No. L83-2029

ORDER

THIS MATTER came on before the undersigned Judge for hearing on defendant's motion for change of venue on December 12, 1983, and plaintiff being represented by its counsel, Levi J. Smith, and defendant having waived the presence of counsel at the time of hearing on the motion, the court having heard the arguments of counsel and being fully advised in the premises, it is hereby

ORDERED that defendant's motion for change of venue is denied.

DATED this ______ day of December, 1983.

____
Don H. Sanders
Circuit Court Judge

CERTIFICATE — TRUE COPY

I hereby certify that the foregoing copy of Order *is a complete and exact copy of the original.*

Dated December 13, 1983

Attorney(s) for Plaintiff

ACCEPTANCE OF SERVICE

Due service of the within .... *is hereby accepted on* ...., *19*...., *by receiving a true copy thereof.*

Attorney(s) for ....

CERTIFICATES OF SERVICE

Personal

I certify that on ...., *19*...., *I served the within* .... *on* .... *attorney of record for* .... *by personally handing to said attorney a true copy thereof.*

Attorney(s) for ....

At Office

I certify that on ...., *19*...., *I served the within* .... *on* .... *attorney of record for* ...., *by leaving a true copy thereof at said attorney's office with his/her clerk therein, or with a person apparently in charge thereof, at* ...., *Oregon.*

Attorney(s) for ....

Mailing

I hereby certify that I served the foregoing Order *on* Leslie B. Hampton, *attorney(s) of record for* Defendant *on* December 13, *19*83, *by mailing to said attorney(s) a true copy thereof, certified by me as such, contained in a sealed envelope, with postage paid, addressed to said attorney(s) at said attorney(s) last known address, to-wit:* 100 State Office Building, Salem, Oregon 97310

and deposited in the post office at Portland, *Oregon, on said day.*

Dated December 13, 1983

/s/ Levi J. Smith

Attorney(s) for Plaintiff

LEVI J. SMITH, P.C., Lawyer
200 Market Building, Suite 453
200 S. W. Market Street
Portland, Oregon 97201
(503) 241-8230

BACKING SHEET

1/1/80-B

FORM No. 100½—STEVENS-NESS LAW PUB. CO., PORTLAND, ORE.

9363

CL 83-268

1859

VICTOR ATIYEH
GOVERNOR

Department of Transportation

TRANSPORTATION BUILDING, SALEM, OREGON 97310

FILED
DEC 8 1983
NORMA PAULUS
SECRETARY OF STATE

December 6, 1983

IN REPLY REFER TO
FILE NO.:

CON 5
#9363

Green Bank Line Construction
Box 441
Lebanon, OR 97355

Attention: R. L. Ray

Gentlemen:

This will acknowledge your letter dated November 28, 1983, filing a claim against the following Highway Division contract:

FILED BY:	Green Bank Line Construction
AMOUNT:	$1,698.52
AGAINST (Prime contractor):	R. A. Hatch Co.
CONTRACT NO.:	9363
PROJECT:	Roberts Creek-Dillard Interchange Section, Pacific Highway, Douglas County
SURETY:	Industrial Indemnity Company
AGENT:	Corroon & Black of Oregon

NOTED ON [illegible]
Dec 12, 1983
Kjm

We will advise the surety and the contractor of the receipt of this claim. We will also forward it to the Secretary of State for filing.

Please advise this office when your claim has been paid.

Sincerely,

Robert W. Gormsen

Robert W. Gormsen
COMMISSION SERVICES

RECEIVED
DEC 12 1983
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

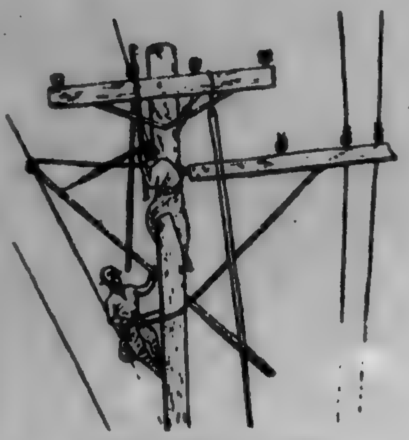
cc: R. A. Hatch Co.
P. O. Box 6179
Bend, OR 97708

Industrial Indemnity Co.
Attn: Bond Department
421 S.W. 6th Avenue
Portland, OR 97204

bc: ✓ Secretary of State - Please acknowledge receipt of the attached claim on the enclosed copy of this letter.

POWERLINE CONSTRUCTION & MAINTENANCE

UNDERGROUND CABLE & MAINTENANCE



"Li'l Jake's Crew"

Green Bank Line Construction
P. O. BOX 451
LEBANON, OREGON 97355
(503) 451-2474

November 28, 1983

Mr. Robert Gormsen
Commission Services
Room 121
Transportation Building

Re: O.S.H.D. Contract 9363 Roberts Creek Dillard Interchange Douglas County

Amount owed Green Bank Line Construction by R.A.Hatch Co. Box 201 Bend, Oregon 97701 1,698.52 one thousand six hundred ninety eight dollars and fifty two cents.

Thank you,

Green Bank Line Construction

R.L.Ray

R.L.Ray

Owner

RECEIVED
NOV 30 1983
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

9363

11-23-83

IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF DOUGLAS

Case No. L83-2029

R. A. HATCH CO.,
an Oregon corporation,

Plaintiff,

v.

STATE OF OREGON, by and through
the Transportation Commission,

Defendant.

DEFENDANT'S REPLY MEMORANDUM IN SUPPORT OF ITS MOTION FOR CHANGE OF VENUE

Plaintiff has filed a memorandum in opposition to defendant's motion for change of venue. In our opening memorandum, we pointed out that the subject action is under the provisions of ORS 14.080, which provides in part:

> "All other actions or suits shall be commenced and tried in the county in which the defendants, or one of them, resides or may be found at the commencement of the action or suit * * * "

We also pointed out that the seat of government of the State of Oregon under the Constitution and the principle office of its Transportation Commission and Department of Transportation, Highway Division, is in Salem, Marion County, Oregon, citing cases and Constitutional provisions.

Plaintiff's principle argument is that venue is in Douglas County because of the provisions of ORS 14.060 which provides:

///

> "Venue of suits against state departments and officials. Any suit against any department, official, officer, commissioner, commission or board of the state, as such, or in virtue of such status, other than a suit for causes enumerated in ORS 14.040, may be brought in the county wherein the cause of suit, or some part thereof, arose.

Plaintiff argues that the adoptions of the Oregon Rules of Civil Procedure abolished all distinctions between suits in equity and actions at law. Plaintiff's position is overly broad and unsound. ORCP 2 and ORS 174.590 cited by plaintiff refers to the abolishment only of "procedural distinctions." Distinctions between law and equity as to matters of substance were not abolished. We first point out that neither the Oregon Rules of Civil Procedure as originally adopted or amendments thereto have addressed the subject of jurisdiction and venue. The venue statute contained in Chapter 14 ORS remains intact and has not been modified by the Oregon Rules of Civil Procedure. In an article commenting on the adoption of ORCP 2, Fredrick R. Merrill stated:

> "The action of counsel (that promulgated the ORCP Rules) has no effect upon the substantive elements of law in equity. The rule making power of the counsel is limited to procedure. Rule 2 specifically only refers to procedural distinctions. * * * " Oregon Law Institute, Oregon Civil Procedure Rules (1980), p. 225.

In Rose v. Etling, 255 Or 395, 467 P2d 633 (1970) the court stated at page 399:

///

///

///

> "Even though the right of a defendant to a change of venue has been described as a 'personal privilege' it is nevertheless a 'right.' *Mutzig v. Hope*, 176 Or 368, 397, 158 P2d 110 (1945). Furthermore, this court has expressly recognized that a motion by defendant for change of venue is defendant's only 'remedy' to enforce such a 'right.' *Mack Trucks, Inc. v. Taylor*, 227 Or 376, 382, 362 P2d 364 (1962).

In conclusion, defendant State of Oregon submits that the legislature by adopting the Oregon Rules of Civil Procedure did not intend to modify the venue statutes set out in Chapter 14 ORS. Therefore, venue for a contract action against the Oregon Transportation Commission comes under the provisions of ORS 14.080; venue is properly laid in Marion County, Oregon. Defendant State of Oregon's Motion should be allowed.

Respectfully submitted,

DAVE FROHNMAYER
Attorney General

/s/ Leslie B. Hampton

LESLIE B. HAMPTON OSB# 53037
Assistant Chief Trial Counsel
Of Attorneys for Defendant
100 State Office Building
Salem, Oregon 97310
Telephone: 378-6313

CERTIFICATE OF SERVICE

I hereby certify that on the 23rd day of November, 1983, I served a true copy of the within Reply Memorandum in Support of its Motion for Change of Venue which is well founded in law upon plaintiff's attorney, by depositing it in the United States Post Office at Salem, Oregon, postage prepaid, addressed as follows:

Levi J. Smith
Attorney at Law
200 Market Building, Suite 453
200 S. W. Market Street
Portland, Oregon 97201

/s/ Leslie B. Hampton

Leslie B. Hampton
Assistant Chief Trial Counsel
Of Attorneys for Defendant
100 State Office Building
Salem, Oregon 97310
Telephone: 378-6313
O.S.B. No. 53037

mj

9363

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
Region 3
P.O. BOX 1128, ROSEBURG, OREGON 97470 PHONE 440-3399

November 8, 1983

Tim Wood
Assistant Attorney General
Department of Justice
100 Justice Building
Salem OR 97310

In Reply Refer to
File No.:

Re: Roberts Cr.-Dillard Jct.

Ron Busey and I met with John Loosley of Roseburg Paving on November 7, 1983 to discuss the pending lawsuit brought by Robert Hatch. The following are the answers to the specific questions asked of John:

1. Hatch did not use Loosley's quote. John thinks he quoted to Hatch after contract was awarded.
2. He knew there would be a haul structure when he worked up his quote to Hatch. Because of conflict with Hatch's haul vehicles and since most of paving was done after the haul structure was cut off, Roseburg Paving got little benefit from the structure.
3. Roseburg Paving as well as Hatch did cross the median near Roberts Cr. and at the south foot of Roberts Mt. Only practical places to cross without stopping traffic which would have been against contract provisions.
4. John stated positively he has no interest in the lawsuit and was not aware of it until I talked to him last week.

I don't believe there is anything more we can get from John that would help our case but discovery and deposition might change that.

J. X. Wilson
J. X. WILSON
Region Construction Engineer

jxw/cw

Form 734-1829

9363

LEVI J. SMITH, P. C.
LAWYER
200 MARKET BUILDING, SUITE 453
200 S.W. MARKET STREET
PORTLAND, OREGON 97201
(503) 241-8230

October 31, 1983

Mr. Leslie B. Hampton
Assistant Chief Trial Counsel
100 State Office Building
Salem, Oregon 97310

Re: R. A. Hatch Co. vs. State of Oregon
Douglas County Circuit Court No. L83-2029

Dear Mr. Hampton:

The court requires a stipulation and cannot accomodate us on November 14th. If December 12th is okay, please sign the stipulation and mail it to the court in the enclosed self-addressed envelope.

If you have any questions, please give me a call.

Sincerely,

Levi J. Smith

LJS:js
Enclosures
cc: R. A. Hatch Co.

IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF DOUGLAS

R. A. HATCH CO., an Oregon corporation,
Plaintiff,
vs.
STATE OF OREGON, by and through the Transporation Commission,
Defendant.

No. L83-2029

STIPULATION RE POSTPONEMENT OF HEARING AND ORDER THEREON

The parties stipulate that the hearing scheduled for Monday, November 7, 1983, at 2:30 p.m. on the pending Motion to Change Place of Trial may be rescheduled to Monday, December 12, 1983.

SO STIPULATED this 1st day of November, 1983.

Levi J. Smith (Bar No. 70135)
Attorney for Plaintiff

Leslie B Hampton
Leslie B. Hampton (Bar No. 53037)
Attorney for Defendant

SO ORDERED this ______ day of November, 1983.

Circuit Court Judge

9363

10-18-83

IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF DOUGLAS

R. A. HATCH CO., an Oregon corporation,

Plaintiff,

vs.

STATE OF OREGON by and through the Transportation Commission,

Defendant.

No. L83-2029

PLAINTIFF'S RESPONSE TO DEFENDANT'S MOTION TO CHANGE PLACE OF TRIAL AND REQUEST FOR ORAL ARGUMENT

Plaintiff responds as follows to defendant's motion regarding venue.

ORS 14.060 provides as follows:

> "Venue of suits against state departments and officials. Any suit against any department, official, officer, commissioner, commission or board of the state, as such, or in virtue of such status, other than a suit for the causes enumerated in ORS 14.040, may be brought in the county wherein the cause of suit, or some part thereof, arose."

There can be no serious doubt as to where the instant dispute arose. The work was done in Douglas County and the decision to deny plaintiff's claim was made by the State in Douglas County. See Exhibit A attached.

No Oregon case has ever held that the use of the word "suit" in the above statute limited the application of ORS 14.060 to cases in equity. Even if such an argument could possibly have been made prior to the enactment and adoption of the Oregon Rules of Civil Procedure, it is now particularly clear that the distinctions between "law" and "equity" cases have been abrogated, and the term suit found in the statute imposes no limitation on that statute's application to the instant situation.

ORCP 2 provides:

> "One form of action. There shall be one form of action known as a civil action. All procedural distinctions between actions at law and suits in equity are hereby abolished, except for those distinctions specifically provided for by these rules, by statute, or by the Constitution of this state."

In the 1979 session, the Legislature modified some litigation related statutes to show that it wished to broaden the former meaning given to particular terms. Other statutes it left alone. However, to make sure that such unchanged statutes would not be read narrowly, the Legislature enacted what is now ORS 174.590. ORS 174.590 provides:

> "Statutory terminology not intended to preserve procedural distinctions between actions and suits. References in the statute laws of this state, including provisions of law deemed to be rules of court as provided in ORS 1.745, in effect on or after January 1, 1980, to actions, actions at law, proceedings at law, suits, suits in equity, proceedings in equity, judgments or decrees are not intended and shall not be construed to retain procedural distinctions between actions at law and suits in equity abolished by ORCP 2." (Emphasis supplied).

What the plaintiff has done here is simply sue the State on a contract dispute in the county where the dispute arose. There is absolutely no bar to bringing the action here.

Arguably, there is an alternate basis why Douglas County is proper. ORS 14.080 provides:

> "Actions and suits that are to be brought where defendant resides or is found, or where plaintiff designates. All other actions or suits shall be commenced and tried in the county in which the defendants, or one of them, reside or may be found at the commencement of the action or suit, except that an action founded on an alleged tort may be commenced either in the county where the cause of action arose or in the county where the defendants, or one of them, reside or may be found at the commencement of the action. If none of the defendants reside in this state the action or suit may be tried in any county which plaintiff may designate in his complaint."

As reflected in Exhibit A attached, and about which there can be no doubt, the State of Oregon is found and was to be found in Douglas County, through the presence of its agents and agencies, at the time of the commencement of this action. If somehow ORS 14.060 were seen not to be applicable, then ORS 14.080 would provide an alternate basis for the suit proceeding here.

The cases cited by the defendant are not in point, and references to locations where the Department of Transportation may be served with summons, or the location of the seat of state government, are similarly beside the point.

The motion should be denied.

Respectfully submitted this ______ day of October, 1983.

/s/ Levi J. Smith

Levi J. Smith (Bar No. 70135)
Attorney for Plaintiff

EXHIBIT A

RECEIVED
MAY 6 1983

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
Region 3
P.O. BOX 1128, ROSEBURG, OREGON 97470 PHONE 440-3399

May 5, 1983

R. A. Hatch Co.
P. O. Box 6179
Bend OR 97708

In Reply Refer to
File No.:

Re: Roberts Cr.-Dillard Int. Sec.
Pacific Highway
Douglas County

Dear Mr. Hatch:

After our recent meeting in Ron Busey's office, I have reviewed your claims and have the following to offer:

Haul Structure - I must deny this claim. I can't believe a reasonable and prudent contractor would bid a job of this magnitude without having the issue of median crossings nailed down. The interpretation of the specs by an assistant project manager certainly wouldn't do that. In the absence of the project manager, the region or Salem offices are always available for project clarification.

Wire Conflict - Again I must deny this claim. Plan location of temporary illumination is really only schematic. We did not dictate how wire was to be handled between poles. Conflict with your other activities was something you should have foreseen.

Screening Plant - Resolved by P.A.

Sequential Arrow - I am in a position to offer only added fuel costs for use over and above work called for on the plans. You have already been compensated for servicing labor.

Pit Development - Because of the significant underrun of inlay quantity, I believe you are entitled to recover some of the fixed development cost. Our cost analysis section has determined that for the planned quantity of rock, the cost of pit development would have been approximately $16,000. Since only about 70% of planned quantity of rock was used, an adjustment of approximately $4,800 could be made.

West Rock Inlay Placement - I can see no way to justify this request. Our records show the inlay was built only 7 feet higher than planned which should have had negligible effect. Also, you should have realized significant benefit by not having to "drill and shoot" to the planned depth of excavation.

Pipe Under Pavement - Resolved by P.A.

54" Pipe Crossing - I concur with your contention that installing this pipe early in the job, all at one time, was the proper procedure. Staging would have been difficult and no doubt would have resulted in other construction problems and more inconvenience to the traveling public. We will pay "pipe under pavement" for this installation.

12" Slotted Drain - I must deny claim for "pipe under pavement" for this item. When intended, the plans clearly state the lineal footage for each run. There is no mention of "pipe under pavement" for slotted drains. I can show we historically have not paid for this item.

Structural Overlay - The contract calls for a minimum of 2" over the existing deck and 2½" over reinforced steel. This requirement would automatically result in an average thickness somewhat greater than 2" to secure a uniform grade line. The average thickness for all decks turned out to be slightly less than 3" which is certainly reasonable but might be somewhat more than bid. I could offer a settlement of the material cost only for 1/2-inch of thickness over the affected area.

Changed Conditions - The basis for this claim is equipment brought to the job and not used because of deleted work. I would certainly expect that equipment transporting would have been included in the appropriate bid item "Mobilization". If there were other costs involved, however, I will give consideration.

After you have reviewed my response, please let me know if we can resolve your claims prior to appealing to the Construction office.

Cordially,

J. X. Wilson

J. X. WILSON, P.E.
Region Construction Engineer

jxw/cw

cc C. T. Keasey
Ron Busey
Don Rapaich, P.O. Box 18160, Portland 97218

CERTIFICATE — TRUE COPY

I hereby certify that the foregoing copy of Plaintiff's Response *is a complete and exact copy of the original.*

Dated October 18, 1983

Attorney(s) for Plaintiff

ACCEPTANCE OF SERVICE

Due service of the within .... *is hereby accepted on* ...., 19...., *by receiving a true copy thereof.*

Attorney(s) for ....

CERTIFICATES OF SERVICE

Personal

I certify that on ...., 19...., *I served the within* .... *on* .... *attorney of record for* .... *by personally handing to said attorney a true copy thereof.*

Attorney(s) for ....

At Office

I certify that on ...., 19...., *I served the within* .... *on* .... *attorney of record for* ...., *by leaving a true copy thereof at said attorney's office with his/her clerk therein, or with a person apparently in charge thereof, at* ...., *Oregon.*

Attorney(s) for ....

Mailing

I hereby certify that I served the foregoing Plaintiff's Response to Defendant's Motion to Change Place of Trial and Request for Oral Argument on Leslie B. Hampton

attorney(s) of record for Defendant *on* October 18, 1983, *by mailing to said attorney(s) a true copy thereof, certified by me as such, contained in a sealed envelope, with postage paid, addressed to said attorney(s) at said attorney(s) last known address, to-wit:* 100 State Office Building, Salem, Oregon 97310

and deposited in the post office at Portland, *Oregon, on said day.*

Dated October 18, 19 83

/s/ Levi J. Smith

Attorney(s) for Plaintiff

LEVI J. SMITH, P.C., Lawyer
200 Market Building, Suite 453
200 S. W. Market Street
Portland, Oregon 97201
(503) 241-8230

BACKING SHEET

1/1/80-B
FORM No. 100½—STEVENS-NESS LAW PUB. CO., PORTLAND, ORE.

9363

SUIT SUMMARY

File

10-17-83

CLAIM FILE # 734-980-L-8435

SUIT STYLED HATCH, R.A., Company v. STATE

COURT Circuit L83-2029 COUNTY Douglas

TORT ALLEGATIONS: N.A.

OTHER ALLEGATIONS (Non-Tort): N.A.

SUMMARY OF OCCURRENCE OR ACCIDENT: N.A.

SUMMARY OF INJURY OR DAMAGE: $323,650 damages claimed for alleged breach of contract

JOINT TORT FEASORS N.A. PERCENT OF NEGLIGENCE N.A.

PRAYER - SPECIALS $ N.A. GENERAL $ 323,650.00

ATTORNEY FEES $ --- OTHER RELIEF $ ---

DEMAND $ ______ SETTLEMENT OFFERED $ ______ PROPOSED $ 20,000

ANTICIPATED ADD'L LEGAL FEES & EXP RELATED TO STATE'S DEFENSE $ ______

ESTIMATED NEGLIGENCE OF STATE DEFENDANTS N.A. %

ESTIMATED PROBABLE CHANCE OF WINNING Unknown at this time %

PROBABLE JUDGMENT IF CASE LOST $ Unknown at this time

ESTIMATE OF PLAINTIFF'S COMPARATIVE NEGLIGENCE N.A. %

SHOULD SETTLEMENT BE CONSIDERED FROM FACTS DEVELOPED TO DATE (unknown) ___YES ___NO

REMARKS Contractor claims that he was told he could cross the I-5 freeway at grade in connection with his freeway job. Later he had to construct a haul structure over the freeway. He claims the costs of constructing the structure and related costs

ASSIGNED ATTORNEY Hampton/Wood DATE 10/17/83

Orig: John Mc
cc. Wm-Gary

JRMcC:ls
11/5/81

work-product

9363

10-12-83

PROJECT: Roberts Creek-Dillard Intchg
HIGHWAY: Pacific
CONTRACT NO: 9363
PREFIX: 610-1006
PROJECT MANAGER: Ron Busey

NARRATIVE ON OUTSTANDING CLAIMS

HAUL STRUCTURE: During the advertising period of the subject contract we had numerous calls regarding the project but there wasn't any from Bob Hatch until the last couple of days. It happened I had scheduled a vacation that week and was off Monday thru Wednesday of that week. Apparently both the region engineer and region construction engineer were out of town at least part of those three days.

Anyway Hatch apparently tried several times to contact me or someone in the region regarding the project. He finally got ahold of my assistant, Al Vohland and asked if they could haul across the freeway and cross the freeway with scrapers. Apparently Al missed the statement on page 5 of the special provisions which forbid the stopping of traffic. However the statement was not entirely clear inasmuch it stated that at least one lane must be open to traffic at all times. He advised he couldn't find anything that forbid it. Bob Hatch said he interpreted that to mean he could haul across traffic with scrapers.

I don't know if Bob Hatch made any attempt to call the construction section in Salem to get a answer to his questions. No mention has been made of this anytime in our conversations on this matter.

Shortly after the bid letting Bob Called me and said that he had talked to Al Vohland and had been advised he could haul across the freeway and that was the way he was going to do the job. I checked the specfications and called him back and advised he could not do that under the terms of the contract and I would not permit it. We argued at some length and I advised it was clear in the special provisions on the contract and we would hold to the terms of the contract. He said he had taken out some money for a planned haul structure after his conversation with Al. He mentioned the figure of $50,000 then and in a later conversation we had after the pre-construction conference.

It is my personnel opinion that he never intended to build the project without the haul structure. It is very clear in the special provisions that the intent is not to allow the stopping of traffic to cross with haul vehicles. Also on the construction plans on sheet 2F-3 there is a suggested haul plan which shows the material from the east side being hauled to the west side by going through a existing cattlepass. This would restrict the size of the hauling vehicle because the cattlepass is only 14' x 14'.

Hatch was never directed by me or anyone else on my staff to construct a haul structure. Bob never made any alternate proposals such as hauling with trucks and merging with traffic or using the cattlepass as shown on the plans. He just advised he was going to install a haul structure and put in a claim for it's cost.

There may be some confusion in terms in the various conversations on this matter. We did not prohibit them from crossing the median with trucks and such. The contract merely states that one lane of traffic must be kept open at all times which precludes them stopping traffic to allow earth moving equipment to cross the freeway. They were not stopped from crossing the median and did so whereever possible throughout the life of the project. It was not possible to cross the median in many areas however due to the presence of concrete and metal median barrier, difference in grades, and the narrow median widths.

The costs listed in R. A. Hatch's letter dated December 27, 1982 are mostly phoney in my opinion. The only cost ever mentioned prior to receiving this letter was the $50,000 he claimed he deducted from the bid for the structure.

The $100,000 listed for the haul structure I believe reflected his actual cost, which came to more than they estimated according to comments made during the project.

The asphalt deduction of $109,400 is apparently based on some estimated per ton reduction on haul costs based on the ability to turn around anywhere they pleased. This is totally unrealistic because there were many physical barriers to the asphalt trucks turning around anywhere they pleased such as median barriers, seperation of grades on the staging and in the overlay areas. There are only a few places the trucks could have turned around at will even if we had allowed them to stop traffic. The haul structure reduced their haul costs as indicated in a conversation with the owner of Roseburg Paving and my assistant. (See his memo to the file dated 10/22/81). If they could have stopped traffic to turn around at will it would have cost Roseburg Paving more per ton as they would have had to furnish flagmen, signing, and other traffic control measures. With the haul structure in place it allowed Roseburg Paving to turn around without incurring any of these extra costs.

The CTB deduction of $34,250 is not reasonable for the same basic reasons as listed on the asphalt deduction. They could not have turned around at will due to the physical limitations. They would have had to set up a crossing in the vicinity of where they built the haul structure because the grade matches at that point, and they would have had maintain traffic control signs and flaggers. The haul structure saved this expense.

The Rock Inlay deduction of $30,000 is not reasonable for the same reasons as the CTB. The rock inlay is even less of a advantage because this is nearly all located in one central location. This location is only a few hundred feet from the location of the haul structure. Once again the haul structure costs would be offset by the added expense of traffic control for a crossing of the freeway.

The misc other deductions of $50,000 I suppose is to cover his statement regarding the movement of materials and equipment. I suspect he pulled this out of thin air. The same argument applies to this cost.

It is difficult to pin down all the cost benefits of the haul structure. It seems apparent that the contractor did not intend to do extensive flagging since he bid only $1.00 per hour for flagging, of course these actual costs could have been hidden in other items. It would take a extensive analysis of haul patterns and so forth to get a realistic cost benefit for the haul structure, which we could do if given some time. I don't have anyone available that is famliar enough to do that research right at this moment. I will give you a example of the type of savings we are talking about however.

The rock inlay on the two big inlays came to about 70,000 cubic yards. If they hauled about 2,000 cubic yards a day it would take 35 days to place. To cross the freeway by stopping traffic would require two flaggers at $5.00 per hour. Their bid is only a $1.00 so there would be a cost to them of $4.00 per hour plus their own overhead costs. Say their out of pocket cost were $5.00 per hour for flaggers it would cost them $80 per day for flaggers or $2,800 for flaggers alone on the inlay. In addition there was concrete median barrier in the area of the inlays and they would have had to remove and replace it each day in order to cross the freeway. This would require a crane and at least two laborers each day for probably 1 1/2 hours. Say $25 rental on crane and $60 dollars a day for the labor would equal another $2100. This comes to a total of $4,900 for this one item alone. Then there is traffic control that would cost them unless they bid sufficiently high on the Temporary Protection & Direction of Traffic item to cover the expense of setting up and taking down of signs each day.

If you expand these costs to all the other items and misc equipment movement costs you could probably come pretty close to the cost of the haul structure. You would have to figure if there were any time savings on earthwork and other haul that would be a cost benefit for the haul structure. All this would take a great deal of analysis to get realistic cost benefits for the haul structure as opposed to flagging across the freeway. We would not have allowed them to haul across any permanent surfacing with illegal haul vehicles so it might be that they would have had to make some staging changes or used legal trucks for some of the earthwork. This would take quite a bit of research and analysis to identify.

It is my opinion that if Hatch really did remove a sum of money from the bid for not having to have a haul structure it would have been nearly offset by the extra costs incurred in stopping traffic and other costs not covered by bid items. His claim might have more validity if he had a realistic bid for flagging costs.

ROCK INLAY CLAIM--Hatch claimed that, when we encountered rock in the excavation of the area to place the west side inlay, that we eliminated the least costly of the quantity. There was a substantial reduction in quantities on this item. What happened is that when we reached the lower area of the excavation we encountered solid rock. Rather that drill and shoot and replace this with rock hauled in we just stopped and said to start placing the inlay. Then to insure that future slide material would not come over the top of the new inlay I raised the elevation of the inlay about 7 feet above the planned elevation to form a dike. Hatch claims the higher material cost more to place than the lower material. Our record do not indicate this so we denied the claim.

WIRE CONFLICT---In the vicinity of the retaining wall at station 2954 the temporary lighting goes through that area. They went ahead and put in the lights as indicated and forgot to check and see if the wires would have been in the way of driving of the "H" piling for the retaining wall. When they discovered the oversight they wanted us to pay them to move the wire out of their way. They said they were just following the plans. Our contention is that they know what is required to drive piling and the location of the temporary lighting is only schematic and they have the responsibility to provide for their own operations to complete the work. We denied the claim on this basis.

PIT DEVELOPEMENT--There is not much I can add to the letter written on this matter by my assistant on January 7, 1983 which is included in the packet. We did offer them some additional development monies because of the decreased quantities to recover their development costs. They did not agree with our offer on this matter however.

SLOTTED DRAINS--This item is explained in the letters and documents included in the packet pretty well. There is no precedent for paying for pipe under pavment for slotted drains.

STRUCTURAL OVERLAY---Our basic position on this matter is the mobilization costs for the deleted items is paid under the bid item for "mobilization" and it would be up to Hatch to compensate Coates for his costs. The only compensation for the increased depth would be to pay his actual cost for the extra mixture used. The increased depth does not incur any increased laydown time. It would only be a matter of minutes in any case. The times claimed have no bearing on the increased depth of overlay.

9363

10-12-83

IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF DOUGLAS

Case No. L83-2029

R. A. HATCH CO.,
an Oregon corporation,

Plaintiff,

v.

STATE OF OREGON, by and through
the Transportation Commission,

Defendant.

MOTION TO CHANGE PLACE OF TRIAL

Comes now the defendant and moves the court for an order changing the place of trial of the above entitled cause from Douglas County, Oregon to Marion County, Oregon upon the grounds that it has not been commenced in the proper county. This Motion is supported by the Affidavit and Memorandum submitted herewith.

Respectfully submitted,

DAVE FROHNMAYER
Attorney General

LESLIE B. HAMPTON OSB# 53037
Assistant Chief Trial Counsel
Of Attorneys for Defendant
100 State Office Building
Salem, Oregon 97310
Telephone: 378-6313

IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF DOUGLAS

Case No. L83-2029

R. A. HATCH CO.,
an Oregon corporation,

Plaintiff,

v.

STATE OF OREGON, by and through
the Transportation Commission,

Defendant.

AFFIDAVIT IN SUPPORT OF MOTION TO CHANGE PLACE OF TRIAL

STATE OF OREGON)
SS
County of Marion)

I, LESLIE B. HAMPTON, being first duly sworn, depose and say that I am an Assistant Attorney General for the State of Oregon and one of the attorneys for the defendant herein, that the Oregon Department of Transportation and its Director, and the Oregon Transportation Commission, officially reside and have their principal offices in Marion County, Oregon and that by statute said department and said commission can be found and served with summons only in Marion County, Oregon, by serving the Director of the Department of Transportation. Plaintiff's cause of action is based upon a contract executed in Marion County and partially performed in Douglas County.

///

///

That this Motion is not made for the purpose of delay.

Than no answer to the Complaint has been filed.

/s/ Leslie B. Hampton
Leslie B. Hampton

Subscribed and sworn to before me this 12th day of October, 1983.

/s/ Margaret E. Jensen
Notary Public for Oregon
My commission expires: 6/7/87

IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF DOUGLAS

Case No. L83-2029

R. A. HATCH CO.,)
an Oregon corporation,)
)
Plaintiff,)
)
v.)
)
STATE OF OREGON, by and through)
the Transportation Commission,)
)
Defendant.)

MEMORANDUM OF POINTS AND AUTHORITIES

This Memorandum is submitted in support of defendant's Motion for Change of Venue.

I

A motion for change of venue, upon the ground that the action has been commenced in the wrong county, may be filed at any time prior to filing of an answer.

ORS 14.120.

II

Actions which are not expressly authorized or directed to be brought elsewhere must be commenced in the county where the defendants reside or may be found.

ORS 14.080.

III

Unless the action is subject to a statute specifically fixing the venue elsewhere, an action against the state or a state agency, board or commission should be brought where the seat of government is located or where such agency, board or commission has its principal office or place of business.

State ex rel Kleinsorge v. Reid, 221 Or 558, 352 P2d 466 (1960); 92 CJS, Venue, § 115.

Cf. State Highway Comm. v. Goodwin, 208 Or 514, 303 P2d (1956).

ORS 14.080.

IV

The seat of government of the State of Oregon under the Constitution and the principal office of its State Transportation Commission, and its Department of Transportation by statute are in the City of Salem, in Marion County, Oregon.

Or Const Art XIV, § 1.

ORS 366.170.

V

By statute, summons can be properly served on the State Transportation Commission and the Department of Transportation only by serving the office of the Director, Department of Transportation, whose official office is in the City of Salem, Marion County.

ORS 184.616(2).

VI

Action to recover damages from a state agency, board or commission, as a legal entity, is not an action against a public officer, within the meaning of ORS 14.050(2)

State ex rel Kleinsorge v. Reid, 221 Or 558, 352 P2d 466 (1960).

VII

ORS 14.060 when otherwise applicable, applies only to suits in equity.

Respectfully submitted,

DAVE FROHNMAYER
Attorney General

/s/ Leslie B. Hampton

LESLIE B. HAMPTON OSB# 53037
Assistant Chief Trial Counsel
Of Attorneys for Defendant
100 State Office Building
Salem, Oregon 97310
Telephone: 378-6313

CERTIFICATE OF SERVICE

I hereby certify that on the 12th day of October, 1983, I served a true copy of the within Motion to Change Place of Trial with supporting Affidavit and Memorandum which is well founded in law upon plaintiff's attorney, by depositing it in the United States Post Office at Salem, Oregon, postage prepaid, addressed as follows:

Levi J. Smith
Attorney at Law
200 Market Building, Suite 453
200 S. W. Market Street
Portland, Oregon 97201

/s/ Leslie B. Hampton

Leslie B. Hampton
Assistant Chief Trial Counsel
Of Attorneys for Defendant
100 State Office Building
Salem, Oregon 97310
Telephone: 378-6313
O.S.B. No. 53037

mj

9362

5

rll

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. I-IR-5-2(91)113

2. STATE PROJECT NO. See Below

2A. COUNTY NAME Douglas

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 90226

6. TO

10-12-83

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 9/20/83

8. FEDERAL ROUTE NUMBER Interstate 5

9. STATE ROUTE NUMBER Primary 1

10. GENERAL LOCATION:
Roberts Creek - Dillard Interchange Section

11. GENERAL DESCRIPTION OF WORK
Contractor's Claim

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER (*Specify*) See Below

13. REMARKS

As requested by Mr. Keasey's letter of 10/5/83 this will confirm the date of 9/20/83 as date of Notice of Contractor's Claim and authorization to proceed with the necessary work in accordance with the Federal-aid Program Manual at a TEC of $20,000 Federal Funds $18,444 (SFO #14). Reimbursement will be in accordance with the Federal-aid Program Manual.

The above authorization is contingent upon modification of Project Agreement if additional funds are required.

RECEIVED
STATE HWY ENGR
OCT 20 '83
REFER TO Potter
FOR

Info	Inves	R/D	O/R	Sign	Act	File

Orig to 20120

14. DATE 10/12/83

15. SIGNATURE OF APPROVING OFFICIAL G. K. Hossner

16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9363

September 22, 1983

Levi Smith
Attorney at Law
200 Market Bldg., Suite 453
200 S. W. Market Street
Portland, Oregon 97201

Re: Hatch v. State of Oregon
Douglas County Circuit No. L83-2029

Dear Mr. Smith:

This will confirm our telephone conversation of September 19. It is understood that on behalf of the State of Oregon we may have an open extension of time within which to respond to your Complaint and that you would not seek a default judgment against the state without giving us a ten day notice.

Please be assured that nevertheless I will endeavor to give this matter as prompt attention as possible.

Thank you very much for your considerations.

Very truly yours,

Luther L. Jensen
Assistant Attorney General

LLJ:mj

9363

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ECEIVED

DAVE FROHNMAYER
ATTORNEY GENERAL

STANTON F. LONG
DEPUTY ATTORNEY GENERAL

DEPARTMENT OF JUSTICE
TRIAL DIVISION
100 State Office Building
Salem, Oregon 97310
Telephone: (503) 378-6313

NOTED
ACK L. SOLLIS

September 16, 1983

H. Scott Coulter
State Highway Engineer
Highway Division
140 Transportation Building
Salem, Oregon 97310

Re: R. A. Hatch Co. v. State of Oregon

Dear Mr. Coulter:

This is to inform you that the above entitled matter has been filed in Douglas County Circuit Court. Named defendants include State of Oregon, Transportation Commission.

The matter concerns a claim for extra work in the sum of $323,650 regarding Roberts Creek--Dillard Interchange on Interstate Highway I-5.

I have assigned this case to Trial Attorney Luther Jensen, who will keep you apprised of significant developments in the case.

Sincerely,

John R. McCulloch Jr.

John R. McCulloch, Jr.
Chief Counsel, Trial Division

DOT DIRECTOR
SEP 20 '83
REFERRED TO
Sollis
FOR
Info [illegible] R/D D.R Sign Act File

JRMc:mj
cc: Fred Miller, Director
Department of Transportation
135 Transportation Building
Salem, Oregon 97310

9363

September 8, 1983

CON

R. A. Hatch Company
P. O. Box 6179
Bend, OR 97708

Time Extension Request
Roberts Creek-Dillard Interchange
Contract No. 9363
FAP No. I-IR-5-2(91)113

Your request for additional contract time in which to complete the above project has been carefully reviewed. A contract time adjustment of an additional 34 calendar days is granted due to the performance of extra and additional work on this contract. The adjusted contract time for completion of this project is 634 calendar days.

This will eliminate all liquidated damages under this contract.

/s/ C. O. Fredrickson

W. E. Schwartz, P.E.
Assistant State Highway Engineer
for Operations

NOTED
W. E. SCHWARTZ

OBJ:mk st

bc H. S. Coulter
C. T. Keasey
Jim Gix w/att.
Ron Busey w/att.
FHWA w/att.
Bob Church

STATE OF OREGON
HIGHWAY DIVISION - REGION 3

INTEROFFICE MEMO

TO: O. B. Jackmond
Contract Administration Engr.

DATE: August 25, 1983

J.K. Wilson

FROM: J. K. WILSON
Region Construction Engineer

SUBJECT: Roberts Cr.-Dillard Intch.
Contract No. 9363
Request for Time Extension

I have reviewed Busey's analysis of R.A. Hatch's time extension request (attached) and have the following to offer:

1. Only the slide correction work actually influenced the completion date of the contract.

2. Slide correction work, when pro-rated against the contract amount and time, would generate 27 days.

3. We can document that on approximately 40 days, men and equipment were engaged in slide correction work.

4. With the necessary additional remobilization time required for slide correction, we should easily be able to justify granting the 34 additional days to eliminate all liquidated damages.

If you need additional documentation, please let me know.

jxw/cw
Attach.

cc Ron Busey

9-2-83

W. E. Schwartz -

I concur with Region and Proj. Mgr. and recommend a time extension of 34 calendar days due to the performance of extra work. This will eliminate liquidated damages on this contract.

O. B. Jackmond

RECEIVED
AUG 30 1983
CONSTRUCTION SECTION

CE
CAE ✓
FOE
OCS
SCS
ESO
CM
CA
LE
TC
FE
CP

9363 DOT-HWY
[illegible]T TORT
734-980-L-8435
8-30-83

Served 9/13/83
3:05
JE

In the CIRCUIT Court of the State of Oregon

for the County of Douglas

R. A. HATCH CO.,
an Oregon corporation,
Plaintiff

vs.

STATE OF OREGON by and through
the Transportation Commission,
Defendant

No. L83-2029

SUMMONS

To Dave Frohnmayer, Attorney General
Justice Building
Salem, Oregon 97310
Defendant

You are hereby required to appear and defend the complaint filed against you in the above entitled action within thirty (30) days from the date of service of this summons upon you, and in case of your failure to do so, for want thereof, plaintiff(s) will apply to the court for the relief demanded in the complaint.

NOTICE TO THE DEFENDANT: READ THESE PAPERS CAREFULLY!

You must "appear" in this case or the other side will win automatically. To "appear" you must file with the court a legal paper called a "motion" or "answer." The "motion" or "answer" must be given to the court clerk or administrator within 30 days along with the required filing fee. It must be in proper form and have proof of service on the plaintiff's attorney or, if the plaintiff does not have an attorney, proof of service upon the plaintiff.

If you have any questions, you should see an attorney immediately.

/s/ Levi J. Smith
SIGNATURE OF OREGON RESIDENT ATTORNEY

Levi J. Smith
TYPE OR PRINT NAME OF RESIDENT ATTORNEY

STATE OF OREGON;
County of Multnomah } ss.

I, the undersigned attorney of record for the plaintiff, certify that the foregoing is an exact and complete copy of the original summons in the above entitled action.

ATTORNEY OF RECORD FOR PLAINTIFF(S)

TO THE OFFICER OR OTHER PERSON SERVING THIS SUMMONS: You are hereby directed to serve a true copy of this summons, together with a true copy of the complaint mentioned therein, upon the individual(s) or other legal entity(ies) to whom or which this summons is directed, and to make your proof of service on the reverse hereof or upon a separate similar document which you shall attach hereto.

/s/ Levi J. Smith
ATTORNEY(S) FOR PLAINTIFF(S)

Post office address at which papers in the above entitled action may be served by mail.

LEVI J. SMITH, P.C.
ATTORNEY FOR PLAINTIFF
200 Market Building, Suite 453
200 S. W. Market Street
Portland, Oregon 97201
(503) 241-8230

CC: DOT: 9/9/83

PAGE 1—SUMMONS

FORM No. 190—CIRCUIT OR DISTRICT COURT SUMMONS
OE STEVENS-NESS LAW PUB. CO., PORTLAND, ORE.

PROOF OF SERVICE

STATE OF .... }
County of .... } *ss.*

I hereby certify that I made service of the foregoing summons upon the individuals and other legal entities to be served, named below, by delivering or leaving true copies of said summons and the complaint mentioned therein, certified to be such by the attorney for the plaintiff, as follows:

Personal Service Upon Individual(s)

Upon ...., *by delivering such true copy to him/her, personally and in person, at* ...., *on*...................., *19*......., *at*..............*o'clock* .....*M.*

Upon ...., *by delivering such true copy to him/her, personally and in person, at* ...., *on*...................., *19*......., *at*..............*o'clock* .....*M.*

Substituted Service Upon Individual(s)**

Upon ...., *by delivering such true copy at his/her dwelling house or usual place of abode, to-wit:* ....,
to ...., *who is a person over the age of 14 years and a member of the household of the person served on* ...., *19*......., *at*..............*o'clock* .....*M.*

Upon ...., *by delivering such true copy at his/her dwelling house or usual place of abode, to-wit:* ....,
to ...., *who is a person over the age of 14 years and a member of the household of the person served on* ...., *19*......., *at*..............*o'clock* .....*M.*

Office Service Upon Individual(s)**

Upon ...., *at the office which he/she maintains for the conduct of business at* ....,
by leaving such true copy with ...., *the person who is apparently in charge, on* ...., *19*......., *during normal working hours, at to-wit:* ....*o'clock,* .....*M.*

Service on Corporations, Limited Partnerships or Unincorporated Associations Subject to Suit Under a Common Name

Upon ...., *by*
(NAME OF CORPORATION, LIMITED PARTNERSHIP, ETC.)

(a) delivering such true copy, personally and in person, to .... *who is a/the*
*.................................... *thereof; OR*

(b) leaving such true copy with ...., *the person who is apparently in charge of the office of* ...., *who is a/the* *.................................... *thereof;*

*Specify registered agent, officer (by title), director, general partner, managing agent.

at ...., *on*...................., *19*......., *at*..............*o'clock* .....*M.*

DATED ...., *19*..........

....
SHERIFF

By....................................
DEPUTY

I further certify that I am a competent person 18 years of age or older and a resident of the state of service or the State of Oregon, and that I am not a party to nor an officer, director or employee of, nor attorney for any party, corporate or otherwise; that the person, firm or corporation served by me is the identical person, firm or corporation named in the action.
DATED ...., *19*........

....
SIGNATURE

....
TYPE OR PRINT NAME

The signature line on the left should be used only by a sheriff or deputy of a county in Oregon; all other servers complete certificate on the right.

The Proof of Service above contains most, but not all, of the methods of service. For example, this form does not include proof of service on a minor or incompetent person. See ORCP 7D. (2) and 7 D. (3) for complete service methods on particular parties.

*** Where substituted or office service is used, the plaintiff, as soon as reasonably possible, shall cause to be mailed a true copy of the summons and complaint to the defendant at the defendant's dwelling house or usual place of abode, together with a statement of the time, date and place at which such service was made. Use SN Form No. 1149 or equivalent.*

IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF DOUGLAS

R. A. HATCH CO., an Oregon corporation,

Plaintiff,

vs.

STATE OF OREGON by and through the Transportation Commission,

Defendant.

No. L83-2029

COMPLAINT
(FIRST CLAIM--BREACH OF CONTRACT; SECOND CLAIM--UNJUST ENRICHMENT)

Plaintiff alleges:

FIRST CLAIM FOR RELIEF

(Breach of Contract)

I.

At all times material plaintiff is and has been an Oregon corporation.

II.

On or about September 30, 1981, plaintiff entered into a contract with defendant, acting through the Transportation Commission, wherein plaintiff agreed to perform and complete the highway construction work associated with grading, paving, barriers, structures and signing at the Roberts Creek--Dillard Interchange on Interstate Highway I-5 in Douglas County, Oregon. Pursuant to the terms and conditions of that contract the defendant State of Oregon agreed to pay for the work performed.

III.

Pursuant to the contract with the State of Oregon, plaintiff was obligated to perform the work in a manner required of it by the project manager, an agent of defendant. After the entry into the contract, the project manager required plaintiff to erect at the site of the work a haul structure to facilitate the passage over the I-5 freeway of vehicles utilized by plaintiff in carrying out the work. In connection with the erection, maintenance and utilization of this haul structure, plaintiff was required by the project manager to carry out certain other activities which, had the haul structure had not been required, would not have been necessary to the successful completion of the work. The cost to plaintiff of the haul structure and related work required of it by the project manager was the sum of $323,650.00, which sum was reasonably expended by plaintiff in doing the work required by the project manager.

IV.

Timely written demand was made by plaintiff for payment of the above sum but the defendant has failed and refused to pay any part of said sum.

V.

Plaintiff has performed all other conditions imposed upon it by the contract.

VI.

Defendant's refusal to pay the above sum constitutes a knowing and material violation of its obligations under the contract.

VII.

Wherefore, as a direct result of defendant's beach of the contract, plaintiff has been damaged in the amount of $323,650.00.

SECOND CLAIM FOR RELIEF

(Unjust Enrichment)

VIII.

Following the entry of the contract with defendant on September 30, 1981, plaintiff performed certain work as referred to in paragraphs II and III above at the request and instance of defendant.

IX.

Defendant claims that said work was not covered by the contract entered into with plaintiff on September 30, 1981.

X.

The plaintiff did such work believing it was compelled to by its contractual relationship and the reasonable value of such work, the benefit of which has been received by the defendant, is $323,650.00.

XI.

It would be unjust and inequitable for defendant to receive the benefit of plaintiff's work without paying for it, and defendant would be unjustly enriched if it were permitted to receive such work without payment.

WHEREFORE, on its First Claim for Relief, plaintiff prays for a judgment against defendant in the amount of $323,650.00

plus its costs herein.

Alternatively, on its Second Claim for Relief, plaintiff prays for a judgment in the amount of the reasonable value of the work it provided to defendant, or $323,650.00.

/s/ Levi J. Smith

Levi J. Smith (Bar No. 70135)
Attorney for Plaintiff

CERTIFICATE — TRUE COPY

I hereby certify that the foregoing copy of Complaint .... *is a complete and exact copy of the original.*

Dated August 30, 1983

....

Attorney(s) for Plaintiff

ACCEPTANCE OF SERVICE

Due service of the within .... *is hereby accepted on* ...., *19*......, *by receiving a true copy thereof.*

....

Attorney(s) for ....

CERTIFICATES OF SERVICE

Personal

I certify that on ...., *19*......, *I served the within* .... *on* .... *attorney of record for* .... *by personally handing to said attorney a true copy thereof.*

....

Attorney(s) for ....

At Office

I certify that on ...., *19*......, *I served the within* .... *on* .... *attorney of record for* ...., *by leaving a true copy thereof at said attorney's office with his/her clerk therein, or with a person apparently in charge thereof, at* ...., *Oregon.*

....

Attorney(s) for ....

Mailing

I hereby certify that I served the foregoing .... *on* ...., ... *attorney(s) of record for* .... *on* ...., *19*......, *by mailing to said attorney(s) a true copy thereof, certified by me as such, contained in a sealed envelope, with postage paid, addressed to said attorney(s) at said attorney(s) last known address, to-wit:* ....

and deposited in the post office at ...., *Oregon, on said day.*

Dated ...., *19*......

....

Attorney(s) for ....

LEVI J. SMITH, P.C., Lawyer
200 Market Building, Suite 453
200 S. W. Market Street
Portland, Oregon 97201
(503) 241-8230

BACKING SHEET

1/1/80-B
FORM No. 100½—STEVENS-NESS LAW PUB. CO., PORTLAND, ORE.

rll 9363

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. I-IR-5-2(91)113
2. STATE PROJECT NO. See below
2A. COUNTY NAME Douglas

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

8-25-83

4. PROGRAM NO.
5. ITEM NO. 90226

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 7/19/83
8. FEDERAL ROUTE NUMBER Interstate 5
9. STATE ROUTE NUMBER Primary 1

10. GENERAL LOCATION:
Roberts Creek - Dillard Interchange Section

11. GENERAL DESCRIPTION OF WORK
Furnish and install slope tubes on the eastside cut slide, and the westside cut slide

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED ON ~~AN AWARDED BID AND/OR~~ FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

Contingent upon modification of Project Agreement if additional funds are required, I approve the advance authorization date of 7/19/83 as requested in Mr. Keasey's letter of 8/23/83 as being cost effective for the use of State forces to proceed with the above work. State Force Order No. 12 is approved for a TEC of $14,500 Federal Funds $13,340.

RECEIVED
STATE HWY ENGR
AUG 30 '83
REFER TO Potter
FOR
Info | Inves | R/D | D/R | Sign | Act | File

Orig 8/31

14. DATE 8/25/83
15. SIGNATURE OF APPROVING OFFICIAL
16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9363

S

August 23, 1983

Beaver State Sand & Gravel, Inc. &
Beaver State Ready-Mix, Inc.
P.O. Box 1427
Roseburg, OR 97470

CON 5
#9363

Attention: Don Barnes, Manager

Gentlemen:

Thank you for your letter of August 17, 1983, informing us that you have been paid $3,255.53 on a claim recently filed.

This was in connection with the R. A. Hatch Company Contract No. 9363 for work on the Roberts Creek-Dillard Interchange Section of the Pacific Highway in Douglas County.

This information will be noted in our records.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

TED
8-23-83 BK

FKN:bk

cc: R. A. Hatch Company
P.O. Box 6179
Bend, OR 97708

Industrial Indemnity Co.
Attention: Bond Dept.
421 SW 6th
Portland, OR 97204

BEAVER STATE SAND & GRAVEL, INC.
and
BEAVER STATE READY-MIX, INC.

503/679-6744 • P. O. BOX 1427 • ROSEBURG, OR 97470

August 17, 1983

Mrs. Norma Paulus
Secretary of State
Salem, Oregon 97310

Robert Gormsen - Manager
Commission Services
Oregon State Hwy Dept of Trans
Salem, Oregon 97310

Industrial Indemnity Co.
421 S.W. 6th
Portland, Oregon 97204

R.A. Hatch Co.
P.O. Box 6179
Bend, Oregon 97708

RE: Claim on Bond
General Contractor: R.A. Hatch Co.
Subcontractor: Douglas S. Coats, Inc.
OSHD Job No 9363 -- Roberts Creek - Dillard Interchange.

BEAVER STATE READY-MIX, INC. has been paid the $3,255.53 on the above claim which covers charges in full through July 27, 1983. The above claim is dismissed at this time.

Yours Very Truly,

BEAVER STATE READY-MIX, INC.

Don Barnes
Manager

cc: Douglas S. Coats, Inc.
P.O. Box 311
Bend, OR 97701

RECEIVED
AUG 19 1983
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

9363 CL 83-143 5

VICTOR ATIYEH
GOVERNOR

Department of Transportation

TRANSPORTATION BUILDING, SALEM, OREGON 97310

FILED
AUG 23 1983
NORMA PAULUS
SECRETARY OF STATE

August 19, 1983

IN REPLY REFER TO
FILE NO.:
CON 5
#9363

RECEIVED
AUG 24 1983
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

Beaver State Ready-Mix, Inc.
P.O. Box 1427
Roseburg, OR 97470

Attention: Don Barnes, Manager

Gentlemen:

This will acknowledge a copy of your letter of July 27, 1983, to Norma Paulus, Secretary of State, filing a claim against the following Highway Division contract:

FILED BY:	Beaver State Ready-Mix, Inc.
AMOUNT:	$3,255.53
FOR:	Concrete produced & delivered
AGAINST (Prime contractor)	R. A. Hatch Co.
CONTRACT NO.:	9363
PROJECT:	Roberts Creek-Dillard Interchange Section, Pacific Hwy., Douglas County.
SURETY:	Industrial Indemnity Co.
AGENT:	Corroon & Black of Oregon

We will advise the surety and the prime contractor of the receipt of this claim.

Please advise this office (121 Transportation Building, Salem, OR 97310) when your claim has been paid.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

cc: R. A. Hatch Co.
P.O. Box 6179
Bend, OR 97708

Industrial Indemnity Co.
Attn: Bond Department
421 SW 6th
Portland, OR 97204

bc: Secretary of State - Please advise us of your filing date and number of the attached claim on the enclosed copy of this letter. Claim filed directly by Beaver State.

BEAVER STATE SAND & GRAVEL, INC.
and
BEAVER STATE READY-MIX, INC.

503/679-6744 • P. O. BOX 1427 • ROSEBURG, OR 97470

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

July 27, 1983

Mrs. Norma Paulus
Secretary of State
Salem, OR 97310

RE: Claim on Bond
General Contractor: R.A. Hatch Co.
Subcontractor: Douglas S. Coats, Inc.

Dear Mrs. Paulus:

Enclosed is claim on bond which is being filed by BEAVER STATE READY-MIX, INC. upon the bond filed by R.A. Hatch Co. as general contractor of the Oregon State Highway Division, Oregon Department of Transportation, Contract No. 9363.

This claim is made at this time due to the fact that the general contractor has been paid by the state for concrete our company has supplied to the subcontractor Douglas S. Coats, Inc., but BEAVER STATE READY-MIX INC. has not in turn been paid for all of the concrete supplied.

Yours Very Truly,

BEAVER STATE READY-MIX, INC.

Don Barnes
Manager

CERTIFIED
P12 5164473
MAIL

cc: ✓ Robert Gormsen

Douglas S. Coats, Inc.

Industrial Indemnity Co.

R.A. Hatch

RECEIVED
JUL 29 1983
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

BEAVER STATE SAND & GRAVEL, INC.
and
BEAVER STATE READY-MIX, INC.

503/679-6744 • P. O. BOX 1427 • ROSEBURG, OR 97470

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

July 27, 1983

Mrs. Norma Paulus, Secretary of State, and
R.A. Hatch Co.:

Notice is hereby given that the undersigned BEAVER STATE READY-MIX, INC. has a claim for concrete produced and delivered in the sum of $3255.53 against the bond taken from R.A. Hatch Co. and Industrial Indemnity Co. for work on OSHD Contract No. 9363, Roberts Creek - Dillard Interchange.

Yours Very Truly,

Beaver State Ready-Mix, Inc.

Don Barnes
Manager

cc: ✓ Robert Gormsen
Manager, Commission Services

Douglas S. Coats, Inc.
P.O. Box 311
Bend, OR 97701

Industrial Indemnity Co.
421 S.W. 6th
Portland, OR 97204

R.A. Hatch Co.
P.O. Box 6179
Bend, OR 97708

RECEIVED
JUL 29 1983
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

9-63

8

STATE OF OREGON
HIGHWAY DIVISION - REGION 3

INTEROFFICE MEMO

DATE: June 16, 1983

TO: Ron Busey
Project Manager

ORIGINAL SIGNED BY JAMES J. GIX

FROM: JAMES J. GIX
Region Engineer

SUBJECT: Asphalt Surfacing
Northbound Lanes
Roberts Cr.-Dillard Int.
Contract No. 9363

copy
FLK 7.

I had an occasion to drive on the recently completed northbound lanes over Roberts Mountain.

The finished surfacing has an excellent ride. It is significantly improved over paving done earlier on the same project.

Please pass on my thanks to the members of your crew who were responsible for this work. After the letters we received regarding the temporary surface last winter and unfair comparisons to another job further south, I think it is only fair to recognize this excellent work by your crew.

jjg/cw

cc W. E. Schwartz
C. T. Keasey

NOTED
W. E. SCHWARTZ

RECEIVED
STATE HWY ENGR
JUN 20 '83
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

9363 5-24-83 8

r11

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. I-IR-5-2(91)113
2. STATE PROJECT NO. See below
2A. COUNTY NAME Douglas

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 90226

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 3/24/83

8. FEDERAL ROUTE NUMBER Interstate 5

9. STATE ROUTE NUMBER Primary 1

10. GENERAL LOCATION:
Roberts Creek - Dillard Interchange

11. GENERAL DESCRIPTION OF WORK
Monitor horizontal drilling at Webers slide

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED ON ~~AN AGREED PRICE AND/OR~~ FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

Contingent upon modification of Project Agreement if additional funds are required, I approve the advance authorization date of 3/24/83 as requested in Mr. Keasey's letter of 5/13/83 as being in the public interest for the use of State Forces to proceed with the above work. State Force Order No. 11 is approved for a TEC of $5,000 Federal Funds $4,600.

RECEIVED
STATE HWY ENGR
MAY 26 '83
REFER TO Potter
FOR
Info / Inves / R/D / D/R / Sign / Act / File

[illegible]

14. DATE 5/24/83

15. SIGNATURE OF APPROVING OFFICIAL Malach

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-78) PREVIOUS EDITIONS MAY BE USED

9363 5-24-83 8

rll

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. I-IR-5-2(91)113

2. STATE PROJECT NO. See below

2A. COUNTY NAME Douglas

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 90226

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 3/24/83

8. FEDERAL ROUTE NUMBER Interstate 5

9. STATE ROUTE NUMBER Primary 1

10. GENERAL LOCATION:
Roberts Creek - Dillard Interchange

11. GENERAL DESCRIPTION OF WORK
Install horizontal drains at Webers slide area

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED ON ~~[illegible] PRICE [illegible]~~ FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

Contingent upon modification of Project Agreement if additional funds are required, I approve the advance authorization date of 3/24/83 as requested in Mr. Keasey's letter of 5/13/83 as being in the public interest for the use of Jensen Drilling Company Forces to proceed with the above work. State Force Order No. 10 representing work to be done by Jensen Drilling Company is approved for a TEC of $26,125 Federal Funds $24,035.

RECEIVED
STATE HWY ENGR
MAY 26 '83
REFER TO
Potter
FOR
Info | Inves | R/D | D/R | Sign | Act | File

14. DATE 5/24/83

15. SIGNATURE OF APPROVING OFFICIAL Walach

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-73) PREVIOUS EDITIONS MAY BE USED

9363

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
Region 3
P.O. BOX 1128, ROSEBURG, OREGON 97470 PHONE 440-3399

May 5, 1983

R. A. Hatch Co.
P. O. Box 6179
Bend OR 97708

In Reply Refer to
File No.:

Re: Roberts Cr.-Dillard Int. Sec.
Pacific Highway
Douglas County

Dear Mr. Hatch:

After our recent meeting in Ron Busey's office, I have reviewed your claims and have the following to offer:

Haul Structure - I must deny this claim. I can't believe a reasonable and prudent contractor would bid a job of this magnitude without having the issue of median crossings nailed down. The interpretation of the specs by an assistant project manager certainly wouldn't do that. In the absence of the project manager, the region or Salem offices are always available for project clarification.

Wire Conflict - Again I must deny this claim. Plan location of temporary illumination is really only schematic. We did not dictate how wire was to be handled between poles. Conflict with your other activities was something you should have foreseen.

Screening Plant - Resolved by P.A.

Sequential Arrow - I am in a position to offer only added fuel costs for use over and above work called for on the plans. You have already been compensated for servicing labor.

Dropped

Pit Development - Because of the significant underrun of inlay quantity, I believe you are entitled to recover some of the fixed development cost. Our cost analysis section has determined that for the planned quantity of rock, the cost of pit development would have been approximately $16,000. Since only about 70% of planned quantity of rock was used, an adjustment of approximately $4,800 could be made.

West Rock Inlay Placement - I can see no way to justify

RECEIVED
MAY 6 1983
OFFICE OF RESIDENT ENGINEER
R. V. BUSEY
RE ☒ ASST ☒ OE ☐ FILE ☐ INSP ☐

Form 734-3122

this request. Our records show the inlay was built only 7 feet higher than planned which should have had negligible effect. Also, you should have realized significant benefit by not having to "drill and shoot" to the planned depth of excavation.

Pipe Under Pavement - Resolved by P.A.

54" Pipe Crossing - I concur with your contention that installing this pipe early in the job, all at one time, was the proper procedure. Staging would have been difficult and no doubt would have resulted in other construction problems and more inconvenience to the traveling public. We will pay "pipe under pavement" for this installation.

Paid

12" Slotted Drain - I must deny claim for "pipe under pavement" for this item. When intended, the plans clearly state the lineal footage for each run. There is no mention of "pipe under pavement" for slotted drains. I can show we historically have not paid for this item.

Structural Overlay - The contract calls for a minimum of 2" over the existing deck and 2½" over reinforced steel. This requirement would automatically result in an average thickness somewhat greater than 2" to secure a uniform grade line. The average thickness for all decks turned out to be slightly less than 3" which is certainly reasonable but might be somewhat more than bid. I could offer a settlement of the material cost only for 1/2-inch of thickness over the affected area.

Changed Conditions - The basis for this claim is equipment brought to the job and not used because of deleted work. I would certainly expect that equipment transporting would have been included in the appropriate bid item "Mobilization". If there were other costs involved, however, I will give consideration.

After you have reviewed my response, please let me know if we can resolve your claims prior to appealing to the Construction office.

Cordially,

J. X. WILSON, P.E.
Region Construction Engineer

jxw/cw

cc C. T. Keasey
Ron Busey
Don Rapaich, P.O. Box 18160, Portland 97218

9363

VICTOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION
Roseburg, Oregon

February 10, 1983

In Reply Refer to
File No.: CON-5
9363

R.A. HATCH CO.
P.O. Box 6179
Bend, Or 97708

Subject: Roberts Cr - Dillard Intge
Contract No. 9363
Claim for extra costs on Rock Inlay on West side

Att: Donald Rapaich

After studying our records and discussions with inspectors who were at the site of work being performed, I do not feel the reduction in quantity at the lower level and raising the top of the inlay conforms to Section 109.04 of the Standard Specifications for 1974.

According to our records, the inlay was built to a level 7 feet higher than designed (which is about 4000 Cu Yds). Our records do not show the production rate for the upper portion was significantly different from the lower portion as a result of added height.

We do find there were some problems obtaining suitable material from the pit without additional developement and this caused production delays.

Based on our data, I do not feel there is justification for additional compensation because of added inlay height.

Sincerely,

Ronald V. Busey
Ronald V. Busey
Proj Mngr

cc: C.T. Keasey
Jim Gix
file

Form 734-3122

9363

R.A.Hatch Co.
General Contractors
Post Office Box 6179
Bend, Oregon 97708
(503) 382-8418

RECEIVED
FEB 03 1983
OFFICE OF RESIDENT ENGINEER
R. V. BUSEY
RE ASST. OE FILE INSP
RV. ☐ ☐ ☐

February 1, 1983

Mr. Ronald V. Busey
Project Manager
Oregon State Highway Division
P.O. Box 1128
Roseburg, OR 97470

Re: Contract #9363
Roberts Creek-Dillard Interchange
Pending Claims

Dear Ron:

Below are listed various issues that have transpired during the course of the project. It is our feeling that the pending issues be either accepted as we request, or that a meeting be set up in the near future as described in your letter dated October 18, 1982, with the Region Engineer so that we may resolve all issues.

The issues are listed as to date of notice by R. A. Hatch Co., the States initial reply, the status as is now the case and action requested.

HAUL STRUCTURE

	10-09-81	Verbal notice of intent to file claim
	✓3-02-82	Written notice of intent to file claim
✓ 3-5-82	3-06-82	State acknowledge letter of intent
	✓12-27-82	Submitted to State Haul Structure costs
	✓1-05-83	State denial of extra compensation
	1-20-83	Request Region meeting

WIRE CONFLICT @ 2954+00

	✓4-15-82	Notice of intent
	✓4-19-82	State denial of claim
	✓4-23-82	Cost submitted to State
✓ 6-7-82	5-07-82	Requested again compensation
	✓6-21-82	Denial of extra cost by State
	1-20-83	Request Region meeting

SCREENING PLANT Settled

✓[illegible]	$0.50 [illegible] request	
	6-10-82	Screening Plant extra request @ $0.50 per ton
	✓8-19-82	Revised Screening Plant extra request @ $0.61 per ton
	10-05-82	Cost breakdown to State
✓11-[illegible]-82	10-15-82	State acknowledge claim
	1-20-83	Verbal discussion, State to agree by P.A. to $0.50 per ton

SEQUENTIAL ARROW USE AT PRICE AGREEMENT SLIDE Settled

✓3-31-82	Request for compensation
✓4-05-82	Denial by State
1-20-83	Request Region meeting

PIT DEVELOPMENT

✓9-28-82	Notice of intent due to quantity underrun
✓12-27-82	Submitted to State costs
✓1-07-83	State denial
1-20-83	Request Region meeting

WEST ROCK INLAY PLACING

	✓9-28-82	Notice of claim
	✓10-01-82	State acknowledge intent
	✓12-27-82	Submitted to State costs
✓1-[illegible]	1-05-82	State acknowledge costs
	1-20-83	Request Region meeting
	✓2-[illegible]-83	State [illegible]

PIPE UNDER PAVEMENT $10

✓9-28-82	Notice of intent
10-03-82	State acknowledge intent
1-20-83	Request Region meeting
✓2-23-83	State proposal

54" PIPE CROSSING

✓11-5-82	10-05-82	Request payment for pipe under pavement on this work
✓11-15-82	10-15-82	State acknowledge letter
	1-20-83	Request Region meeting
✓2-16-83		State denial of claim

12" SLOTTED DRAIN

✓11-3-82	10-03-82	Request payment for pipe under pavement
✓11-10-82	10-10-82	State denial
	1-20-83	Request Region meeting

STRUCTUAL OVERLAY

✓12-21-82	Request for compensation
✓1-05-83	State denial of claim
1-20-83	Request Region meeting
[illegible]	[illegible] Reply

Also there have been numerous discussions and correspondence concerning the excavation quantities and staging of the material. While it has not been resolved as of this writing, this issue will be pursued as soon as final measurements are known.

Your attention concerning these matters in the very near future would be greatly appreciated.

Respectfully,

R. A. HATCH CO.

Donald J. Rapaich
Project Supt.

DJR:lst

9363

BRIDGES STREETS & ROADS STEEL STRUCTURES

DOUGLAS S. COATS, INC.
P.O. BOX 311 • BEND, OREGON 97701 • (503) 382-7330

January 28, 1983

RECEIVED
FEB 0 3 1983
OFFICE OF RESIDENT ENGINEER
R. V. BUSEY
RE ☐ ASST. RE ☐ OF ☐ FILE ☐ INSP ☐

State Highway Division
1547 S.E. Jackson Street
Roseburg, Oregon 97470

ATTN: A.D. Vohland

SUBJECT: Roberts Creek - Dillard Interchange
Contract #9363

Gentlemen:

120 58 yd.

In response to your letter dated January 5, 1983, it is apparent that some miscalculation has occured. Our 56 c.y. referred to is based upon a 2" overlay, not 1" as you state. Please check your calculations again.

On page 99 of the Special Provisions, it states two thicknesses - 2½" over rebar and 2" over the prepared deck. I am sure you will agree that the exposed rebar was a very small percentage of the deck area. We are willing to compromise our position and base the thickness on 2¼". Then the expected yardage would be 136 c.y.. We calaulated the yardage from the printed tickets as 178 c.y., therefore, the difference is 42c.y..

5 yd.

Your denial of the number of hours billed by Butler Sealant is in error. The mobile concrete machines are billed to us by the day, 8 hours per day. For 6 days of deck pour at 8 hours per day for two machines is 96 hours. I agree that standby and mobilization should not have been charged.

With these corrections in mind, we can recalculate the cost impact.

Percentage of concrete poured would now be 42/178=24%. Using your actual pour time of 29 hours, the extra time would now be 24% times 29 which is 7 hours.

The additional labor would now be 28,498.48 divided by 29 for 982.71/hour. So 982.71 times 7 hours is $6,878.94.

Our equipment cost would be based on, Daffin time of $9,600.00, Bidwell time $5,350.00, for a total $14,950.00.

Cost per hour is now 14,950.00 divided by 29 equals $515.52. Then 515.52 times 7 equals $3608.62.

Material costs from Beaver State would now be 7,677.03 times 24% equals $1,842.49. ÷ 173.08 = $44.3554/yd.

Again, please note that no additional charges have been made for our own equipment and miscellaneous supplies.

Summary of the additional costs are as follows:

Labor -	$6,878.94
Equipment -	3,608.62
Material -	1,842.49
Total --	$12,330.05

Your letter did not reflect your response to our changed condition agreement, so we are assuming it is unchanged.

In summary our costs are as follows:

Resurfacing -	$12,330.05
Changed Cond. -	7,009.21
Total	$19,339.26

Sincerely,

W.M. Farr

W.M. Farr P.E.

9363 1-27-83

nig

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO.
I-IR-5-2(91)113

2. STATE PROJECT NO.
See below

3. FROM
Dale E. Wilken, Division Administrator
Oregon Division, FHWA
Salem, Oregon

4. PROGRAM NO.

5. ITEM NO.
90226

2A. COUNTY NAME
Douglas

6. TO
Mr. H. S. Coulter, State Highway Engineer
Oregon State Highway Division
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE
1-3-83

8. FEDERAL ROUTE NUMBER
Interstate 5

9. STATE ROUTE NUMBER
Primary 1

10. GENERAL LOCATION:
ROBERTS CREEK - DILLARD INTERCHANGE

11. GENERAL DESCRIPTION OF WORK
Maintain base lift during contract suspend-work time.

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED ON ~~AN AGREED PRICE AND/OR~~ FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

Contingent upon modification of Project Agreement if additional funds are required, I approve the advance authorization date of January 3, 1983, as requested in Mr. Keasey's January 24, 1983 letter as being in the public interest for the use of State Forces to proceed with the above work.

State Force Order No. 9 is approved for a TEC of $4,000; FF $3,688.

RECEIVED
STATE HWY ENGR
FEB 1 '83
REFER TO [illegible]
FOR

Info	Invest	R/D	D/R	Sign	Act	File

2/2

14. DATE
1-27-83

15. SIGNATURE OF APPROVING OFFICIAL
G K Hassner

16. TITLE
for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9363

OR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION
Roseburg, Oregon

In Reply Refer to
File No.: CON-3
9363

January 7, 1983

R.A. HATCH CO.
P.O. Box 6179
Bend, Or 97708

Attention: Donald J. Rapaich
Project Superintendent

Subject: Roberts Cr - Dillard Intge
Contract No. 9363
Louisiana Pacific Rock Pit

Dear Mr. Rapaich,

In response to your letter dated December 27, 1982, the following is my analysis and comments:

OVERBURDEN:

1. The buried telephone cable did not move before or after you decided to use the pit for your source.
2. The method you chose to remove the overburden was solely yours. There is nothing on the plans that directs you on how to remove the overburden.
3. I feel your foreman did not understand the drawings and this was confirmed February 17, 1982. I had visited the pit on this date and could not understand why you were stripping overburden some 300 feet± from the rock source. I went back to Roseburg to the Region Geologist office and brought Jim Bilderback and Pete Bowers to the pit with me. They confirmed that the drill holes were to the southerly side of the pit as the typical sections indicate. This was discussed with John Wilson and yourself. Thereafter your activities were concentrated in the areas as shown on the typical sections.

Therefore, I do not see any merit to your claim for additional expenses, unless you have additional information. Please feel free to discuss this further if you wish.

Sincerely,

A. D. Vohland
A.D. Vohland
Ass't Proj Mngr

cc: C.T. Keasey
Jim Gix
file

Form 734-3122

9363

VICTOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION
Roseburg, Oregon
January 5, 1983

In Reply Refer to
File No.: CON 5
9363

Douglas S. Coats Inc.
P.O. Box 311
Bend, Or 97701

Subject: Roberts Cr. - Dillard Inter
Contract No. 9363
Structural Overlay

Dear Sir:

In response to your letter of December 16, 1982, I do not agree with your method of substantiating the overrun costs.

First of all the 56 cu. yds. you refer to allows for a one inch overlay. It is unfortunate if you bid this project for a one inch overlay. The minimum as stated in the special provisions of two and one half inches would require 148 cu. yd.. The average thickness of all decks was three inches and the total cubic yardage of material from the printed tickets was 173.08. A three inch average would require 176.67 cu. yd..

The second reason for denial is the number of hours billed to you by your supplier. We have records that indicate a total of 29 hours were used during the actual placement of the overlay material.

In your break - down you have included all costs billed to you by Butler Sealant Co. ie; mobilization stand-by etc.. Those costs were not a direct cost to the depth of the overlay.

In summary I cannot justify any part of your claim. If you have any further information please advise.

Sincerely,

A.D. Vohland
A.D. Vohland
Asst. Proj. Manager

cc: C.T. Keasey
James J. Gix
~~file~~
R.A. Hatch - Bend

Form 734-3122

9363

TOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION
Roseburg, Oregon
January 5, 1983

In Reply Refer to
File No.: CON 5
9363

R.A. Hatch Co.
P.O. Box 6179
Bend, Oregon 97708

Subject: Roberts Cr. - Dillard Inter.
Contract No. 9363
Haul Structure Claim

This is to acknomledge receipt of your Dec. 27, 1982 letter regarding your claim for the haul structure on subject project.

Our position is still, as was stated in prior discussions, that the project specifications are clear on this issue. On page 5 of the project special provisions, under section 105.05 paragraph C, it states that two lanes of traffic uphill and one lane downhill "shall be maintained at all times".

Nowhere in this document are provisions made for stopping traffic. Since no correction was issued on this matter the special provisions must stand as written. In accordance with section 102.05 of the Standard Specifications for Highway Construction, 1974, the contractor must bear the responsibility for being aware of what is contained in the plans and specifications. The interpretation of an Asst. Project Manager does not constitute a "change" in these plans or specifications.

Based on these considerations we do not accept responsibility for the cost of the haul structure. We will give serious consideration to any further documentation and justification you may offer on this matter.

Sincerely,

Ronald V. Busey
Ronald V. Busey
Proj Mngr

cc: C.T. Keasey
James J. Gix
file

Form 734-3122

9363

R.A.Hatch Co.
General Contractors
Post Office Box 201
Bend, Oregon 97701
(503) 382-8418

RECEIVED
JAN 04 1983
OFFICE OF RESIDENT ENGINEER
R. V. BUSEY
ASST. ☐ OF ☐ FILE ☐ INSP ☐

December 27, 1982

Ron Busey
Oregon State Highway Department
P. O. Box 1126
Roseburg, OR 97470

Re: Contract #9363
Roberts Creek-Dillard Interchange
Louisiana Pacific Rock Pit

Dear Ron,

R, A. Hatch Co. requests that a price agreement be issued to cover our fixed costs for pit development of the L/P pit. Due to the substantial decrease in pay quantities, our original projected cost per cubic yard for material from the pit and what we actually realized in cost per cubic yard has increased greatly.

The basis of our claim is best explained if broken down as follows:

1. Overburden Removal	$14,000.93
2. Drilling, loading & shooting	3,455.98
3. Miscellaneous Costs	4,373.30
a. Access Road	
b. Equipment moves	
c. Pit cleanup (no seed)	
Total	$21,830.21

In the overburden removal item, the method necessary to develop the pit and that shown on the drawing is greatly different. The method used was required because of the actual location of the main buried telephone cable. As a result, we encountered massive amounts of material over the top of the rock in the 1st stage of development and minimal amount of material in the 2nd stage of development. This overburden phase of the work increased our pay quantity costs per cubic yard for the material by $14,000.93.

Drilling, loading and shooting costs were also affected in the first stage of development because we had to drill and shoot closer spacing and deeper holes due to the confined area as opposed to wider spacing and shallower holes in the second phase of development because we were on benches. In other words, it cost more on the first phase of drilling and shooting per cubic yard than in the second phase. This loss to us amounted to $3,455.98.

There were also miscellaneous expenses which were fixed costs that due to the decrease in pay quantities raised our price per cubic yard of material. These costs were $4,373.30.

Should you have any questions or wish to discuss this further, please contact me.

Respectfully,

Donald J. Rapaich
Project Superintendent

9363

R.A. Hatch Co.
General Contractors
Post Office Box 201
Bend, Oregon 97701
(503) 382-8418

December 27, 1982

Ron Busey
Oregon State Highway Dept.
P. O. Box 1128
Roseburg, OR 97470

Re: Contract #9363
Roberts Creek-Dillard Interchange
West Side Rock Inlay

Dear Ron,

In my letter dated 9/28/82, I stated that due to the field change of raising the bottom of the rock inlay and raising the top affected the placing price per cubic yard of the material. A typical days operation was composed of a trackhoe, two off-highway hauling units and a placing dozer. Due to the confines of the haul road, two trucks were a maximum that we could use because of maneuvering room. The cost for the crew per hour would be at the rate of $606.51 and based on actual hauling trips performed, it cost us $1.22/cy for placing for the start of the inlay and $2.16/cy for placing for the top of the inlay.

Therefore, we request that a price agreement be issued to cover the extra $0.94 per cubic yard for the volume that was added to the top of approximately 5300 cy or $0.94 x 5300 cy = $4,982.00.

Should you have any questions, please call.

Respectfully,

Donald J Rapaich
Donald J. Rapaich
Project Superintendent

RECEIVED
JAN 04 1983
OFFICE OF RESIDENT ENGINEER
R. V. BUSEY
ASST ☒ OE ☐ FILE ☐ INSP ☐

rd 3982 - 5142

9363

R.A.Hatch Co.
General Contractors
Post Office Box 201
Bend, Oregon 97701
(503) 382-8418

December 27, 1982

Ron Busey
Oregon State Highway Department
P. O. Box 1128
Roseburg, OR 97470

Re: Contract #9363
Roberts Creek-Dillard Interchange

Dear Ron,

As stated in our previous letter, R. A. Hatch Co. requests that a price agreement be issued to cover the costs involved in the installation and removal of the temporary haul structure and other costs of having to use said structure. The chain of events leading up to this are as follows:

Numerous phone calls were made by Robert Hatch to Ron Busey's office prior to the bid requesting information concerning various particulars.

Monday 9/21/81 - Phoned State office, no one in to explain particulars.
Tuesday 9/22/81 - Phoned again, no one in to explain particulars, was informed all persons gone to Salem.
Wednesday day 9/23/81 - Finished putting bid together including cost of haul structure. Phoned State office, said needed answers job bid tomorrow, was put in contact with Al Vohland Ass't. Project Manager. Discussed project with Mr. Vohland and got permission to cross freeway in any location by using flagmen and proper signing. Stated that no place in bid documents did it state that you couldn't cross freeway. Had understood from Mr. Vohland that he had been telling everyone same answer.
Wednesday night 9/23/81 - Put final numbers in bid book in Salem, removing from bid costs previously included for haul structure and also lowering quoted price to us by Roseburg Sand and Gravel for paving because they could cross anyplace and also for other items concerning the movement of materials and machines. At this time we had removed from our previous bid these projected costs:

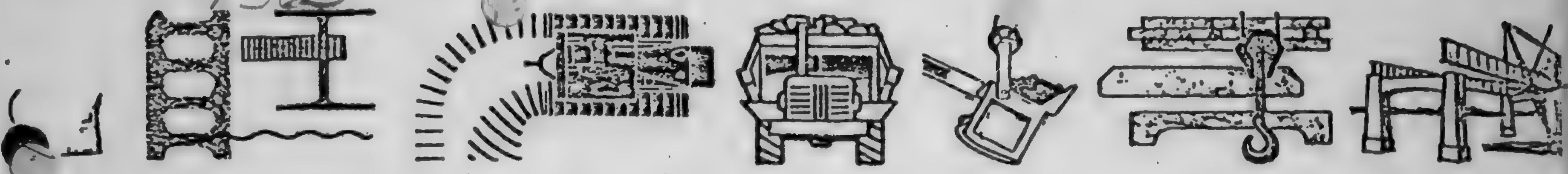
Haul structure deduction	$100,000.00
Asphalt deduction	$109,400.00
CTB deduction	$ 34,250.00
Rock inlay deduction	$ 30,000.00
Misc. other deduction	$ 50,000.00
Total	$323,650.00

RECEIVED
JAN 04 1983
OFFICE OF RESIDENT ENGINEER
R. V. BUSEY
RE ☐ ASST ☐ OE ☐ FILE ☐ INSP ☐

As you can see this one conversation had a key influence on the price we bid for the project and at a substantial savings to the State of Oregon.

GES STREETS & ROADS STEEL STRUCTURES

9363



DOUGLAS S. COATS, INC.
P.O. BOX 311 • BEND, OREGON 97701 • (503) 382-7330

December 16, 1982

R.A.Hatch Co.
P.O.Box 6179
Bend, Oregon 97708

RECEIVED
DEC 17 1982

RE: Roberts Creek-Dillard Interchange
Contract #9363

Gentlemen:

This letter is submitted after consideration of our meeting on November 29, 1982, which concerned itself with extra cost involved in resurfacing the decks and with changed conditions.

Regarding the resurfacing question, the following will show the amount of additional monies spent over what it should have been.

To arrive at a basis of extra time, we are using a percentage of excess concrete yardage poured. So, as noted in previous correspondence, 56/178=31%. To arrive at? actual hours, we are using the time spent pouring the daffin as billed to us of 96 hours. Since we are talking about extra work in pouring the deck, only that time spent on the deck will be used. so, a basis for extra hours can now be determined, namely, 31% X96=29.76 hours.

= 16 hrs. to Pour Each deck

Our labor was figured from 7-20-82 to 7-29-82 and 8-2-82 to 8-9-82 (Refer to the certified payrolls for these dates) and after applying our percentage for payroll and taxes and insurance, the amount is $28,498.48. Therefore, $28,498.48 divided by 96 hours equals $296.86/hour. Extra labor would then be $296.86 times 29.76=$8834.55.

Our direct equipment costs comes from Butler Sealant Co. and their cost per hour is 24,050/96=$250.52/hour. Therefore, the extra equipment cost is 250.52 times 29.72=$7455.45.

The material costs for the concrete only is from Beaver State and is $7,677.03. 31% of 7677.03 equals $2,379.88.

Please notice that no additional charges have been made for our own equipment and miscellaneous supplies; only direct costs.

The total additional charges are as follows:

Labor	$8,834.55
Equipment	$7,455.45
Material	$2,379.88
Total	$18,659.88

Regarding changed conditions, we believe the project results will substantiate our claim in this matter.

Item 83, sheet piling, was reduced from 2100 L.FT. to 329.3 L.FT. actually placed which represents an 84% reduction. Equipment was brought to the job anticipating a tight schedule to discover that further reduction on the sheet piling was needed because of existing impact panels. This equipment (510 Hoe) was then moved out because it was not needed.

Item 84, eliminated completely while Items 85,86, and 88 were left in tack. What this means is that equipment was mobilized for the work and 25% was eliminated.

We recongnize that some direct costs were paid back in that the sheet piling and rebar not used was purchased by the State.

However, extra movement of equipment and material did occur and the cost involved was not totally covered by the amount that was accomplished. In other words, more equipment was brought to the job than actually needed and if the final size of the job had been known, we would not have gone to the extra expense.

Refering to our letter dated September 13, 1982, part 4, the lost amount of potential monies is $100,735.10. Subtracting the amount of money paid for sheet piling and rebar, ($22,854.95), this figures to $77,880.15.

Knowing that actual cost would be difficult to determine, we are requesting 10% of (77,880.15 - 0.1 X 77,880.15)= $7,009.21 as just compensation for changed conditions.

In summary, we are requesting the following amounts as compensation for this claim.

Resurfacing	$18,659.88
Changed Conditions	$7,009.21
Total	$25,669.09

Sincerely,

WM Farr

W.M.Farr P.E.

E HIGHWAY DIVISION

FINAL QUANTITY CALCULATIONS

CONTRACT NO. ____

SHEET ____ OF ____ S

BRIDGE NO. ____

____ 19__ CHECKED BY ____ , 19__ BACKCHECKED BY ____ 19

REFER DWG. NOS.: ____ FIELD BOOK NO. ____ PAGE ____

			TOTALS
4:30 - 9:00	8-4-82	S.B. Roberts Cr E 1/2 (32.18) c.y.	4.5 hr
3:30 - 9:00	8-2-83	Clarks branch W 1/2 (25.81 c.y.)	5.5 hr
11:30 - 4:00	8-6-82	S.B Roberts Rt 1/2 (30.32 c.y.)	4.5 hr
2:00 - 6:30	7-26-82	W 1/2 N.B. Roberts (30.15 c.yd.)	4.5 hr
2:00 - 6:00	7-23-82	E 1/2 Clarks Br (23.29 cu.yd.)	4.0 hr
11:30 - 5:30	7-22-82	E 1/2 NB Roberts (31.33 c.y.)	6.0 h

Total cu. yd. = 173.08

Total Time = 29 hrs.

Sheet Total

119.64

Job No.
Sheet .... of .... sh.

OREGON STATE HIGHWAY DIVISION

2'

Total Bill = 24050.00

4.000 Mobil
100.00 Equipt. per hr. / machine = 19200.00

2.50 sq. yd. 2140 sq. yd. 5350.00

7 day @ 600 day 4200
96 hr. 3 day 3ea 300 day = 900 } #5100.00

33650.00

2120 sq. yd.

.21

148.4 cu. yd. = 2 1/2"

176.67 = 3 inch

9363

TOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION

Roseburg, Oregon

In Reply Refer to
File No.: CON-5
9363

November 10, 1982

R. A. Hatch Co.

P.O. Box 786
Roseburg, Or. 97470

Attn: Don Rapiach

Subject: Roberts Creek - Dillard Intchge
Contract No. 9363
Slotted Drain

In response to your November 3, 1982 letter regarding payment for slotted drain. We will pay for trench excavation but feel there is ample evidence to indicate that the item "extra for pipe under pavement" is not appropriate for slotted drain.

There is nothing on the standard drawing 2132, supplemental standard specifications, or contract plans to indicate this item is appropriate.

I agree it is difficult to seperate these quantities on the overlay areas of the contract plans but nowhere in the new construction areas is the item "extra for pipe under pavement" indicated where slotted drain is shown. As you are aware the slotted drain must be installed after completion of the paving. Therefore we will not pay "extra for pipe under pavement" on slotted drains.

Sincerely,

Ronald V. Busey

Ronald V. Busey
Proj. Mngr

cc Bend
Region
Construction

Form 734-3122

1.

9363

R.A. Hatch Co.
General Contractors
Post Office Box 201
Bend, Oregon 97701
(503) 382-8418

November 3, 1982

Ron Busey
Oregon State Highway Department
P.O. Box 1128
Roseburg, Oregon 97470

Re: Contract # 9363
Roberts Mtn Project
Slotted Drain Pipe

Dear Ron,

As per a discussion with Larry Carson of the OSHD, it has been brought to my attention that the State feels that all items necessary to complete the 12" Slotted Drain Pipe be incidental to the payment of the pipe per foot. We do not agree with this method of payment.

In no place of the project drawings, Standard Specification or Special Provisions does it state that all items are included with the exception that it does state that the concrete backfill is included in the payment of the pipe.

The pipe notes on each sheet of the drawings indicate a total quantity for pipe under pavement and a total for trench excavation per circled number per sheet but it is physically impossible using the circled number and also the pipe data sheet to realize whether or not we are to include these costs on the price per foot of pipe.

Due to this non-descriptive issue of the work we have to assume that all items of the work will be paid for.

RECEIVED
NOV 05 1982
OFFICE OF RESIDENT ENGINEER
R. V. BUSEY
RE ☐ ASST ☐ OE ☐ FILE ☐ INSP ☐

R.A.Hatch Co.
General Contractors
Post Office Box 201
Bend, Oregon 97701
(503) 382-8418

Therefore we feel that when paying for the slotted drain lines we also be paid for the trench excavation and extra for pipe under pavement at their respective bid prices.

I'm sure that you will realize this oversite on the part on the drawings and specification. Should you have any question please contact me.

Respectfully,

Donald J. Rapaich
Project Supt.

c/c: Bend File
Job File

9363

VICTOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION
Roseburg, Oregon

In Reply Refer to
File No.: CON-5
9363

October 18, 1982

R.A. Hatch Co.
P.O. Box 6179
Bend, Or 97708

Att: Gerald Johnston

Subject: Roberts Cr - Dillard Intge
Contract No. 9363
Subcontractor Douglas S. Coats Claim

Dear Mr. Johnston,

Reference to your letter of 10-8-82, relative to the above mentioned claim. The procedure for your cubcontractor and R.A. Hatch is as follows:

1. The claim should be very specific with documented costs.
2. Each item should be set-out with documentation as to why he feels extra compensation is due.
3. The presentation should be made at the Project Managers office with the Prime Contractor in attendance.
4. The claim will be analyzed, discussed and a decision as to the merits of the claim will be made at this time.
5. If the claim is not mutually agreed to at the Project Managers level, the next level would be at the Region Engineers level.

Please advise this office when you and your subcontractor have the claim in a formal format and we will schedule a date for the meeting. Thankyou.

Sincerely,

A.D. Vohland
A.D. Vohland
Ass't Proj Mngr

cc: C.T. Keasey
Alfred Shirley
R.A. Hatch, Roseburg
file

Form 734-3122

734-3156

Job No. ....

Sheet .... of .... Sheets

OREGON STATE HIGHWAY DIVISION

alculations for ....

Made by .... 19....... Checked by .... 19....... Backchecked by .... 19.......

Str. NO
7835 = 783.87 sq.yd. = 7054.83 □'

62.5 cu.yd. = .24 or 3 inchs (13.06)

7835 A = 786.5 s.y. = 7078.50 □'

Total = 61.48 cu. yd. = .23 or 3 inches (2 7/8)

(13.11)

7839 = 584.73 = 5262.57 □'

49.1 cu.yd. = Ave .25 or 3 inches

AS per Bid = 189.7 cu.yd.
2 1/2 inch

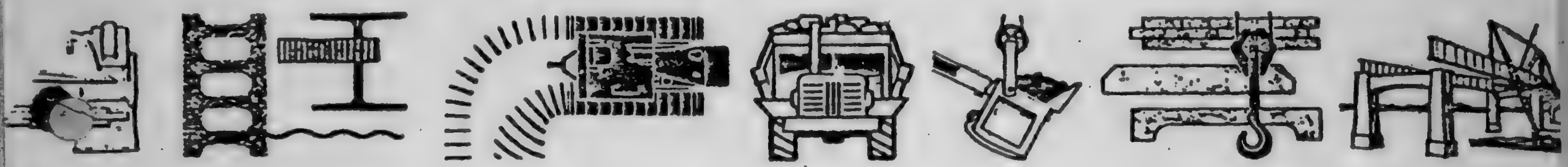
(9.75)

20
2155.1 sq.yd. x $27 = $\frac{\$58,187.70}{173.08}$ = $336.19 + 36° cu.yd. (At 3 inch depth)

18 770

9363

BRIDGES STREETS & ROADS STEEL STRUCTURES



RECEIVED
OCT 8 1982

DOUGLAS S. COATS, INC.
P.O. BOX 311 • BEND, OREGON 97701 • (503) 382-7330

October 6, 1982

R.A.Hatch Co.
P.O.Box 6179
Bend, Oregon 97709

RE: Roberts Creek - Dillard Interchange
Contract #9363
Structural Items and Claims

Gentlemen:

Regarding the State's reply dated September 29, 1982, please be advised that for item #1 and 2, we concur and would like a price agreement for those items.

On items #3 and 4, we do not agree and request a review board at the next level be scheduled so we can share our concerns and hopefully resolve our differences.

Also, we request an additional item be discussed at the review board, and that is interest paid on the sheet piling during the time it was delivered and paid for. Our contention is that it should have been paid for material on hand when it arrived on the job. As of this date, it's been over four months sitting on the job.

Sincerely,

W M Farr

W.M.Farr Project Engineer

9363

STATE OF OREGON
1859
VICTOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION
Roseburg, Oregon

October 1, 1982

In Reply Refer to
File No.: CON 5
9363

R.A. Hatch Co.
P.O. Box 786
Roseburg, Or 97470

Subject: Roberts Cr – Dillard Intge
Contract No. 9363
Letters of Sept 28, 1982

Att: Don Rapaich
Proj. Supt.

This is to acknowledge receipt of your letters dated Sept. 28, 1982 regarding possible claim for additional cost on drainage items, haul distribution of earthwork and rock inlay.

We will take your requests under consideration. We are not prepared at this time to provide you a breakdown on the haul distribution or the embankment quantities as these are not bid items.

Further documentation on your requests would be required before any recommendations could be made on these matters.

Sincerely,

Ronald V. Busey
Ronald V. Busey
Proj Mngr

cc: C.T. Keasey
Alfred Shirley
R.A. Hatch Co, Bend
file

Form 734-3122

9363

CTOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION
Roseburg, Oregon
September 29, 1982

In Reply Refer to
File No.: CON 5
9363

R.A. Hatch Co.
P.O. Box 6179
Bend, Or 97708

Subject: Roberts Cr - Dillard Intge
Contract No. 9363
Structure Items & Claims
by your Subcontractor

Dear Mr. Johnston;

In reply to your letter of September 20, 1982 and Douglas Coats letter of September 13, 1982, the following is my analysis and status item by item:

Item No. 1 Sheet Piling:
We have 1197 Lin Ft of piling left as excess material.
1197 Lin Ft @ 36 lbs/ft = 43,092.0 lbs
Invoice price @ $38.55/Cwt = $16,611.97
Fixed cost for cutting & welding sheet piling is: Labor $1,717.18
Ratio of States share = 1545 = Order length, 1197 = remaining sheet piles
1197 ÷ 1545 = 77.476% Labor $1717.18 (77.746) = $1330.40 State share
48 hour backhoe time used during welding = $2459.04
2459.04 (77.476) = $1905.16 State share
Increased cost per Lin Ft = $1.03/Lin Ft = $339.69

Recap:

Sheet Piling -	$ 16,611.97
Labor -	1,330.40
Equipment -	1,905.16
Increased Mtrl cost -	339.69
Total cost	$ 20,187.22

As per Section 109.11, there will not be any additional percentage markup for materials purchased.

Item No. 2 Bridge End Panel Reinforcement:
The northerly end panels of Structure No. 7835A and 7835 were eliminated as existing bridge end panels were in place.

The cost of the reinforcement F.O.B. Jobsite was $2,446.50 per each structure. Therefore, 50% of this item is the States share or $2,446.50.

There is an existing detailing charge from Farwest to Doug Coats in the amount of $170.00 and one hour of backhoe time for unloading of $51.23.

Recap:

Reinforcement -	$2,446.50
Detail charge -	170.00
Equipment -	51.23
Total	$2,667.73

Again, there will be no percentage allowance.

Item No. 3 Additional yardage for concrete resurfacing:

The Special Provisions on page 99 are very explicit about the depths and controlling factors.

I feel the controlling factor on this project was the direct result of the scarifying process. The machine was operated without any controls. The deck was very erratic as our profiles will prove, both longitudinally and transversly. We established the overlay grade from the profiles and paying close attention to the "Special Provision" specifications.

On all three structures, ie; Str No. 7835, 7835A and 7839, the average depth was three inches.

Your figures are based on a 2-inch overlay. They should reflect the 2½ inch minimum as stated in the "Specials".

Based on 2½ inch overlay, the overpour would have been 36 Cu Yd.
This calculates as:
Str. No. 7835 - 13.06 Cu Yd
7835A- 13.11 Cu Yd
7839 - 9.75 Cu Yd

Again, I can contribute the additional ½ inch overlay as necessary to obtain the proper vertical alignment needed for a smooth ride.

I would also point out that past history proves that excessive depths of the dense overlay is detrimental to the system. Keeping this in mind, I was very hesitant in establishing the final grades with too much depth. But, my main concern was the final ride, which I feel is very good on all structures.

Therefore, at this point, I don't feel the State has any obligations above contract quantities for this item.

Item No. 4 Mobilization

I have explained the States obligation for this item in a letter dated April 19, 1982. There is not any way we can participate in additional Mobilization unless we reduce the Bid Item for Mobilization. As you are aware, the bid item is a Lump Sum Item and we feel all mobilization for the project is included in the bid item.

Therefore, to reiterate my proposal, following is what I would consider as just payment for your subcontractor.

Please advise and a price agreement will be issued.

Sheet piling –	$20,187.22
Reinforcement –	2,667.73
Total	$22,854.95

Sincerely,

A.D. Vohland
A.D. Vohland
Ass't Proj Mngr

cc: C.T. Keasey
Alfred Shirley
Don Rapaich (Hatch Const.)
file

9363

R.A.Hatch Co
General Contractors
Post Office Box 201
Bend, Oregon 97701
(503) 382-8418

September 28, 1982

Ron Busey
Oregon State Highway Department
P.O. Box 1128
Roseburg, Oregon 97470

Re: Contract # 9363
Roberts Creek-Dillard Intrchng
Excavation and Embankment Quantities

Dear Ron,

In the bidding documents of the project quantities were given showing dirt distribution per stage of work. Numerous discussions have been carried on in reference to these quantities and to date their has not been one stage that was built as per the original intent with reguards to the dirt distribution.

The most recent change has been in the method of constructing the rock inlay on the west side of the project. This change again will greatly affect our original pricing for the excavation work.

So that we may arrive at a conclusion about this issue it is imperative that we recieve from you all as-built quantities per stage of work for excavation and embankment for the project.

Respectfully,

Donald J Rapaich
Project Supt.

C/C: Bend File
Job File

RECEIVE
SEP 29 1982
OFFICE OF RESIDENT ENGINEE
R. V. BUSEY
ASST ☐ OE ☐ FILE ☐ INSP ☐

9363

R.A. Hatch Co.
General Contractors
Post Office Box 201
Bend, Oregon 97701
(503) 382-8418

Sept. 28, 1982

Mr. Ron Busey
Oregon State Highway Department
P.O. Box 1148
Roseburg, OR. 97470

Re: Contract #9363
Roberts Creek - Dillard Intchg.
Rock Inlay

Dear Ron,

Due to the recent changes in the method of constructing the rock inlay on the west side of the project, we find it necessary to make you aware of our intent to file a claim.

Changing the excavation limits has drastically reduced the quantity of the rock inlay material, and effected the pit developement costs. Also, starting the rock inlay at a higher elevation and raising the top of the inlay greatly effects the placing of this material.

As soon as we gather our costs for this work, we shall submit them to you.

Should you have any questions please contact me.

Respectfully,

Donald J Rapaich

Donald J. Rapaich
Project Superintendent

cc: Bend File
Job File

RECEIVED
SEP 29 1982
OFFICE OF RESIDENT ENGINEER
R. V. BUSEY
RE ☐ ASST ☐ OE ☐ FILE ☐ INSP ☐

9363

September 27, 1982

Walker Bros. Auto Repair
1225 N.E. Stephens Street
Roseburg, OR 97470

COM 5
#9363

Attention: Delton E. Walker

Gentlemen:

Thank you for your letter of September 22 informing us that you have received payment in full from Hopsing Construction and R. A. Hatch Company.

This was in connection with a claim you filed recently in the amount of $1,140 for labor and material furnished to Hopsing Construction, subcontractor, on Contract No. 9363 with R. A. Hatch Company for work on the Roberts Creek-Dillard Interchange Section of the Pacific Highway in Douglas County.

We will advise the prime contractor and the surety that your claim has been paid.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

js
cc: Industrial Indemnity Company
421 S.W. 6th Avenue
Portland, OR 97204

R. A. Hatch Co.
P. O. Box 6179
Bend, OR 97708

NOTED ON CARD
9 27 82
p

Walker Bros. Auto Repair
1225 NE Stephens St.
Roseburg, Or. 97470

September 22,1982

Robert W. Gormsen
Commission Services

Department of Transportation
121 Transportation Building
Salem, Or. 97310

Dear Mr. Gormsen:

In reference to your file number 9363, we wish to inform you that Walker Bros. Auto Repair of Roseburg, Or. has received payment if full from Hopsing Construction and R. A. Hatch Corp. Our claim has been paid.

Thank you so very much for your concern and help with this account.

Sincerely,

Delton E. Walker

Delton E. Walker, Partner
Walker Bros. Auto Repair

RECEIVED
SEP 24 1982
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

9363
CL-82-175

files

L

FILED
SEP 16 1982
NORMA PAULUS
SECRETARY OF STATE

VICTOR ATIYEH
GOVERNOR

Department of Transportation

TRANSPORTATION BUILDING, SALEM, OREGON 97310

September 15, 1982

IN REPLY REFER TO
FILE NO.:

CON 5
#9363

Mr. Delton E. Walker
Walker Bros. Auto Repair
1225 N.E. Stephens Street
Roseburg, OR 97470

Dear Mr. Walker:

This will acknowledge a copy of your recent letter received in our office on September 7, 1982, addressed to Hopsing Construction concerning labor and material furnished to them in the amount of $1,140.

The letter states this is in reference to the R. A. Hatch Company Contract No. 9363 for work on the Roberts Creek-Dillard Interchange Section of the Pacific Highway in Douglas County.

As you know, Industrial Indemnity Company through Corroon and Black of Oregon furnished the bond on this contract. We will advise the surety and the prime contractor of the receipt of this claim. We will also forward it to the Secretary of State for filing.

Please advise this office (121 Transportation Building, Salem, OR 97310) when your claim has been paid.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

RECEIVED
SEP 21 1982
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

js

cc: R. A. Hatch Co.
P. O. Box 6179
Bend, OR 97708

Industrial Indemnity Company
421 S.W. 6th Avenue
Portland, OR 97204

Corroon & Black of Oregon
P. O. Box 8699
Portland, OR 97207

NOTED ON CARD
9-21-82 dmc

bc: ✓Secretary of State - Please acknowledge receipt of the attached claim on the enclosed copy of this letter.

Walker Bros. Auto Repair
1225 NE Stephens St.
Roseburg, Or. 97470
672-1527

Hopsing Construction
P.O. Box 12734
Salem, Or. 97379

To Whom It May Concern:

This letter is to inform you that Walker Bros. Auto Repair, in March of 1982, did repairs on the following vehicles for Hopsing Construction. Replaced a carburetor, in a 1975 Chevorlet pick up, ground the valves on a 1979 Ford pick up and installed a long block on a drill engine. This work was done under Purchase Order #1235 and #1233, in the amount of $1,140.00.

We have mailed monthly statements with no resulting payment. All attempts to contact Hopsing Construction and R. A. Hatch Corp. have been fruitless.

We are a small firm, this amount is needed to meet our obligations and to keep our firm in good standing.

Hopsing Construction is working on Roberts Creek Dillard Enterchange Pacific Highway, under R. A. Hatch Construction. OSHD Contract #9363.

We feel this should be brought to your attention.

Thank you,

Delton E Walker
De'ton E. Walker, Partner
Walker Bros. Auto Repair
672-1527

Copies Mailed:
Hopsing Construction

R.A. Hatch Inc.

Industrial Indemnity Co.

Oregon State Highway Div.

RECEIVED
AUG 30 1982
HIGHWAY ACCOUNTING

NOTED
V. E SKOOG

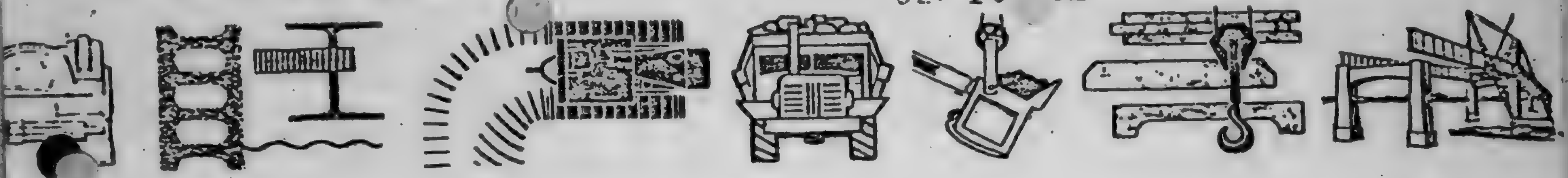
NOTED
F. J. HACE

NOTED
F. R. GRIFFIN

RECEIVED
SEP 7 1982
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

BRIDGES 9363 (STREETS & ROADS (STEEL STRUCTURES

SEP 10 '82



DOUGLAS S. COATS, INC.
P.O. BOX 311 • BEND, OREGON 97701 • (503) 382-7330

September 13, 1982

R.A. Hatch Co.
P.O. Box 6179
Bend, OR 97708

Gentlemen:

This letter is intended to recap previous claims as well as update them, and add some items which were not known until the job was complete.

1) Sheet piling:

As previous letter stated, increase cost difference on sheet piles is $1.03 per L.F. The contract has paid for 329.8 L.F. At $1.03 per ft, this equals $339.69. ?

The ordered length was 1545 which leaves (1205.~~31~~ 15 2) ft left over. The State has indicated they would buy the 1205.31 ft at 38.55/cwt, this equals $16,727.29. 16861 (36 lbs/ft.)

Time was spent cutting the sheets to length and welding pieces together. On May 24 and 25 and June 7-9 and 22, we spent this time with the sheets. From the time cards and figuring payroll taxes and insurance, total labor came to $1549.12. (OK) The ratio of the State's quanity to the total is 1205.31/ 1545 = 78%. Therefore, we are asking the State to 1197 pay 78% of 1549.12 or $1208.31.

48 hours of backhoe time at $51.23/hr is also added for
No → $2459.04. X 77.476 = 1905.16

Total costs for sheet piling is 20,734,33 plus 15% of 3110.15 = $23,844.48.

NO

Sect. 109.11 says
No Percentage Allowance

BRIDGES STREETS & ROADS STEEL STRUCTURES

DOUGLAS S. COATS, INC.
P.O. BOX 311 • BEND, OREGON 97701 • (503) 382-7330

2) Rebar:

The cost for the change in detailing time for Farwest Rebar as stated in previous letter, is not changed and remains at $170.00.

North end of the northbound bridge at Roberts Creek had an existing impact panel which wasn't discovered until excavation for the proposed one was begun. It was decided to leave it there, but the rebar for the proposed panel was already on the job. The cost of the rebar f.o.b. job is 15.99/sy. For 76.98 sy, this equals $1230.91.

66.50

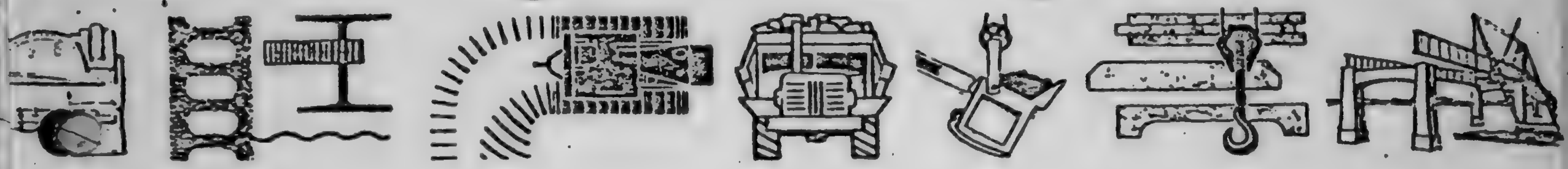
Backhoe time of 1 hour in unloading is $51.23. Total costs of $1452.14 plus 15% of $217.82 equals $1669.96.

3) Additional yardage for concrete resurfacing:

The paid square yard quanity is 2155. At the contract average of 2" depth, this calculates to 122 cy of concrete. Using Butler Sealants truck count, yardage poured is 178 cy for a difference of 56 cy which represents additional yardage placed.

There has been some discussion that the scarifier machine cut too deep on the first half of the project, but on the second half, it was more in line whith the ½" it wqs supposed to take out. We compared the quanity of cement used in the two stages as bought thru Beaver State, and found that for the 1st half, 61,750 lbs was used, and for the 2nd half, 68,250 lbs was used. This seems to indicate that if there was a difference in depth between the two stages, the 2nd half would show the increased depth. As this is not what would be expected, we conclude that

BRIDGES STREETS & ROADS STEEL STRUCTURES



DOUGLAS S. COATS, INC.
P.O. BOX 311 • BEND, OREGON 97701 • (503) 382-7330

the scarifing depth would not be a factor in the overrun of the yardage.

It appears that the extra yardage is the result of smoothing out the grade of the decks. We have no problem with the grades, but when the quanity differs substantially, we believe the State should pay the difference. Remember, the pay quanity is by the square yard and not cubic yard, so any substantial change in depth will greatly affect the quanity.

Using the bid quanity and prices, the unit price in cubic yards is $476.95/cy. Using this price for 56 cy, the total equals $26,709.11. This represents the added costs involved for the additional yardage.

4) Mobilization:

List of deleted bid items and actual amounts:

	original	revised	actual	price	original	acutal
#83	2100 ft	1536	329.8	24.00	50,400	7915.20
#84	710	310	134	60.00	42,600	8040
#87	584	0	0	12.00	7,008	0
#91	17	0	0	100.00	1,700	0
#93	2710	2120	2155.1	27.00	73,170	58,187.70
					$174,878	$74,142.40

Difference	- $100,735.10
10% deduction	- 10,073.51
Total	$ 90,661.59

Refer to our letter dated May 5, 1982. We believe the mobilization amount of $9,066.16 is a very realistic amount

BRIDGES STREETS & ROADS STEEL STRUCTURES

DOUGLAS S. COATS, INC.
P.O. BOX 311 • BEND, OREGON 97701 • (503) 382-7330

that we have spent on this project for MOB items. This job has been substantially changed from the original intent. Deck replacements were eliminated as well as impact panels and sheet piling. From an estimated total of over $335,000.00, the contract was reduced over $100,000.00. Our MOB costs need to be recovered to justify the expense of the project.

5) Scheduling:

Letter dated May 7, 1982 was written assuming using the latex modified conc. which would have allowed the pour clear across the deck, not in two stages as the Iowa Method required. Therefore, no extra will be charge by us.

Summary:

Sheet piling -	$ 23,844.48	— 20 187.22
Rebar -	1,669.96	— 2667.73
Additional yardage -	26,709.11	— 36 yds
Mobilization -	9,066.16	— 0
Total	$ 61,289.71	

We request a price aggreement be worked up to reflect these costs.

Sincerely

Douglas S. Coats

Douglas S. Coats

9363

CL-82-163

L

1859

VICTOR ATIYEH
GOVERNOR

Department of Transportation

TRANSPORTATION BUILDING, SALEM, OREGON 97310

FILED
SEP 8 1982
NORMA PAULUS
SECRETARY OF STATE

September 7, 1982

IN REPLY REFER TO
FILE NO.:
CON 5
#9363

Stunz, Fonda, Pratt & Nichols
Attorneys at Law
P. O. Box 1565
Nyssa, OR 97913

Attention: Gary Stunz

Gentlemen or Ladies:

This will acknowledge receipt of the Notice of Claim dated August 17, 1982, concerning the following Highway Division contract:

FILED BY: Concrete Products, Inc.

AMOUNT: $110,838.83 plus interest

FOR; Labor and materials

AGAINST: (Prime contractor) R. A. Hatch Company

CONTRACT NO.: 9363

PROJECT: Work on Roberts Creek-Dillard Interchange Section of Pacific Highway in Douglas County

SURETY: Industrial Indemnity Company

AGENT: Corroon & Black of Oragon

We will advise the surety and the prime contractor of the receipt of this claim. We note you have filed this directly with the Secretary of State.

Please advise this office when your client's claim has been paid.

Sincerely,

Robert W. Gormsen

Robert W. Gormsen
COMMISSION SERVICES

dmc

cc: R. A. Hatch Co.
P. O. Box 6179
Bend, OR 97708

Industrial Indemnity Company
Attn: Bond Department
421 S.W. 6th Avenue
Portland, OR 97204

bc: ✓ Secretary of State - Please advise on the attached letter the filing number and date of the enclosed claim. Claim filed directly with you by attorney.

NOTICE OF CLAIM

To: Mr. Fred B. Klaboe, Director
Oregon State Department of Transportation
135 Transportation Building
Salem, Oregon 97310

Industrial Indemnity Co.
421 S.W. 6th Avenue
Portland, Oregon 97204

Corroon & Black of Oregon
P. O. Box 8699
Portland, Oregon 97207

R. A. Hatch Co.
P. O. Box 201
Bend, Oregon 97701

Secretary of State
State Capitol
Salem, Oregon 97310

CERTIFIED
P24 2149497
MAIL

You, and each of you, are hereby given notice that the undersigned, Concrete Products, Inc., a Washington corporation, has a claim for precast concrete median barriers manufactured and delivered, and for the labor and materials performed and furnished in connection therewith, to R. A. Hatch Co., for the Roberts Creek - Dillard Interchange job, Oregon State Highway Department Contract No. 9363, the total value of which was $222,500.00, upon which there is an unpaid balance due and owing of $110,838.83, plus interest thereon at the rate of 18% per annum from August 1, 1982. The prime contractor of the said job is R. A. Hatch Co., the prime contractor's surety is Industrial Indemnity Co., and the agent of the surety is Corroon & Black of Oregon. This claim is against the bond provided by the said R. A. Hatch Co. and its surety, Industrial Indemnity Co., and the total amount claimed against the said bond is $110,838.83, plus interest.

Dated August 17, 1982.

CONCRETE PRODUCTS, INC.

By:
Its Attorney

RECEIVED
STATE HWY ENGR
AUG 23 '82
REFER TO
A. Shirley
FOR

DOT DIRECTOR
AUG 20 '82
REFER TO
Coulter
FOR

RECEIVED
AUG 2_ 1982

STUNZ, FONDA,
PRATT & NICHOLS
ATTORNEYS AT LAW
106 MAIN STREET

To: Mr. Fred B. Klaboe, Director
Oregon State Department of Transportation
135 Transportation Building
Salem, Oregon 97310

Industrial Indemnity Co.
421 S.W. 6th Avenue
Portland, Oregon 97204

Corroon & Black of Oregon
P. O. Box 8699
Portland, Oregon 97207

R. A. Hatch Co.
P. O. Box 201
Bend, Oregon 97701

Secretary of State
State Capitol
Salem, Oregon 97310

CERTIFIED
P24 2149497
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Dated August 17, 1982.

CONCRETE PRODUCTS, INC.

By:
Its Attorney

RECEIVED
STATE HWY ENGR
AUG 23 '82
REFER TO A. Shirley
FOR
Info | Inves | R/D | D/R | Sign | Act ✓ | File

DOT DIRECTOR
AUG 20 '82
REFER TO Counter
X

RECEIVED
AUG 2[illegible] 1982

CC: Ron Busey
Sent cw

STUNZ, FONDA,
PRATT & NICHOLS
ATTORNEYS AT LAW
108 MAIN STREET
P. O. BOX 1585
NYSSA, OREGON 97913
(303) 372-2268

9363

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

INTER-OFFICE CORRESPONDENCE
Roseburg, OR 97470
September 1, 1982

FILE: CON-5
9363

L

FROM: Ron Busey
Project Manager

Ron Busey

TO: File

RECEIVED
STATE HWY ENGR
SEP 7 '82
REFER TO
FOR
Info
Inves
R/D
D/R
Sign
Act
File

SUBJECT: Roberts Cr. - Dillard Intchg.
Contract No. 9363
Claim for Supplying Concrete Median Barrier.

On August 26, 1982, this office received a copy of a claim against R. A. Hatch Co. filed by Concrete Products, Inc. for $110,838.83 for concrete barrier.

Concrete Products was the supplier for the concrete barrier used on the subject project. The concrete barrier falls under two bid items on the contract and one price agreement.
Bid Item #7 Temporary Concrete Barriers 11,400 lin. ft. @ $12.00
Price Agreement #5 Temporary Concrete Barriers 5,600 lin ft. @ $8.00
Bid Item #68 Concrete Barrier 17,700 lin. ft. @ $9.00

Concrete Products produced the 17,700 lin. ft. of barrier and billed R. A. Hatch by invoice @ $12.50 lin. ft.

R. A. Hatch requested materials on hand payment for the barrier. In discussions with our construction section, we were advised on December 16, 1981 that we can only pay meterials on hand for concrete barrier based on the permanent price, not temporary prices. Cost analysis uses 60% of bid price for material.

Thus the allowance for materials on hand is $5.40 lin. ft. This, of course, does not cover cost of production which supplier states is $12.50 lin. ft.

Currently, R. A. Hatch has received the following payments on concrete barrier.

Bid Item #7 Temp. Conc. Barrier	10,629 lin. ft. @ $12.00 =	$127,548.00
Bid Item #68 Conc. Barrier	0 lin. ft. @ $9.00 =	$0.00
P. A. #5 Temp. Conc. Barrier	5,600 lin. ft. @ $8.00 =	$44,800.00
Material on Hand	1,471 lin. ft. $5.40 =	$7,943.40

Total paid less ret. = $180,291.40

According to Concrete Products claim, they have received to date $111,661.17 with a balance due of $110,838.83.

ROSEBURG REGION
RECEIVED
SEP - 2 1982
A
RE | RME | RCE | ROE | TE
RUE | DES | RSR | RPR | RLE
GEO. | FAE | RBI | ATE | AA

NOTED
W. E. Schwartz

cc: Alfred Shirley
C. T. Keasey

cc: W. E. Schwartz
sent AIW

363 5-17-82 L.

NOTICE OF CLAIM

To: Mr. Fred B. Klaboe, Director
Oregon State Department of Transportation
135 Transportation Building
Salem, Oregon 97310

Industrial Indemnity Co.
421 S.W. 6th Avenue
Portland, Oregon 97204

Corroon & Black of Oregon
P. O. Box 8699
Portland, Oregon 97207

R. A. Hatch Co.
P. O. Box 201
Bend, Oregon 97701

Secretary of State
State Capitol
Salem, Oregon 97310

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Dated August 17, 1982.

RECEIVED RECEIVED

Industrial Indemnity Co.
421 S.W. 6th Avenue
Portland, Oregon 97204

Corroon & Black of Oregon
P. O. Box 8699
Portland, Oregon 97207

R. A. Hatch Co.
P. O. Box 201
Bend, Oregon 97701

Secretary of State
State Capitol
Salem, Oregon 97310

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Dated August 17, 1982.

CONCRETE PRODUCTS, INC.

By: ______________________
Its Attorney

RECEIVED
STATE HWY ENGR
AUG 23 '82
REFER TO
A. Shirley
FOR
Info Inves R/D D/R Sign Act ✓ File

RECEIVED
DOT DIRECTOR
AUG 20 '82
[illegible]
FOR
Info Inves R/D D/R Sign Act ☒ File

Orig to 8-24-82

STUNZ, FONDA,
PRATT & NICHOLS
ATTORNEYS AT LAW
106 MAIN STREET
P. O. BOX 1865
NYSSA, OREGON 97913
(503) 372-2268

9363 7-27-82

U. S. DEPARTMENT OF TRANSPOR[illegible]TION
FEDERAL HIGHWAY ADMINIST[illegible]TION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. I-IR-5-2(91)113

2. STATE PROJECT NO. See below

2A. COUNTY NAME Douglas

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 90226

6. TO

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE	**8. FEDERAL ROUTE NUMBER**	**9. STATE ROUTE NUMBER**
5/27/82	Interstate 5	Primary 1

10. GENERAL LOCATION:

Roberts Creek - Dillard Section

11. GENERAL DESCRIPTION OF WORK

Install 2¼" PVC pipe under southbound lane Station 3050+50
(R/W file 49724 - Permit of Entry)

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED ON ~~A CONTRACT AND/OR~~ FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

I approve the advance authorization date of 5/27/82 as requested in Mr. Keasey's letter of 7/8/82 as being in the public interest for the use of State Forces to proceed with the above work. State Force Order No. 4 is approved for a TEC of $5,120 Federal Funds $4,722.

RECEIVED
STATE HWY ENGR
JUL 30 '82
REFER TO Moehring
FOR
Info | Inves | R/D | D R | Sign | Act | File

August 8 7 82

14. DATE	**15. SIGNATURE OF APPROVING OFFICIAL**	**16. TITLE**
7/27/82		for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9363

L

VICTOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION

[redacted]

IN REPLY REFER TO
FILE NO.: CON

June 25, 1982

Trish Wheeler
2000 Del Mar
Roseburg, Oregon 97470

Your letter sent to the Motor Vehicles Division was referred to this office for a reply to your postscript.

At the Winston Interchange some temporary accesses have been constructed for the contractor on the RobertsMountain section of I-5 to provide him ingress and egress to the rock stockpiled inside the interchange and being used on that project.

When that project is complete, those temporary access roads will be removed. New exits are not being built.

It is true that the exits in use are of a good design.

W. E. Schwartz, P.E.
Assistant State Highway Engineer
for Operations

AS:cw st

bc H. S. Coulter
Alfred Shirley, Jr.

Form 734-3123

Renewal KJ17813
processed Ck. 74 5/20 cd

Gentlemen:

I didn't pay any attention to this notice because I always renewed the registration in the summer when I used it.

Sorry about the mess up.

Trish Wheeler

P.S.

This has nothing to do with registration but at exit #119 at Winston, I notice a new exit is being built when a perfectly good exit is there. But by the same token Pine St. & Stephens streets in Roseburg (business 99) have pot holes and are terrible to drive on. The reason = lack of funds. If there aren't any funds for a highway to be repaired then there shouldn't be any funds to remake a perfectly good exit. Seems like a waste and misuse of funds.

9363

TOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION
Roseburg, OR 97470

In Reply Refer to
File No.: CON-5
9363

June 21, 1982

To: R. A. Hatch Co.
P.O. Box 786
Roseburg, OR 97470

Subject: Roberts Creek - Dillard Intchge.
Contract No. 9363
Wire Relocation at 2954+00

Attention: Don Rapaich

Dear Mr. Rapaich;

In answer to your letter of June 7, 1982 regarding the above mentioned subject, I still believe and stand on my original determination.

Please refer to the Standard Specficiations, Section 102.05, page 8.

If you knew the temporary illumination overhead wires were going to conflict with your construction practices and installed the wiring without due consideration, I feel you, as the contractor, should accept the responsibility.

Sincerely,

A. D. Vohland
A. D. Vohland
Asst. Project Manager

cc: R. A. Hatch Co. - Bend
C. T. Keasey
Alfred Shirely
file

9363

R.A.Hatch Co.
General Contractors
Post Office Box 201
Bend, Oregon 97701
(503) 382-8418

June 7, 1982

Mr. Ron Busey
Oregon State Highway Department
P. O. Box 1148
Roseburg, OR 97470

Subject: Contract #9363
Roberts Creek-Dillard Int.
Wire Relocation at 2954+00

Dear Ron,

R. A. Hatch Company disagrees with your answer as to extra compensation for the costs that we incurred relocating the wire at the station mentioned above.

We, under your direction, installed the wire as shown on the drawings and as you approved on shop drawings. Field measurements indicated that it is physically impossible to drive the piling for the retaining wall at the station without relocating the wire.

We feel that, you, as design engineer have the obligation to design a system of whatever scope to facilitate the installation of all work items.

Therefore, we request that as originally stated, a price agreement be issued for $819.94 to cover this cost.

Please issue this in the near future so we may resolve this matter.

Respectfully,

Donald J Rapaich

Donald J. Rapaich
Project Supt.

cc: Bend file
Job file

RECEIVED
JUN 11 1982
OFFICE OF RESIDENT ENGINEER
R. V. BUSEY
RE ☐ ASST. ☐ OE ☐ FILE ☐ INSP ☐

9363

L.

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

5-18-82

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. I-IR-5-2(91)113

2. STATE PROJECT NO. See below

2A. COUNTY NAME Douglas

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 90226

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 4/14/82

8. FEDERAL ROUTE NUMBER Interstate 5

9. STATE ROUTE NUMBER Primary 1

10. GENERAL LOCATION:
Roberts Creek - Dillard Section

11. GENERAL DESCRIPTION OF WORK
Install and monitor slope tubes on the upper bench right - Section 2980-2987

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED ON XXXXXXXXXXXXXXXXXXXXX FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

I approve the advance authorization date of 4/14/82 as requested in Mr. Keasey's letter of 5/12/82 as being in the public interest for the use of State Forces to proceed with the above work. State Force Order No. 3 is approved for a TEC of $13,100 Federal Funds $12,080.

RECEIVED
STATE HWY ENGR
MAY 21 '82
REFER TO [illegible]
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Oly
5-2[illegible]-82

14. DATE 5/18/82

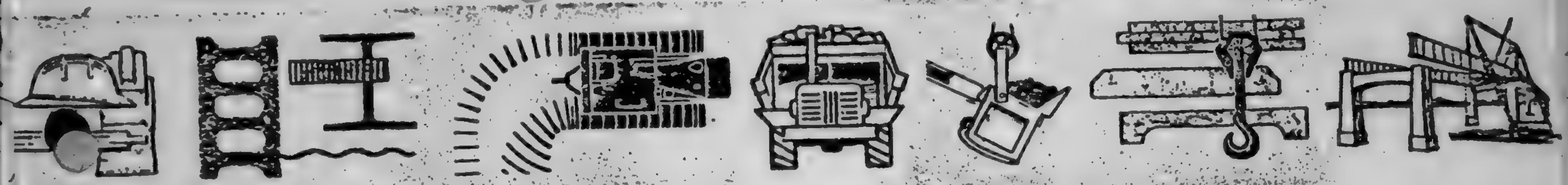
15. SIGNATURE OF APPROVING OFFICIAL

16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9363

BRIDGES STREETS & ROADS STEEL STRUCTURES



DOUGLAS S. COATS, INC.
P.O. BOX 311 • BEND, OREGON 97701 • (503) 382-7330

May 7,1982

A.D.Vohland
Asst. Project Manager
P.O.Box 1128
Roseburg, Oregon 97470

Gentlemen:

In considering our schedule for removing the bridge decks and related work in light of your requirement to do Clarks Branch, South Bound in two stages, please notice our attached schedule.

The schedule shows two approaches - one as mentioned and the other by being able to do Clarks Branch S.B. at one time instead of in two stages. Please note that the original bid included the North Bound of Clarks Branch, but this was eliminated as was also the quanities for payment, which reduced the work and also the income from those quanities.

Doing any bridge in two stages was not considered in the original bid. By considering the schedule, it is seen that the two stage will add 4 days more time or 25% to do the same amount of work. This means we're adding more labor and machines to do the same volume by going two stage.

We estimate the additional labor at $6,400.00 for 4 extra days and 1 day extra rental for the screed machine at $1,200.00. Total costs to us is $7,600.00.

(should be less Rental Time)

Sincerely,

WM Farr
W.M.Farr Project Engineer

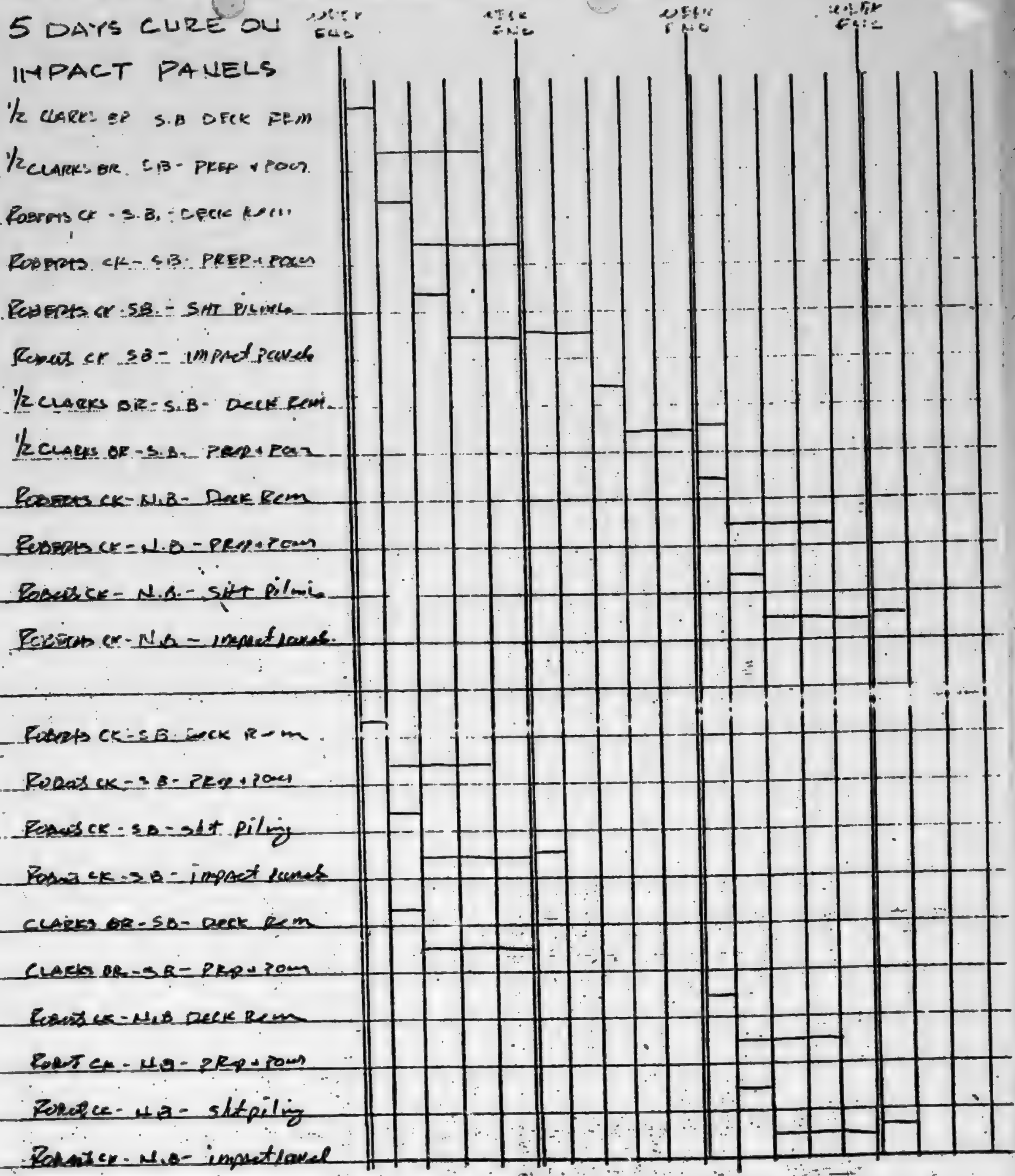
RECEIVED
MAY 11 1982
OFFICE OF RESIDENT ENGINEER
R.V. BUSEY
RE ☐ ASST. ☑ OE ☐ FILE ☐ INSP ☐

4 DAYS CURE AFTER DECK POUR - 1 DAY FOR LANE CHANGES

5 DAYS CURE ON IMPACT PANELS

SCHEDULE IN ACCORDANCE WITH STATES DIRECTIVE TO DO CLARKS BRANCH IN TWO STAGES

SCHEDULE IF CLARKS BRANCH COULD BE DONE AT ONE TIME

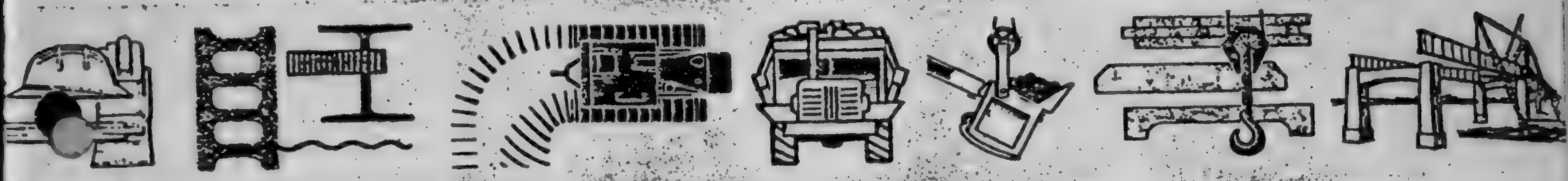


ROBERTS CREEK - DILLARD INTERCHANGE

SCHEDULE FOR DECK REMOVAL + CONCRETE SURFACING

9363

BRIDGES · STREETS & ROADS · STEEL STRUCTURES



DOUGLAS S. COATS, INC.
P.O. BOX 311 • BEND, OREGON 97701 • (503) 382-7330

RECEIVED
MAY 7 1982

May 5, 1982

A.D.Vohland
Asst. Project Manager
P.O.Box 1128
Roseburg,Oregon 97470

Gentlemen:

In reviewing your letter dated April 19, 1982 regarding deleted bridge items, we concur that the mobilization in the bid items should have been deducted before applying the 10%, the correct amount deleted is now $64,251.00 plus 10% of this is $6,425.00.

Regarding documentation of mobilization in each bid item, this would be difficult to "prove". All bids are estimated realizing what mobilization expenses are and in this case it was included in total costs. With the type of work we are doing- concrete which requires a lot of form material, backhoes for excavation, pile driving equipment, it is evident that mobilization is needed for this type of work.

We believe this request is compatable with section 109.04 plus 109.05 and has a direct bearing on the deleted items.

Therefore, we respectfully request a credit of $8177.08 (This reflects the change in mobilization) be given us for the deleted items.

RECEIVED
MAY 10 1982
OFFICE OF RESIDENT ENGINEER
R. V. BUSEY
RE ASST ☑ OE ☐ FILE ☐ INSP ☐

Sincerely,

W M Farr
W.M.Farr Project Engineer

9363

R. A. Hatch Co.
General Contractors
Post Office Box 201
Bend, Oregon 97701
(503) 382-8418

April 23, 1982

Al Vohland
Oregon State Highway Department
P.O. Box 1128
Roseburg, Oregon 97470

Re: Contract # 9363
Roberts Creek-Dillard Interchange
Electrical Wire Relocation @ Sta. 2954

Dear Al,

Attached find a copy of the costs that we incurred in the relocation of the wire at Station 2954+00.

We Feel that this work was extra to the contract and should be paid for.

Repectfully,

Donald J Rapaich

Donald J. Rapaich
Project Supt.

c/c: Bend File
Job File

RECEIVED
APR 23 1982
OFFICE OF RESIDENT ENGINEER
R. V. BUSEY
ASST. RV. OE ☐ FILE ☐ INSP ☐

	INITIALS	DATE	REFER-
PREPARED BY			
CHECKED BY			
APPROVED BY			

FORCE ACCOUNT WORK up Se. Pole:

DON GILLISON	operator Fore.	Group 9	3 hr @ 15^{05}	45^{15}
JOHN FIFER	operator	Group 9	1 hr @ 15^{05}	15^{05}
JOHN FIFER	operator	Group 7	1½ hrs @ 14^{85}	22^{28}
MATT BURROUGHS	Truck Driv.	Group 4	3 hr @ 13^{95}	41^{85}
				124^{33}

VACATION + FRINGE:	Operator	5½ h @ 3^{87}	21^{29}
	Teamster	3 hr @ 3^{52}	10^{56}
			156^{18}
TAXES + INSURANCE @ 22.92%			35^{80}
			191^{98}
	20% Mark-up		38^{4}
			230^{38}

9363

TOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION
Roseburg, Oregon 97470

In Reply Refer to
File No.: CON - 5
9363

April 19, 1982

To: R. A. Hatch Co.
P.O. Box 786
Roseburg, OR 97470

Attention: Donald Rapaich
Project Superintendent

Subject: Roberts Creek - Dillard Intchge
Contract No. 9363
Electrical Wire Relocation - Sta. 2954

Dear Mr. Rapaich:

In reply to your letter dated April 15, 1982 regarding the above mentioned subject, we will not issue any Price Agreement or participate in any additional costs incurred for moving the electrical wires at Sta. 2954.

The initial temporary illumination drawings indicate setting the poles at a distance of 55 feet from centerline. The location of the retaining wall is 51 feet from centerline. Therefore, it would have been feasible to drive piling without any restrictions as the plans were drawn.

Sincerely,

A. D. Vohland
A. D. Vohland
Asst. Proj. Manager

cc: R. A. Hatch Co. - Bend
C. T. Keasey
Alfred Shirley
—file

Form 734-3122

9363

VICTOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION
Roseburg, Oregon 97470

In Reply Refer to
File No.: CON-5
9363

April 19, 1982

To: R. A. HATCH CO.
P.O. Box 786
Roseburg, OR 97470

RECEIVED
APR 21 1982

Attention: Donald Rapaich

Subject: Roberts Creek - Dillard Intchge.
Contract No. 9363
Deleted Bridge Items

Dear Mr. Rapaich;

I have analyzed your letter of April 8, 1982 regarding additional compensation for the deleted items of the structure work at Clarks Branch.

The item for reimbursement of mobilization is going to be very difficult to justify. I realize the sub-contract does not include any monies for mobilization. However, if your subcontractor can furnish documentation, whereby he specifically set out the mobilization for each bid item, then we may take another look at the item.

Please refer to Section 109.04 and 109.05, page 81, of the Standard Specifications. Specifically 109.05, which addresses reimbursement for unbalanced allocation . . . . .

If your subcontractor did in fact have mobilization in his bid items he should have deducted these amounts before applying the 10%.

Please review the above mentioned sections of the Standard Specifications and advise me of your intentions.

Sincerely;

71 390
7139
64,251
10% - 6425^{09}

A. D. Vohland
A. D. Vohland
Asst. Proj. Manager

RECEIVED
MAY 10 1982
OFFICE OF RESIDENT ENGINEER
R. V. BUSEY
ASST ☐ OE ☐ FILE ☐ INSP ☐

cc: R. A. HATCH CO.
C. T. Keasey
Alfred Shirley
file

9363

R. A. Hatch Co
General Contractors
Post Office Box 201
Bend, Oregon 97701
(503) 382-8418

April 15, 1982

Ron Busey
Oregon State Highway Department
P.O. Box 1128
Roseburg, Oregon 97470

Re: Contract # 9363
Roberts Creek-Dillard Interchange
Electrical Wire Relocation @ Sta. 2954

Dear Ron,

R. A. Hatch Company Requests that a Price Agreement be issued to cover the cost of relocating the overhead electric wire that conflicts with the installation of the retaining wall at approximate station 2954+00.

The design and location of the temporary illumination poles was the states responsibility and therefore feel that this problem could have been avoided.

As soon as we collect our costs for this work we shall submit them to you.

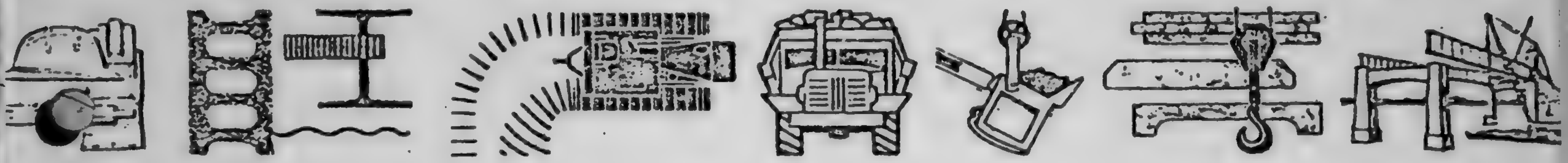
Respectfully,
Donald J. Rapaich
Donald J. Rapaich
Project Supt.

c/c: Bend File
Job File

RECEIVED
APR 16 1982
OFFICE OF RESIDENT ENGINEER
R. V. BUSEY
RE ☐ ASST ☑ OE ☐ FILE ☐ INSP ☐

9363

BRIDGES STREETS & ROADS STEEL STRUCTURES



DOUGLAS S. COATS, INC.
P.O. BOX 311 • BEND, OREGON 97701 • (503) 382-7330

RECEIVED
APR 7 1982

April 6,1982

R.A.Hatch Co.
P.O.Box 201
Bend, Oregon 97709

RE: Roberts Creek-Dillard Interchange
Bid Item Quanity Changes

Gentlemen:

In analysing the impact of the eliminated bid items per your letter dated 3-23-82 and looking at the attached breakdown of the affected items, please consider the following.

As our Sub-contract implies, there is no item for mobilization, as we consider the moblization to be spread evenly throughout the various items. Therefore, we request 10% of 71,390.00 or 7139.00 to be returned as a credit to us.

The time involved in waiting until we knew for sure how many sheet pile were needed and then having the quanity reduced by half, has increased the price to us from 35.70/cwt to 38.55/cwt. This represents an increase of 1.03/l.f. The adjusted quanity is now 1536 l.f. to accommodate the extra length at one end. Therefore, we request 1.03X1536= 1582.08 to be returned to us as a credit.

Also, Farwest Rebar has submitted a change to us by adding 170.00 for their time in detailing the impact panel that was deleted.

Detailed 11-17-81
Items eliminated 2-22-82

Elimimating the one deck removal does not actually hamper our schedule since we were counting on detouring around the affected bridge, doing that bridge complete (piles, impact panels, deck) then moving to the other end of the project and doing one bridge there. By then, traffic could be switched over to the first bridge that was done, and the cycle repeated.

Therefore we request a total credit to us of $8891.08 for the deleted items.

Sincerely,

WM Farr
W.M. Farr
Project Engineer

① 7139.00
② 1582.08
③ 170.00
8891.08 - All subcontracted Items

ITEMS AFFECTED

Bid Item	Original Quanity	Revised Quanity	Unit Price	Original Total	Revised Total
#83 Sheet Piling	2100 Ft.	1152 Ft.	24.00	50,400.00	27,648.00
#84 Impact Panels	710 SY	310 SY	60.00	42,600.00	18,600.00
#87 Class 1 Prep. (#7839)	584 SY	0	12.00	7,008.00	0
#88 Class 1 Prep. (#7839A)	560 SY	0	12.00	6,720.00	0
#91 Class 2 Prep. (#7839)	17 SY	0	100.00	1,700.00	0
#92 Class 2 Prep. (#7839A)	17 SY	0	100.00	1,700.00	0
#93 Conc. Resurf.	2710 SY	1560 SY	27.00	73,170.00	42,120.00
			TOTAL	183,298.00	88,368.00

REPRESENTS: 183,298.00
- 88,368.00

94,930.00 Deduction

9363

VICTOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION
Roseburg, Oregon

March 23, 1982

In Reply Refer to
File No.: CON-5
9363

R.A. HATCH CO
P.O. Box 201
Roseburg, Or 97470

Attention: Don Rapaich

Subject: Roberts Creek - Dillard Intge
Contract No. 9363
Bid Item Quantity Changes

Dear Mr. Rapaich;

On February 22, 1982, I transmitted a letter to you regarding the changes associated with the deletion of sheet piling, Bridge End Panels and Structure Overlay of the Clarks Branch Structures.

I have reviewed the proposal from your subcontractor regarding these changes. In review of the changes, I discovered I had deleted the structure overlay of the N.B. Clarks Branch Structure #7839A. This was in error and we still intend to overlay this structure. Therefore, following are the revised quantities:

Bid Item No.	Revised Corrected Quantities	
83	1152 Lin Ft	(36 @ 20 Ft) (36 @ 12 Ft)
84	310 Sq Yd	
85	No change	
86	No change	
87	Deleted	
88	No change	
89	No change	
90	No change	
91	Deleted	
92	No change	
93	2120 Sq Yd	

I advised Skip Farr, of Douglas Coates Construction, your subcontractor, of the error this date and informed him I would resubmit the quantities.

Please transmit a copy of the revised quantities and have them resubmit their estimate of values regarding the changes. Thankyou.

Sincerely,

A.D. Vohland
A.D. Vohland
Ass't Proj Mngr

cc: R.A. Hatch - Bend
C.T. Keasey
Alfred Shirley
file

Form 734-3122

9363

R.A.Hatch Co.
General Contractors
Post Office Box 201
Bend, Oregon ~~97701~~ 97709
(503) 382-8418

March 19, 1982

Mr. Ronald V. Busey
Resident Engineer
Oregon State Highway Division
P.O. Box 1128
Roseburg, OR 97470

Re: OSHD Contract 9363

Dear Mr. Busey:

Enclosed is a copy of the price adjustment request from our subcontractor, Douglas S. Coat, Inc., due to the deletion of the sheet piling, impact panels and other bridge work as listed.

We consider this a very reasonable request, and forward it to you. The only thing we have to add is that related traffic control matters have not been addressed, in particular the detour plan. We suggest that these matters be handled separately if the need arises, so that the enclosed request can be processed.

Yours truly,

R. A. HATCH CO.

Gerald B Johnston

Gerald B. Johnston
Controller/VP

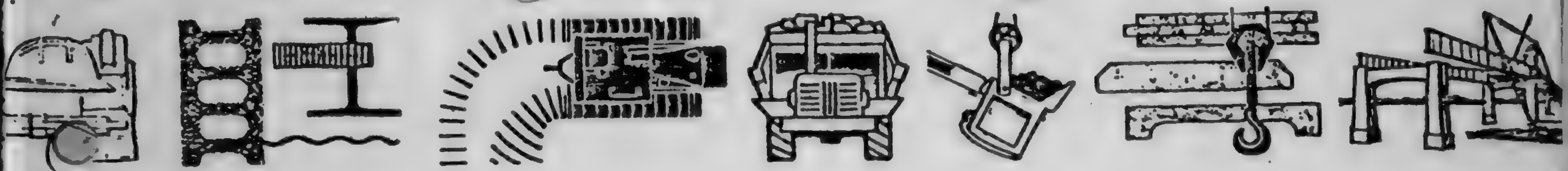
GBJ:lst

enclosure

sent back for
Resubmittal

RECEIVED
MAR 19 1982
OFFICE OF RESIDENT ENGINEER
R. V. BUSEY
RE ☐ ASST. ☑ OE ☐ FILE ☐ INSP ☐

BRIDGES 9363 STREETS & ROADS STEEL STRUCTURES



DOUGLAS S. COATS, INC.
P.O. BOX 311 • BEND, OREGON 97701 • (503) 382-7330

March 15, 1982

RECEIVED
MAR 16 1982

R.A.Hatch Co.
P.O.Box 201
Bend, Oregon 97709

SUBJECT: Roberts Creek -Dillard Interchange
(Eliminating Bid Items)

Gentlemen:

In analysing the impact of the eliminated bid items per your letter dated 2-22-82 and looking at the attached breakdown of the affected breakdown, please consider the following.

As our Subcontract implies, there is no item for mobilization, as we considered the mobilization to be spread evenly throughout the various items. Therefore we request 10% of $94,930.00 or $9493.00 to be returned as a credit to us.

The time involved in waiting until we knew for sure how many sheet pile were needed and then having the quanity reduced by half has increased the price to us from $35.70/cwt to $38.90/cwt. On 36 lb./ft. pile, this represents $1.15/LF of pile, the added cost to us is $1.15 X 1152 = $1324.80. We also request this amount be returned to us as a credit.

Also, Farwest Rebar has submitted a change to us by adding $170.00 for their time in detailing the impact panels which were deleted.

In setting up for bid items 87,88 and 93, the job was bid for two stage construction, where it was intended to move from the one bridge at one end of the job to the other end in the same stage. By the time the second bridge on the 1st. stage is done, we can move back to the other end and switch to stage two. Concrete would be set up and traffic could be moved without delay to the sequences.

By eliminating Clarks Branch Bridges, there will be a delay in switching between stage 1 and 2 on Roberts Creek Bridges, causing a second trip for the scarifier for the deck removal and also a

RECEIVED
MAR 19 1982
OFFICE OF RESIDENT ENGINEER
R. V. BUSEY
RE ☐ ASST ☐ OE ☐ FILE ☐ INSP ☐

second trip for the screed machine which will both be rented. The additional cost is hard to figure on inefficient movement of men and equipment and additional rental cost, so for your consideration, we request for Bid Items 87 and 88, a cost of $0.50 X 1144' = 572.00, and for Bid Item 93, a cost of $1.00 X 1560 = $1560.00, to be credited to us.

In summary, we are requesting a total of $13,119.80 to be returned to us because of the deletions.

Sincerely,

W.M.Farr

W.M.Farr Project Engineer

REVISED QUANITY ON DELETED BID ITEMS

Bid Item	Original Quanity	Revised Quanity	Unit Price	Original Total	Revised Total
#83 Sheet Piling	2100 Ft.	1152 Ft.	24.00	50,400.00	27,648.00
#84 Impact Panels	710 SY	310 SY	60.00	42,600.00	18,600.00
#87 Class 1 Prep. (#7839)	584 SY	0	12.00	7,008.00	0
#91 Class 2 Prep. (#7839)	17 SY	0	100.00	1,700.00	0
#93 Conc. Resurf.	2710 SY	2120 SY	27.00	73,170.00	57,240.00
			TOTAL	174,878.00	103,488.00

REPRESENTS: 174,878.00
−103,488.00
71,390.00 Deduction

9363

TOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION

Roseburg, Oregon
March 15, 1982

In Reply Refer to
File No.: CON-5
9363

R.A. Hatch Co.
P.O. Box 786
Roseburg, Or 97470

Subject: Roberts Creek - Dillard Intge
Contract No. 9363
Haul from L.P. Quarry

Attention: Don Rapaich

I notice from your current schedule you intend to haul rock inlay and rock ditch lining beginning this week. I assume you intend to obtain the material from the L.P. Quarry.

I wish to caution you that a zoning variance has been applied for and using the existing access road could jeopardize the timely issuance of this necessary variance.

If you intend to use the existing road (in lieu of constructing a haul road at this time) it would be well to contact all effected property owners and explain the limited nature of your operation.

Sincerely,

Ronald V. Busey
Ronald V. Busey
Proj Mngr

cc: R.A. Hatch - Bend
C.T. Keasey
Alfred Shirley
file

Form 734-3122

9363

R. A. Hatch Co.
General Contractors
Post Office Box 201
Bend, Oregon ~~97701~~ 97709
(503) 382-8418

March 2, 1982

Mr. Ronald V. Busey
Resident Engineer
Oregon State Highway Division
P.O. Box 1128
Roseburg, OR 97470

Re: OSHD Contract 9363, Roberts Creek
Haul Structure

Dear Ron:

Bob Hatch gave notice verbally at the pre-job that we expect to have a claim for the haul structure cost, since we had understood at bid time that we could cross the travelled roadway with haul vehicles. We would like to record the fact that notice has been given.

Yours truly,

R. A. HATCH CO.

Gerald B. Johnston

Gerald B. Johnston
Controller/VP

GBJ:lst

RECEIVED
MAR 3 1982
OFFICE OF RESIDENT ENGINEER
R. V. BUSEY
RE ASST ☑ OE ☐ FILE ☐ INSP ☐

9363

Sept 24th (1110 Bid letting

VICTOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION
Roseburg, Oregon

March 1, 1982

In Reply Refer to
File No.: CON-5
9363

R.A. Hatch Co.
P.O. Box 786
Roseburg, Or . 97470

Attention: Don Rapaich

Subject: Roberts Creek - Dillard Intge
Contract No. 9363
L.P. Quarry

This is to advise you that the L.P. Quarry is to be developed as shown on the construction plans with slopes as indicated. However, any expansion of the pit must wait for a conditional use permit which will be issued not sooner than 45 days from February 26, 1982.

You can construct access road and remove material already mined prior to issue of the conditional use permit. I would advise against any use of the existing road to haul material without first contacting property owners to advise them of the situation.

Sincerely,

Ron Busey
Ron Busey
Proj Mngr

cc: Alfred Shirley
R.A. Hatch - Bend
file

Form 734-3122

I-5

VICTOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION
P.O. Box 1128
Roseburg, Or 97470

REFERRED TO
Beard ~~WEC.~~ Stoudenmeyer
~~Cole~~ Munn
Erikson Watson
Hager Dorn Leu
Return Discuss Do File Copy Due
BY FINAL DESIGN ENGINEER

Info.
A.

In Reply Refer to
File No.: CON-5
9363

December 22, 1981

1 Versteeg ✓
Anderson
2 Adams A
Olson
3 Sullivan JWS
Turpin
Trout
Wakerlig

RECEIVED
DEC 30 1981
ROAD DESIGN SECTION

Do Not File ☐
Return To
Bring Up
Action

R.A. HATCH CO.
P.O. Box 201
Bend, Or 97709

Attention: Gerald Johnston

Subject: Roberts Creek - Dillard Intchge
Contract No. 9363
Structure O'Lay and Sheet Piling

Dear Mr. Johnston;

We have discovered some discrepencies between the Plans and Special Provisions regarding the Structural O'Lay of Structure No. 7839A. The purpose of this letter is to clarify and inform you of what we will require within the contract.

The plans specify a structural O'Lay for Structure No. 7839A, however, the Special Provisions, page 86, indicates an overlay depth of "0" inches. Therefore we will not be overlaying this structure. Please note the quantities in the "Bid Schedule" include the quantities for this structure and should be reduced accordingly.

Not Correct - specs show depth of existing AC not overlay

We will not construct the Reinforced Concrete Bridge End Panels or install the Steel Sheet Piling on Structures No. 7839 or 7839A. Again, these quantities are included in the contract bid schedule and should be discounted.

Why?

Therefore, the only work to be done at the Clark Branch Structures is the structural overlay of Structure No. 7839. We will be working on a detour or other alternatives to handle traffic while constructing the overlay on this structure. We will advise you at a later date regarding this matter.

Please discuss these changes with your subcontractor to insure that he does not purchase materials which will not be needed do to the deletions. Also, please advise as to any additional monetary changes which may be warranted due to the changes. Thankyou.

cc: J. H. Versteeg ✓
Walt Hart

Sincerely,

Ron Busey
Ron Busey
Proj Mngr

CC: CONSTR.

Sent cw

ROSEBURG REGION
RECEIVED
1981

cc: C.T. Keasey
Alfred Shirley
file

Form 734-3122

7363 I-5

STATE OF OREGON
ROAD DESIGN SECTION

INTEROFFICE MEMO
DES 16

TO: MEMO TO THE FILE

DATE: December 4, 1981

FROM: Jack Sullivan Jack
Specifications Engineer

SUBJECT: Contract Specifications
Roberts Creek-Dillard Interchange

Versteeg ✓
Anderson
Christensen
Olson
Sullivan
Terpin
Trout
Wakerlig

RECEIVED
DEC 07 1981
ROAD DESIGN SECTION

Do Not File
Return To
Bring Up
Action

Tensile strength requirements for the 36-inch welded steel pipe should be 80,000-96,000 psi instead of 85,000-96,000 psi as shown on page 60 of Contract No. 9363.

The 85,000 psi minimum strength as stated was inadvertently incorporated into the project specifications. The minimum tensile strength should be corrected to 80,000 psi.

JS:ja

cc J. H. Versteeg
John Jenkins
Glenn Hossner, FHWA
Ron Busey
Bud Shirley

H

1981 Roberts Creek-Dillard 9363
Int. Sec. Pac. Hwy.
(gr, pav, bar, str, & sign) #3

9363

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION
INTER-OFFICE CORRESPONDENCE
Roseburg, Oregon
October 22, 1981

FILE: CON-5
9363

FROM: Alva D. Vohland
Alva D. Vohland
Asst Res Engr

SUBJECT: Roberts Creek - Dillard Inter
Contract No. 9363

TO: Memo to file

Mr. John Loosley, Roseburg Paving Inc., was in the office this A.M. regarding business of other projects he currently has with us. After we finished talking about his contracts, I asked John if he had a subcontract or any official document regarding work R.A. Hatch indicated Roseburg Paving is going to perform. John replied, no only a telephone conversation indicating that they had the paving portion of the contract. John then asked if Hatch was going to build a temporary structure across the lanes at the top of the mountain, as he had figured his bid contingent upon the structure. I replied yes, that at the preconstruction conference, Mr. Hatch said that Doug Coates would be designing and constructing a temporary haul structure. John Loosley then stated that Mr. Hatch informed him that he did have a "haul structure" figured in his bid and that it was covered under "Mobilization".

cc: Alfred Shirley
file

Friday (Day of Week), October (Month) 2 (Date), 1981

Weather

Called Hatch and arranged a date for the pre-consth conference. We decided on Friday, Oct 9, 1981 at 10:00 a.m. at Region conference room.

I asked if he had a schedule and MBE requirements. He said he would have them by then.

Ronald V. Bussy
(Signature)

Friday (Day of Week), October (Month) 9 (Date), 1981

Weather

Held precon as planned. See minutes for details. The tape of the meeting is on file.

After the meet Hatch met with Gix, Voland and myself and Hatch advised he is going to bu. a haul structure and will make a claim based on the conversation with Al prior to bid. We acknowledged his intent. I advised Al hadn't been present at previous discussions with road design regarding haul patterns.

Ronald V. Bussy
(Signature)

1-382-8418

In Robert Hatch 8:10 a.m. 9-28-81

Advised Al said it was o.k. to haul across freeway direct with scrapers. I said I didn't think that was permitted by the specifications. I advised I would check and call him back.

I called back and advised, even though Al had told him it was permissable, it was in direct violation of the specials and would not be permitted. The discussion went on at some length. He insisted because Al told him it was o.k. he was going to do it that way. I said regardless of what Al said we would go by the specifications. He insisted otherwise. Said he dropped the planned temp overcrossing based on what Al said. I said I can not allow any deviation from the specs. I said I would discuss it with the region but didn't believe it would change anything.

Ron Busey

On any job there is always a possibility of a dispute between the contractor and the state with reference to conditions, which, at the time they occur, appear to be trivial.

It is imperative therefore that our field records indicate every detail of the construction from start to finish and that these records recite all conversation with the contractor and give complete data as to each minute detail involved in any change whether in plans, procedure, schedule of operations or, in fact, anything which might in any degree whatsoever affect the contractor's costs.

The diary shall be entered, signed and dated each day and forwarded to the office with other records at the completion of the job.

At the close of the day's entry a line shall be drawn through the unused portion of the page as evidence that the entries were made on the actual date indicated at the top of the page. If, later, it is found that some other item or incident should have been recorded to make an entry on the page for the date the omission was discovered together with a cross reference on the date the incident occurred.

If a wrong entry is made cross it out. Make no erasures.

The diary shall contain the following information:

1. Each and every conversation, pertaining to the prosecution of the work, with the contractor or his representative on the job including verbal instructions pertaining to methods of prosecuting the work, time schedule of operations, acceptance of materials and all orders of any character whatsoever which might in any degree affect the contractor's costs.
2. A detailed record of weather conditions including water stage, temperature, etc.
3. A record of any condition encountered which differs from that shown on the plans or in the specifications. This will include a complete log of character of material encountered in excavations. If cofferdams, footing sizes or depths are changed in any degree whatsoever or if the contractor is requested to prosecute any particular part of the work in advance of other operations a detailed record must be made in the diary.

Everything which happens on the job from start to finish is to be recorded in the diary.

Monday (Day of Week), September (Month) 28 (Date) 1981

Weather

I recieved a phone call from R. Hatch wanting to know if it was permissable to haul across the freeway with scrapers. I said I didn't think so but I would check. He said he had called while I was on vacation and Al, my asst, said it was O.K.

I called him back later after talking to Al. I advised that Al had been mistaken and missed the statements on page 5 of the special provisions which stated at least one lane in both directions must be kept open at all times. I told him we would ~~this~~ insist he abide by the specials and he would not be permitted to haul across the freeway.

We argued this point at some length and I stood firm on my position. He said he dropped a planned haul structure costing $50,000 based on Al's statement. I advised that was unfortinate but we would still have to ~~fou~~ follow the specs. See memo to file.

Ronald V. Buys
(Signature)

Wednesday (Day of Week), September (Month) 23 (Date), 1981

Weather Fair

Jay Evensen - L.B. Foster & Son Called 9:30 AM inquiring about specification for H-Piles in Retaining Wall. I Pointed out the fact they must be "American Manufactured Materials" and then Read the Section 503 - Piles page 102 of Special Provisions and Referred him to the Ore St. Standard Specs." 1974 Page 656, Sect. 731.01, which he agreed and was apparently reading.

Apparently someone had indicated the H-Piles in the retaining Wall must be something other than Normal Piling.

Alva D. Volland (Signature)

Wednesday (Day of Week), September (Month) 23 (Date), 1981

Weather Fair

Bob Hatch - RA Hatch CO.

Inquired about Cross-over of Median area. I said it would be permissable to Cross Median @ ½ mile intervals with proper Signing, Flagging etc.

He also inquired about Haul Str. across ~~For~~ Both lanes I said "No Problem"

He asked if these Cross-overs would be utilized through all phases ie; "CTB" Grading, & Paving: I said yes if the Grade Separation was not adverse.

Alva D. Volland (Signature)

9363 6

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION
INTER-OFFICE CORRESPONDENCE
Roseburg, Oregon
October 2, 1981

FILE: CON-5
9363

FROM: Ron Busey
Res Engr

Ron Busey

TO: MEMO TO FILE

SUBJECT: Roberts Cr - Dillard Intchg
Pacific Hwy
Contract No. 9363
Hauling across Freeway

On September 28, 1981, Robert Hatch of R.A. Hatch Co. called regarding the subject project. He asked about hauling across the freeway into the median. I said this is not permitted by the specifications.

He said he tried to call me last week prior to the bid opening but I was on vacation so he tried to get Bud Shirley but he and his assistant were also gone. So he asked my assistant, Al Vohland, if he could haul direct across the freeway with scrapers. He advised Al had said he did not find anything in the specifications to forbid it.

I told him I would check with Al and call him back. Al advised he had said he could haul across into the median. I pointed out Article 104.05(A), (B) & (C) of the Special Provisions on page 5 which do not allow closing over on lane of trafffic at any time. Al said he had overlooked that provision.

I called Mr. Hatch back and advised that even though Al had mistakenly advised he could haul across traffic that did not releave him of the responsibility of living up to the terms of the contract. I said I would not permit it. I read the article to him and again stated my position on the matter.

The discussion went on at some length. Mr. Hatch insisted that because someone from my office had said he was permitted to haul across the freeway he was going to do it that way. He said he had subtracted $50,000 from his bid because he felt he no longer needed the temporary haul structure.

I told him that was unfortunate but the specials were plain on maintaining two way traffic at all times without interruption and I felt he could read as well as anyone else. I advised I would not permit violation of the specifications. I advised I would talk to the region about the matter but I was sure that wouldn't change anything.

I discussed the matter with Bud Shirley and Jim Gix and they agreed that no deviation from the specials would be permitted.

cc: C.T. Keasey
Bud Shirley

9363 8-26-81 L

U. S. DEPARTMENT OF TRANSPORT ION
FEDERAL HIGHWAY ADMINIST ION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. I-5-2-(91)113
2. STATE PROJECT NO. See below
2A. COUNTY NAME Douglas

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.
5. ITEM NO. 90226

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

RECEIVED
STATE HWY ENGR
AUG 27 '81
REFER TO [illegible]
FOR
Info ☐ Inves ☐ R/D ☐ D/R ☐ Sign ☐ Act ☐

7. DATE AUTHORIZATION EFFECTIVE 8/26/81
8. FEDERAL ROUTE NUMBER Interstate 5
9. STATE ROUTE NUMBER Primary 1

10. GENERAL LOCATION: Roberts Creek - Dillard Section

11. GENERAL DESCRIPTION OF WORK Program change

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* Program change

13. REMARKS

As requested in Mr. Swan's letter of 7/10/81 I approve the program change as follows:

1. Project Location: Change to I-5, 5.2 miles south of R[illegible]eburg south 5.1 miles.
2. Character of Proposed Work: Change to grade, drain and High Type pavement 1.4 miles to alleviate slide problems at Roberts Mt. High Type pavement overlay median barrier and shoulder improvements.
3. Project Number: Change to I-IR-5-2(91)113.
4. Miles: Change to 5.14.
5. Appropriation Code: Add 044.
6. Project Name: Change to Roberts Creek - Dillard Interchange Section.
7. Project Cost: Revise TEC appn. code 042 to $6,472,026 - F.F. $5,968,501. Add to appn. code 044 TEC $1,929,440 - F.F $1,701,380.

(Total Increase of $2,391,216 - F.F. $2,127,231 from 20% limitation)

14. DATE 8/26/81
15. SIGNATURE OF APPROVING OFFICIAL Malach
16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9363

8-26-81

2

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. I-IR-5-2(91)113

2. STATE PROJECT NO. See below

2A. COUNTY NAME Douglas

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 90226

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

RECEIVED
STATE HWY ENGR
AUG 27'81
REFER TO
[illegible]
FOR:

Info	Inves	R/D	D/R	Sign	Act	File
					X	

7. DATE AUTHORIZATION EFFECTIVE 8/26/81

8. FEDERAL ROUTE NUMBER Interstate 5

9. STATE ROUTE NUMBER Primary 1

10. GENERAL LOCATION:
Roberts Creek - Dillard Section

Original
8.27.81

11. GENERAL DESCRIPTION OF WORK
Grading, paving, barriers, structures and signing

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY

☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION

☐ ACQUISITION OF RIGHT-OF-WAY

☒ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS

☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

☒ OTHER *(Specify)*
Perm. & Temp. Pavement Striping S.F. $14,000
Remove pavement striping S.F. $6,000
Temporary Erosion control $10,000
on the job training $4,800
Asphalt cement adjustment $155,000

13. REMARKS

After concurrence in award you are authorized to proceed with those items listed above as shown in your Estimate.

Mr. Swan's 8/24/18 request and certifying statements are accepted.

PS&E documents for the subject project have been reviewed and are approved at a total estimated cost of $8,401,466 Federal Funds $7,669,881.

A signed copy of the Title Sheet is returned herewith.

(The above authorization does not require additional obligation of funds)

14. DATE 8/26/81

15. SIGNATURE OF APPROVING OFFICIAL Malach

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79)   PREVIOUS EDITIONS MAY BE USED

9363

5

ENVIRONMENTAL REVIEW CHECKLIST

ALL CLEAR 7/30/81
Donald L [illegible]

1/2 ~~Louie~~ Paul

Sept. 3, 1981 Bid Letting ____________ All Clear Deadline
SECTION Roberts Creek-Dillard Int.
Highway Pacific
County Douglas Region 3
Type of Work G-P-etc. Funds FAI
State ____ Consultant ____ Plans Avail. ___ Yes ___ No

DSL ✓ Weigel Bar Oct 15 - Jun 15
Noise ✓

	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR	2 Exc
DOCUMENTS:						
EIS	☒					
Negative Declaration	☒					
Project Assessment	☒					
Write-off Letter	☒					

PERMITS:						
Division of State Lands		☒			☒	
D.O.G.M.I.		☒			☒	4 Sources (1 Mand. 3 Prosp)
Corps of Engineers		☒			☒	
Coast Guard	☒					
Co. Conditional Use	☒					
NPS Air Pollution	☒					
NPS Water Pollution	☒					

CULTURAL:						
Cultural Survey		☒			☒	
Cultural Salvage	☒					

NOISE:						
Noise Study		☒			☒	

9363 L.

U.S. Department
of Transportation

**Federal Highway
Administration**

Memorandum

THE OREGON DIVISION - SALEM

Subject: Oregon Project I-IR-5-2(91)113
Roberts Creek-Dillard Intchg. Section
Pacific Hwy., Douglas County

Date: July 21, 1981

From: Division Administrator

Reply to Attn. of: HFO.3-OR

To: Mr. H. S. Coulter, State Highway Engineer, ODOT

The information contained in Mr. Christensen's July 15, 1981 letter supporting the use of State furnished materials on the subject project has been reviewed and found acceptable.

G.K. Hosmer
for Dale E. Wilken

cc:
OSHD (D O Christensen, Rd Dsgn)

RECEIVED
STATE HWY ENGR
JUL 22 '81
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

9363

2.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

July 15, 1981

In Reply Refer to
File No

Mr. Dale E. Wilken
Division Administrator
Federal Highway Administration
The Equitable Center, Suite 100
530 Center Street N.E.
Salem, Oregon 97301

Dear Mr. Wilken:

Re: Roberts Creek-Dillard Intchge. Sec.
Pacific Highway
Douglas County

We are requesting a public interest finding in the State furnishing the following materials on the subject project.

State-furnished Cement-treated Base Material and Aggregate Shoulder Material. This material consists of previously crushed aggregates in stockpile located on State property in the N.E. quadrant of the Winston Interchange approximately two miles north of the beginning of the subject project, and in the S.W. quadrant of the Oakland-Shady Interchange approximately 2.7 miles north of the beginning of the subject project.

This material was crushed for future use by the State from excess excavation material off of the Garden Valley Road-Fairgrounds Interchange section of I-5 in Roseburg.

Initially the project will be credited in the amount of $305,270.00. This amount was arrived at as shown on the following page.

RECEIVED
STATE HWY ENGR
JUL 15 '81
REFER TO

FOR

Info	Issues	R/D	D/R	Sign	Act	File

NOTED
H.S. COULTER

7-16
EAH

Crushed Material In Stockpile	Cost/Ton	Amount
47,474 Tons - 1"-0	$2.56	$ 121,533.00
50,703 Tons - 1/2"-0	$2.93	$ 148,560.00
+ 3,929 Tons - 3/8"-0	$3.48	$ 13,673.00
Total----102,106 Tons		Total-----$ 283,766.00 *

Storage of Crushed Material on Private Property (8 Acre)	
Cost to prepare 8 Acre site for Rock Storage	$ 66,235.00
Rental Cost of property, 1976 to 1981 @ $5000/yr.	+ $ 25,000.00
Total	$ 91,235.00
Crushed Material to be furnished . . . . $\left(\frac{102{,}106 \text{ tons}}{265{,}200 \text{ tons}}\right)$ = Original Qty. stored on private property	x 39 %
	$ 35,582.00 *
Cost to Move Material to State Property (Present location)	$ 31,234.00 *
Total Cost of Stockpiled Material	$ 350,582.00 *

The contract specifications will require the contractor to use this material on the project and credit to the project will be adjusted when the actual amount of material is determined. The unit cost used in the final adjustment will be as follows:

Total Cost of Stockpiled Material . . . . $\frac{\$\ 350{,}582.00}{102{,}106 \text{ tons}}$ = $3.43/ton
Total Crushed Material in Stockpile . . . .

The total crushed material estimated for the subject project is 89,000 tons. Total initial credited amount 89,000 tons @ $3.43 = $305,270.00.

Our public interest finding is based on the energy conserved by using materials already on hand and to fully utilize public funds already expended.

This proposal has been discussed by telephone and tentatively approved by Mr. Hossner of the F.H.W.A.

We solicit your concurrence that it is in the public interest to furnish this material.

Very truly yours,

Duane O. Christensen

Duane O. Christensen
Acting Road Design Engineer

WEC:ls

cc: ✓H.S. Coulter
E. S. Hunter
C. T. Keasey
Alfred Shirley
D. E. Swan
Jack Sullivan
W. E. Cole

9363

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

July 10, 1981

In Reply Refer to
File No.: PRO 6-2

TO: Dale E. Wilken
Division Administrator
Federal Highway Administration

Original Signed By
D. E. Swan

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Program Change
Item No. 90226
Project No. I-5-2 (91) 117
Roberts Mountain Section
Douglas County

I request approval of a program change revoking my PR-9 dated May 5th and authorized May 20th by your PR-1240 as the State Highway Division now wishes to contract the project as originally programmed and authorized February 13th.

This program change will require additional funds as tabulated below. The additional cost is expected to be funded from the 20% of the FY'81 limitation withheld from distribution until after August 1.

	TEC	FF	PROJECT NO.
Rev.	$ 8,401,446	$ 7,669,881	I-IR-5-2(91)113
Present	6,010,250	5,542,650	I-5-2(91)117
Add'l.	$ 2,391,216	$ 2,127,231	

A breakdown of the additonal funds by appropriation codes follows:

APPN. CODE	TEC	FF	STATE	Amount	%
042	$ 6,472,026	$5,968,501	$503,525	Rev.	92.22
042	6,010,250	5,542,650	467,600	Present	92.22
	$ 461,776	$ 425,851	$ 35,925	Diff.	Add'l.
044	1,929,440	1,701,380	228,060	Rev.	88.18
Total	$ 2,391,216	$2,127,231	$263,985	Total	Add'l.

JLG/lms

cc: Lou Olson
General Files

orm 734-3122

9363

2

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

5-20-81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. I-5-2(91)117

2. STATE PROJECT NO. See below

2A. COUNTY NAME Douglas

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division
Salem, Oregon

4. PROGRAM NO.

5. ITEM NO. 90226

6. TO
Mr. H. S. Coulter
State Highway Engineer
Oregon State Highway Division
Salem, Oregon

RECEIVED
STATE HWY ENGR
MAY 26 '81
REFER TO [illegible]
FOR
Info Inves Act File

7. DATE AUTHORIZATION EFFECTIVE 5-20-81

8. FEDERAL ROUTE NUMBER Interstate 5

9. STATE ROUTE NUMBER Primary 1

10. GENERAL LOCATION: Roberts Mountain

11. GENERAL DESCRIPTION OF WORK Program Change

orig to 5-26-81

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* Program Change

13. REMARKS

As requested in Mr. Swan's letter of May 6, 1981, I approve the program change as follows:

1. Project Location: Change to "I-5, 6.3 miles south of Roseburg, South 1.5 miles"
2. Character of Proposed Work: Change to "grade, drain, and high type pavement."
3. Project Number: Change to "I-5-2(91)117"
4. Miles: Change to "1.5"
5. Appropriation Code: Change to "042 only" (Eliminate 044)
6. Class of Funds: Change to "Interstate"
7. Project Name: Change to "Roberts Mountain Section."
8. Project Cost: Change to "TEC $6,010,250 - Federal funds $5,542,650."

(Decrease TEC $3,561,130 - Federal funds $3,169,550)

14. DATE 5-20-81

15. SIGNATURE OF APPROVING OFFICIAL

16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9363

No 235

ROAD DESIGN SECTION 378-6558

May 18, 1981

J. E. Boyd, Manager
Right of Way Section

J. H. Versteeg
Road Design Engineer

File No. 51981
Weigle Bar Section
Dillard Highway
Douglas County

Attached is a description, an authorization, correspondence and prints for one file for quarry expansion to be used on the Roberts Mountain project, which is tentatively scheduled for July 9, 1981.

ORIGINAL SIGNED BY
By: W. H. WAKERLIG

W. H. Wakerlig
R/W Descriptions Engineer

WHW:rlr
Attachments

~~REFERRED TO~~
~~Beard Stoudenmeyer~~
~~Cole Munn~~
~~Erikson Watson~~
~~Hager Dorn Leu~~
~~Return Discuss Do File Copy Due~~
~~BY FINAL DESIGN ENGINEER~~

9363 1

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

INTER-OFFICE CORRESPONDENCE

FILE:

April 30, 1981

FROM: F. W. Yarbrough
Soils Engineer

TO: J. H. Versteeg
Road Design Engineer

SUBJECT: Roberts Mountain Section
[redacted]
Douglas County

Sources for Rock Buttress Material

Attached is advice I published on two occasions in the past regarding the identification and preparation of specifications for use of material sources for rock buttress material in the subject section.

The prints attached describe the difficulty associated with preparation of specifications and the need for tests on which to base specifications. We do have a number of tests in our files but none from the sources you named over the phone this afternoon. The sources to be used should be tested before specifications are prepared.

cc
Frank Terpin

REFERRED TO
___ Beard ___ Stoudenmeyer ___
1 Cole WEC ___ Mann ___
___ Eriksen ___ Watson ___
___ Hager ___ Dorn ___ Leu ___
[✓ Return] Discuss Do File Copy Due ___
BY FINAL DESIGN ENGINEER

Ant
Paul - file copy
Be sure we
have spec for
rock buttress
ok

1 Versteeg ✓
___ Anderson
3 Christensen W
___ Olson
2 Sullivan JWS
___ Terpin
___ Trout
___ Wakerlig

RECEIVED
MAY 1 1981
ROAD DESIGN
SECTION

Do Not File ☐
Return To ___
Bring Up ___/___/___
Action ___

Salem, Oregon
February 1, 1979

F. W. Yarbrough
Soils Engineer

Roberts Mountain Slide Repair
Rock Source for Rock Buttresses

Frank Terpin
Location Engineer

There is need for further investigation of possible material sources for the rock buttress material to be used in the stabilization of the Roberts Mountain and Weber slides. Extraordinary investigation needs to be made because no sources of obviously good rock with obviously sufficient quantity are known in the vicinity.

There are locations nearby which have some rock which will be satisfactory, but two things about them are not known: 1. How much good rock is in them and 2. How much waste will be generated to get the good rock.

These are uncertainties we like to leave with the Contractor. Which is fine. Which leaves us with the necessity to write a specification which will not rule out usable rock from not usually acceptable formations and at the same time enable exclusion of the junk and dirt associated with them. These are large and expensive inlays and selection of materials should not be taken lightly.

Where fresh lava rock can be anticipated there is no question that our Stone Embankment specification 203.13 is sufficient, except that gravel is not desired at Roberts Mountain.

The "clean" characteristic required for Stone Embankment material can be made more specific by requiring that visible voids be contained in most interstices of the rock, and even more so by permitting not more than 5% passing the #200 sieve in the 1/4 minus fraction.

But writing a durability specification for the altered rocks in the Roberts Mountain area which will permit all the good rock and exclude all the bad is not possible until a number more tests are made on various types of the available rocks to establish the limit values. Rod Halter made a start with one sample from each of several locations in 1975.

About 170,000 cubic yards of rock buttress material is needed in place. Previously, when I allowed for swell in the rock excavation and waste in the junk, I came up with 200,000 cy of quarry excavation. Now everybody can figure the swell and waste quantity.

FWY:af

Salem, Oregon
November 7, 1975

Alfred Shirley
Region Engineer
Roseburg

Shady-Dillard Jct. Section
Pacific Highway
Douglas County

Roberts Mountain Cut Slides

In the discussions which have been held here in Salem about the various possibilities for redu[illegible] slides in the cut at Roberts Mountain summit on t[illegible]
will select rock [illegible]
most effective [illegible]

At present, [illegible]
the FHWA [illegible]
explor[illegible]

Th[illegible]

Inlays appro[illegible]
explorations above this height probably will not [illegible]

It is further suggested that Rod Halter's rock material source report information, dated July, 1967, should be investigated in more detail. It would be embarassing to get committed to constructing rock inlays with material from several miles distant and which is of the same character as that now sliding in the cut. The two inlays will require about 100,000 cubic yards of clean, durable rock material. Inlay size can be increased above that with lesser quality material.

Victor D. Wolfe
Location Engineer

VDW-FWY:af

cc: J. H. Versteeg

Most of the possible sources in
the subject report (below) are in
the same geologic formation as the
slides. If any of these are to be
made prospective, more than usual
care in selecting and specifying
seems warranted.
Near 200,000 cy now proposed for
all three buttresses.

cc
[illegible]
Christensen
[illegible]
[illegible]
[illegible]
[illegible]

1-16

9363

1.5

FORM E-30

OREGON STATE HIGHWAY DIVISION
INTER-DEPARTMENT CORRESPONDENCE
Salem
April 1, 1981

SUBJECT: Roberts Mountain Section
Pacific Highway Douglas County
Soils Design Modifications no. 2

To: Lyle Watson
Final Design Supervisor

Another new condition observed in a recent field examination of the summit cut in the subject section is that the east side cut slope to the south of the east side slide has cracked at the top of the slope and is becoming unstable.

Therefore the minimum or steepest slope for excavation to the south from the east side slide buttress should be 1½ to 1. The present plan for these is as steep as 1 to 1. Station limits are 2970 to 2975.

Frank Terpin
Bill Cole

Yarbrough
Soils Engineer

REFERRED TO
Beard Stoudenmeyer
✓ Cole Mann
Eriksen Watson
Hager Dorn Leu
[✓ Return] Discuss Do[illegible]opy Due
BY FINAL DESIGN ENGINEER

Versteeg
Anderson
Christensen
Olson
Sullivan
Terpin
Trout
Wakerlig

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Bring up /
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9363

No 1

STATE OF OREGON
ROAD DESIGN SECTION

INTEROFFICE MEMO
~~DES 16~~-1

1-5

TO: MEMO TO THE FILE

DATE: March 4, 1981

FROM: Duane O. Christensen
Duane O. Christensen
Final Design Engineer

SUBJECT: Roberts Creek-Dillard Interchange
Pacific Highway
Douglas County

The subject project is presently being carried on the February 1981 "Schedule of Contract Lettings" for a July 23, 1981 bid opening. Also listed on the same document is the Roberts Mountain Section, which is a part of the subject section. The subject project contains the work that has been broken out to make the plans for the Roberts Mountain Section, therefore only one or the other will go to contract, not both.

The following factors should be taken into account when making a decision on which and when to contract:

1. The design year for FAI funding runs out in Fiscal Year 1984.
2. The work associated with slide corrections ($2,500,000) is only eligible for FAI funding until December 1981; after that time, FAI (RRR) or other funds would have to be used.
3. If the Roberts Mountain Section work (slides and drainage) were to be done, there is some question as to whether the remaining overlay and safety work would be eligible for FAI funding. Other funds would probably have to be used.

DOC:ja

cc E. S. Hunter
D. H. Moehring
Alfred Shirley
W. E. Cole

L Versteeg ✓
Anderson
Christensen
Olson
Sullivan
Terpin
Trout
Wakerlig

RECEIVED
MAR 05 1981
ROAD DESIGN SECTION

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Return To
Bring Up __/__/__
Action

9363

1-5

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

INTER-OFFICE CORRESPONDENCE

FILE:

Roseburg, Oregon
August 5, 1980

Elliott Parker

FROM: Elliott Parker
Region Geologist

TO: Jim Gix
Region Constr. Engr.

SUBJECT: "South Fill" Stability
Robt's Mtn. Summit Section
Pacific Highway (I-5)
Douglas County

The attached set of readings indicate that this high fill is not as stable as it was thought to be.

In view of this new data, it is suggested that we reconsider construction plans to place additional waste material in the draw above the subject fill. A better location for depositing the waste would be in the hole at the toe area of the fill, providing that special care is taken to provide for adequate drainage.

NOTED
E. S. HUNTER

RECEIVED
AUG 11 1980
CONSTRUCTION BRANCH

1 Keasey K
Jackmond
Hopkins
2 Williams
Johnsen
Glenn
Richards
Berg
Inloes
Widmer
Gebauer
Church

8-12-80
Copy to:
Ed Hunter

REFERRED TO

✓ Beard
Cole WEC
Eriksen
Hager
Stoudenmeyer
Mann
Watson
Dorn
Leu

[✓ Return] Discuss Do File Copy Due

BY FINAL DESIGN ENGINEER

RECEIVED
AUG 12 1980
ROAD DESIGN SECTION

1 Versteeg ✓
Anderson
2 Christ[illegible] Don
Olsen
Sullivan
Terpin
Troy
Wakerlig

Do Not File ☐
Return To
Bring Up / /
Action

RECEIVED
TECHNICAL SERVICES
AUG 12 '80
REFER TO Versteeg
FOR

Info	Inves	R/D	D/R	Sign	Act	File

9/8/80
Called Yarborough – he does not agree and will respond in writing to us. Don

August 5, 1980

So. Fill Failure
Roberts Mtn. Sec.
Pacific Hwy. (I-5)
Douglas Co.

Elliott -

Slope Tubes on the subject problem area were read on 6-10-80. Computations, graphing, and analysis have been completed.

Tube #1 appears to have a very slowly progressive outward tilt from about 70º' to the surface.

Tube #2 appears to have a slowly progressive outward tilt from about 90º' to the surface.

Tube #3 appears to have a very slowly progressive outward tilt from about 74º' to the surface.

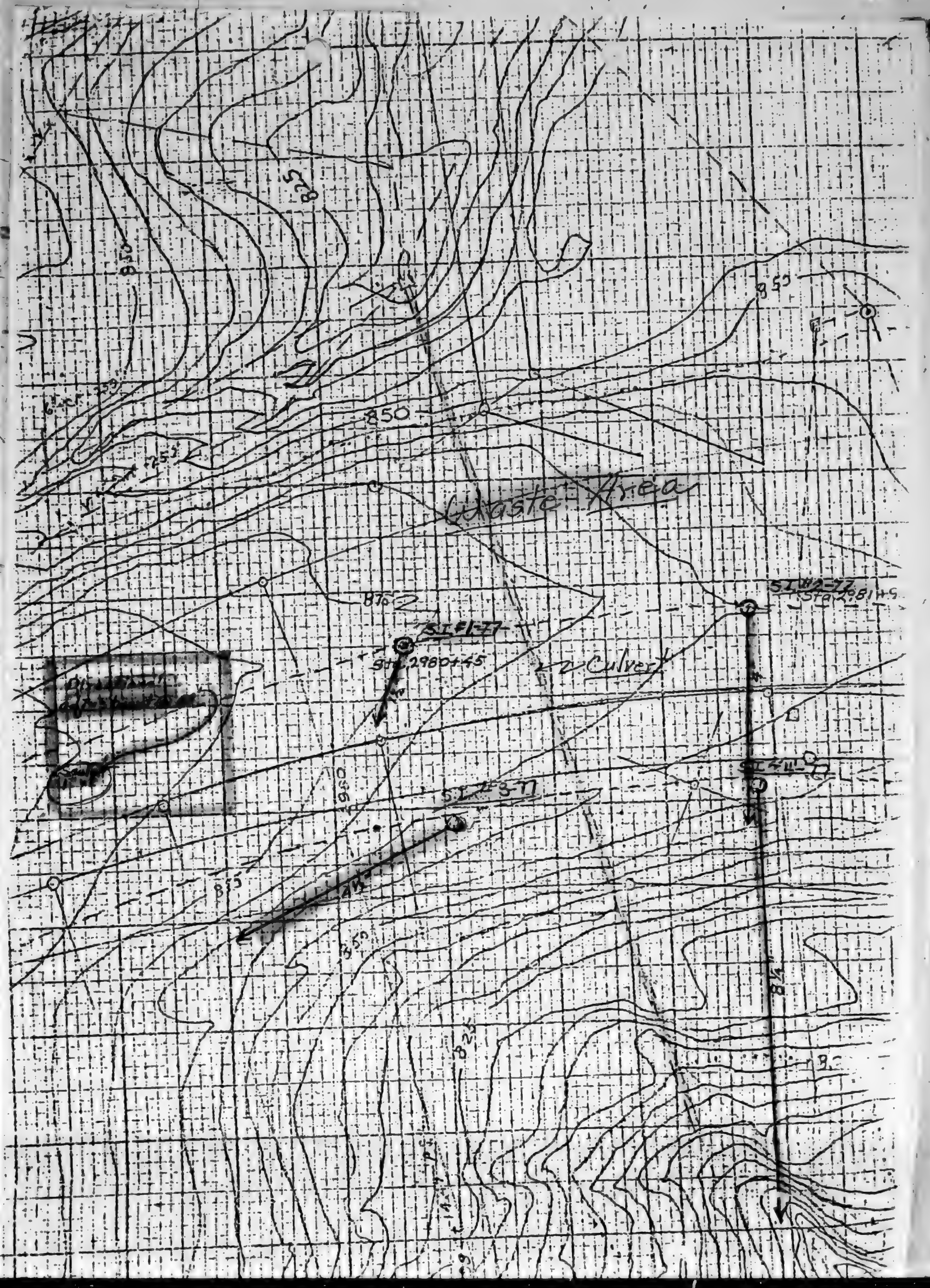
Tube #4 appears to have a slowly progressive outward tilt from about 100º' to the surface.

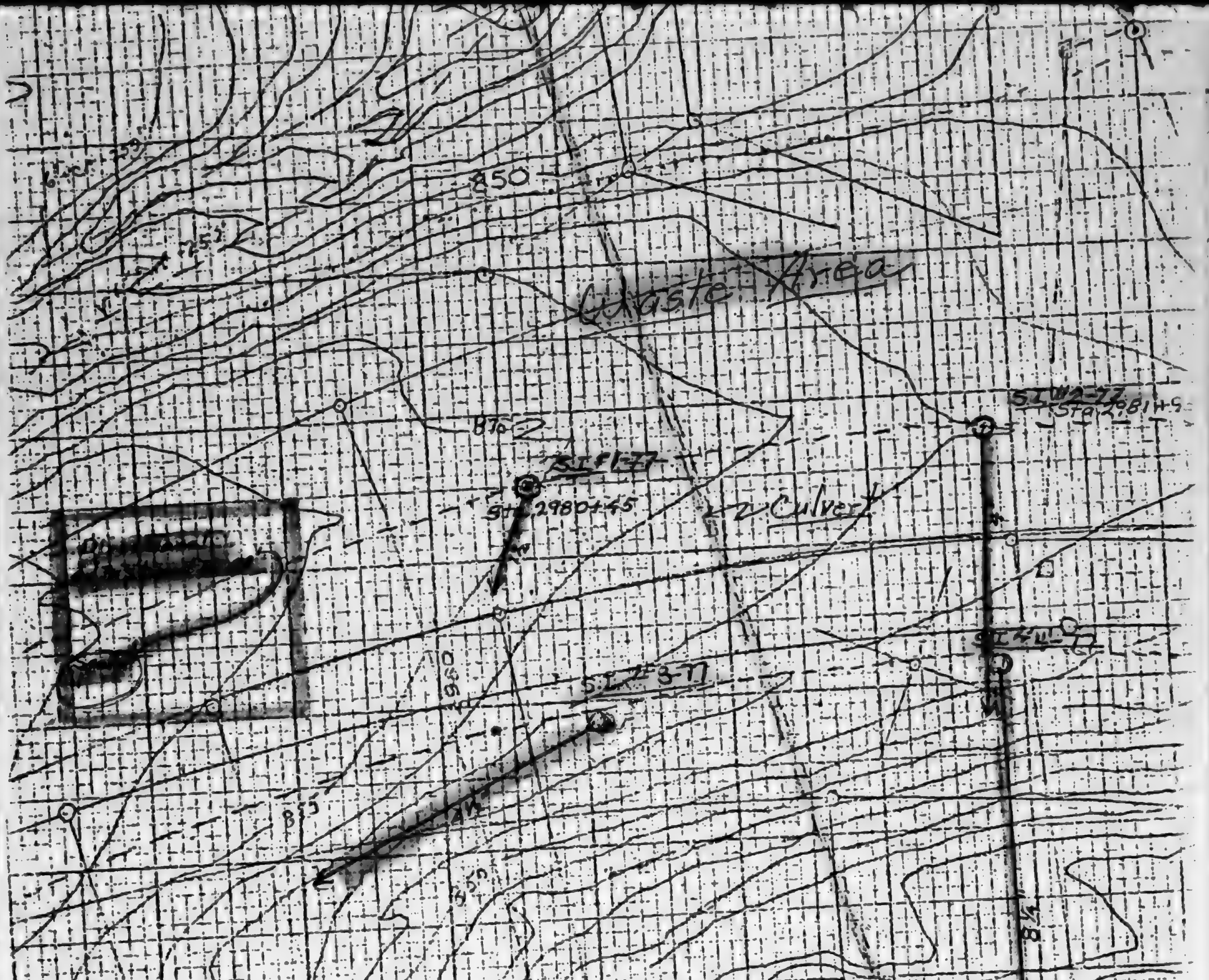
Summary —

Tubes #1 & #3 show the least amount of adjustment but with both toeward & right components involved. Tubes #2 & #4 show the most adjustment which is essentially toeward 4 & 8 inches respectively.

Adjustment appears to be in the form of outward tilt to which a continued build-up of the inside waste area could be a contributing factor.

It is suggested consideration be given toward placing slide removal material in another area, possibly below the freeway.


825
850
850
850
Waste Area
870
S.I. #1-77
Sta 2980+45
Culvert
S.I. #2-77
Sta 2981+9
S.I. #3-77
S.I. #4-77
875
850
825


[redacted]
850
Waste Area
870-2
S.I. #1-77
Sta 2980+45
2' Culvert
S.I. #2-77
Sta 2981+9
S.I. #4-77
S.I. #3-77
860
855
850
48" Culvert Area
Slope Tube Location
Scale: 1"=50'

SLOPE METER DATA SHEET

Roberts Mtn. – Sa Fill SHEET 1 OF 1

Y Beal & Proc Bowers – Kobernik TUBE NO. 1

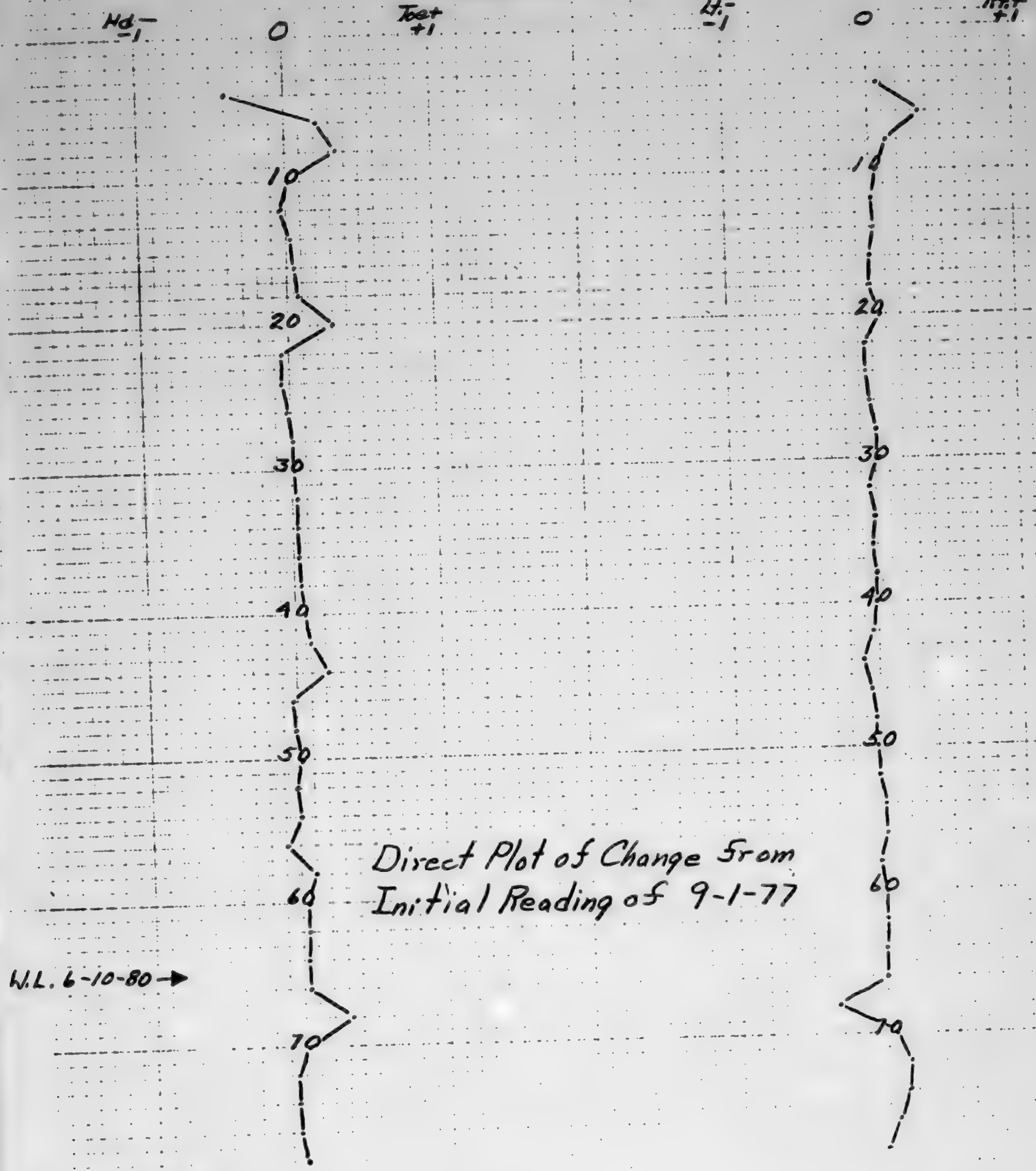
ATE ~~9/17/77~~ 6-10-80 ~~——~~

W.L. ~~74~~ 65' S.U. 29

PTH	Az.	Initial Reading	Change Σ	90°	Initial Reading	Change Σ	Remarks	
2		+354			-1.287			
4	-071	+329	-400	168	-256	+088	+1571	+558
6	+438	+222	+216	409	-042	+367	+1971	+470
8	+420	+064	+356	+243	+127	+116	+1755	+103
10	+039	+027	+012	+113	+157	+044	+1399 +152	-013
12	+025	+050	-025	+146	+152	+006	+1387	-057
14	+103	+081	+022	+163	+147	+016	+1412	-063
16	+160	+103	+057	+150	+152	-002	+1390	-079
18	+218	+135	+083	+153	+167	-014	+1333	-077
20	+277	-028	+305	+178	+116	+062	+1281 +114	-063
22	-042	-008	-034	+041	+123	-042	+945	-125
24	-040	+015	-055	+093	+135	-042	+979	-083
26	+014	+025	-011	+125	+149	-024	+1034	-041
28	+052	+042	+010	+152	+147	+006	+1045	-017
30	+071	+051	+020	+150	+131	+019	+1035 +124	-023
32	+092	+053	+039	+110	+152	-042	+1015 Rough spot ~1" before 32'	-042
34	+073	+043	+035	+136	+139	-002	+976	000
36	+083	+055	+028	+110	+135	-015	+941	+002
38	+135	+090	+045	[illegible]	+132	-005	+913	+017
40	+183	+103	+080	[illegible]	+128	-015	+868	+022
42	+214	+114	+100	[illegible]	+120	-032	+788	+037
44	+227	+018	+209	[illegible]	+162	-109	+698 Rough spot ~1" before 44'	+069
46	-013	+005	-018	[illegible]	+164	-057	+479	+178
48	+011	+013	-002	+146	+172	-026	+497	+235
50	+023	+004	+019	+168	+191	-023	+499	+261
52	-002	±000	-002	[illegible]	+205	-002	+480	+284
54	+005	-002	+007	[illegible]	+214	+028	+422	+286
56	+002	+099	-097	[illegible]	+206	+043	+475	+258
58	+167	+066	+101	168	+183	-015	+572	+215
60	+124	+059	+065	+201	+174	+027	+471	+230
62	+132	+074	+058	[illegible]	+163	+011	+406	+203
64	+139	+080	+059	+159	+154	+004	+339	+192
66	+166	+105	+061	+116	+107	+009	+287	+188
68	+167	-050	+317	[illegible]	+305	-314	+228	+179
70	-036	-053	+027	[illegible]	+351	+073	-089	+493
72	[illegible]	-027	-042	+201	+324	+177	-116	+420
74	042	+004	-044	[illegible]	+284	+154	-074	+243
76	+004	+036	-032	[illegible]	+246	+092	-030	+089
78	+103	+101	+002	[illegible]	+228	-003	+002	-003
80							* Appears slowly progressive.	
82								
84								
86								
88								

TN 77°

South Fill Failure
Robts. Mtn. Sec.
Pacific Hwy. (I-5)

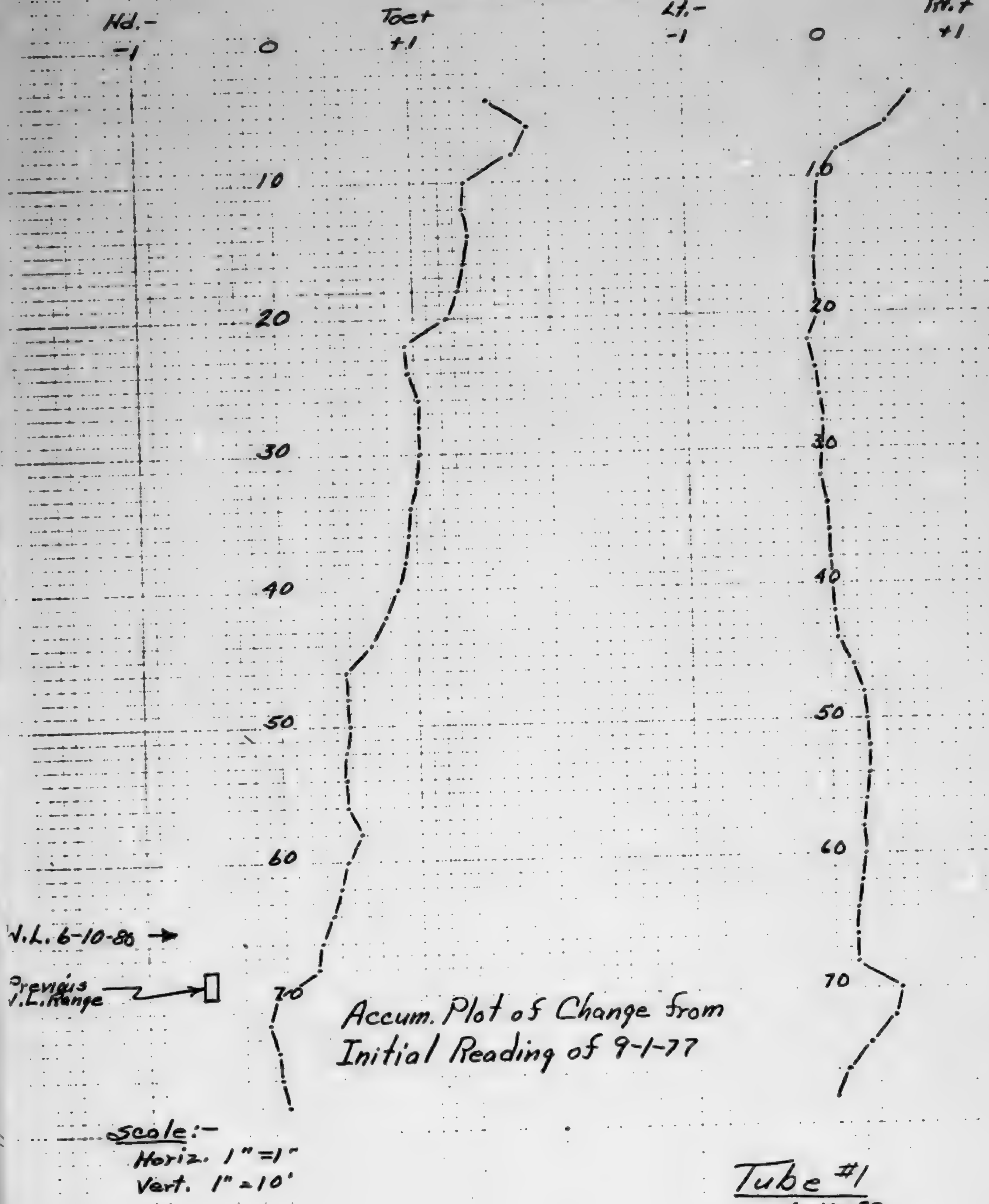


Direct Plot of Change from
Initial Reading of 9-1-77

Scale:-
Horiz. 1" = 1"
Vert. 1" = 10'

Tube #1
6-10-80

South Fill Failure
Robts. Mtn. Seg.
Pacific Hwy. (I-5)



Accum. Plot of Change from
Initial Reading of 9-1-77

Scale:-
Horiz. 1" = 1"
Vert. 1" = 10'

Tube #1
6-10-80 JB

DATA SHEET

Roberts Mtn. - S. Fill

SHEET 1 OF 2

Bowers - Kobernik

TUBE NO. 2

TE ~~9/1/77~~ 6-10-80

W. L. ~~75°~~ 74°   Initial Reading S.V. 3d

Ft	A=	Initial Reading	Change ≥1	90°	Initial Reading	Change ≥1	Remarks		
2		+049			I [illegible]				
4	-029	+015	-054	+261	+110	+259	+3777		+1909
6	-114	+023	-137	+268	+122	+146	+4051		+1650
8	+072	-012	[illegible]	+226	-131	+257	+4188		+1404
10	+060	-021	+054	+225	+112	+113	+4104		+1047
12	+043	-043	+086	+213	+116	+097	+4020		+934
14	-012	-034	+022	+230	+097	+133	+3934		+837
16	+049	-009	+058	+189	+135	+054	+3912		+704
18	+068	-005	+073	+229	+134	+075	+3854		+650
20	+089	+020	+069	+242	+129	+113	+3781		+555
22	+140	+063	+077	+217	+120	+097	+3712		+442
24	+230	+127	+105	+203	+113	+090	+3635		+345
26	+366	+025	+341	+192	+040	+192	+3530		+255
28	+001	-136	+137	+072	+035	+037	+3189		+115
30	-168	-069	-099	+[illegible]	+095	+017	+30525	-05[illegible]	+076
32	-042	-020	-022	+020	+039	+031	+3151		+059
34	+039	+031	+008	+[illegible]	+035	+023	+3173		+033
36	+168	+077	+091	[illegible]	+037	[illegible]	+3125		+010
38	[illegible]	-004	[illegible]	[illegible]	+035	[illegible]	+3044		+002
40	+047	-066	+113	[illegible]	[illegible]	+010	+27891	-193	+005
42	-085	-038	+073	+162	+102	+060	+2666		-0[illegible]
44	+027	-034	+061	+144	+071	+043	+2643		-0[illegible]
46	+046	-003	+049	+097	+075	[illegible]	+2582		-137
48	+052	-003	+055	+117	+068	+047	+2533		-160
50	+095	-003	+098	+106	-003	+107	+2448		-209
52	+090	-012	+102	050	-023	-027	+2350		-317
54	+071	-012	+083	078	-027	-051	+2248		-291
56	+072	-008	+080	077	-034	-043	+2165		-[illegible]
58	+092	-017	+109	-[illegible]	-038	-043	+2085		-1[illegible]
60	+073	-014	+107	137	-044	-050	+1976		-1[illegible]
62	+[illegible]	-025	+100	157	-[illegible]	-111	+1762		-074
64	+019	-047	+066	+032	+130	-098	+1[illegible]29		+037
66	+002	-040	[illegible]	+181	+108	+073	+1103		[illegible]
68	+003	-051	+054	+159	+095	+064	+1[illegible]		-06[illegible]
70	-014	-063	+049	+133	+073	+060	+1667		-0[illegible]
72	-021	-066	+045	-[illegible]	+152	+035	+1559		-[illegible]
74	-020	-089	+069	+[illegible]	+051	-009	+1513	*Appears progressive.	-0[illegible]
76	+039	-005	+014	+096	+107	-[illegible]	+1444	JHS	-1[illegible]
78	+093	+004	+087	+146	+089	[illegible]	+1430		-[illegible]
80	+109	-015	+124	+114	+109	[illegible]	+1341		-1[illegible]
82	+088	+009	+079	+125	+110	-015	+1217		-139
84	-123	+014	+109	-142	+120	[illegible]	+1138		-1[illegible]
86	-144	±000	+144	-[illegible]	+092	[illegible]	+1017		-1[illegible]
88	+055	-091	+[illegible]	+[illegible]	+142	+003	+885		[illegible]
		cord					+739	TD 110	

SLOPE METER DATA SHEET

Collar El.

Roberts Mtn. - So. Fill

SHEET 2 OF 2

ROBERT W. STRAUB
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
Region 3
P.O. BOX 1128, ROSEBURG, OREGON 97470 ~~PHONE 672-6341~~

TUBE NO. 2

	Az.	Initial Reading	Change >.1	90°	Initial Reading	Change >.1	Remarks	
10	− 073	−070	−003	+ 018	+052	−034	+ 739	−257
12	− 030	−063	+033	+ 034	+033	+001	+ 772	−233
14	− 017	−063	+046	+ 111	+005	−004	+ 709	−224
16	− 018	−069	+051	− 051	−030	−051	+ 663	−220
18	− 029	−057	+028	− 162	−036	−126	+ 612	−169
20	+ 020	−007	+027	+ 318	+207	−189	+ 551	−045
02	+ 087	−022	+109	+ 297	+154	+143	+ 557	+ 126
04	+ 053	−036	+089	+ 170	+064	+106	+ 449	+003
06	+ 057	−020	+077	+ 036	+073	−037	+ 359	−103
08	+ 029	−015	+104	+ 143	+076	−033	+ 388	−066
10	+ 034	+003	+021	+ 111	+074	−033	+ 177	−033
12	− 006	−131	+125	− 137	+123	−056	+ 071	000
14	− 109	−105	−037	+ 150	+156	−006	−029	+056
16	− 088	−099	+015	+ 203	+186	+014	+009	+062
18	− 076	−088	−008	+ 223	+176	+047	−006	+043
20	− 059	−059	+002	+ 192	+196	−004	+002	−00
22								
24								
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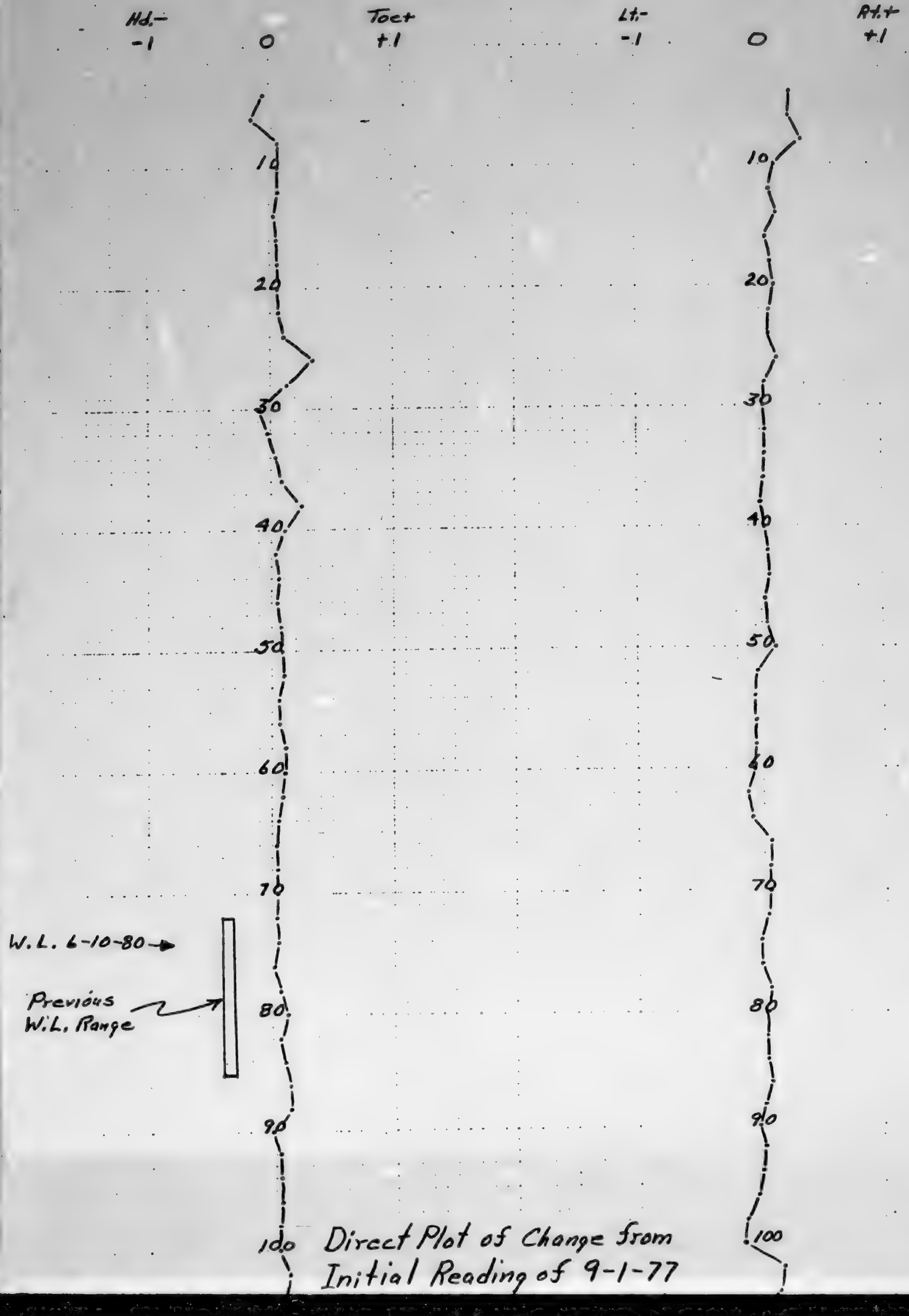
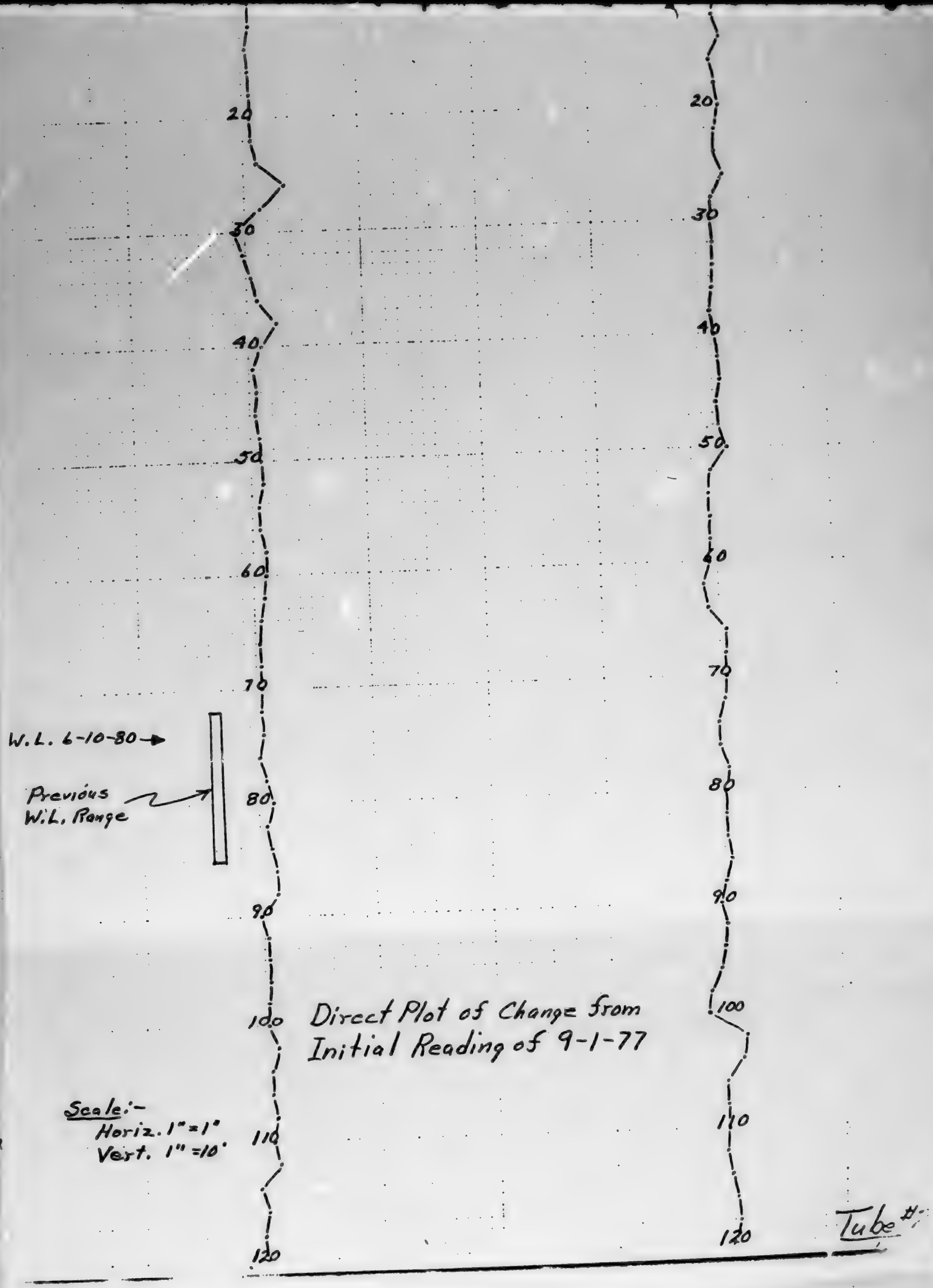
South Fill Failure
Robts. Mtn. Sec.
Pacific Hwy. (I-5)



Direct Plot of Change from Initial Reading of 9-1-77

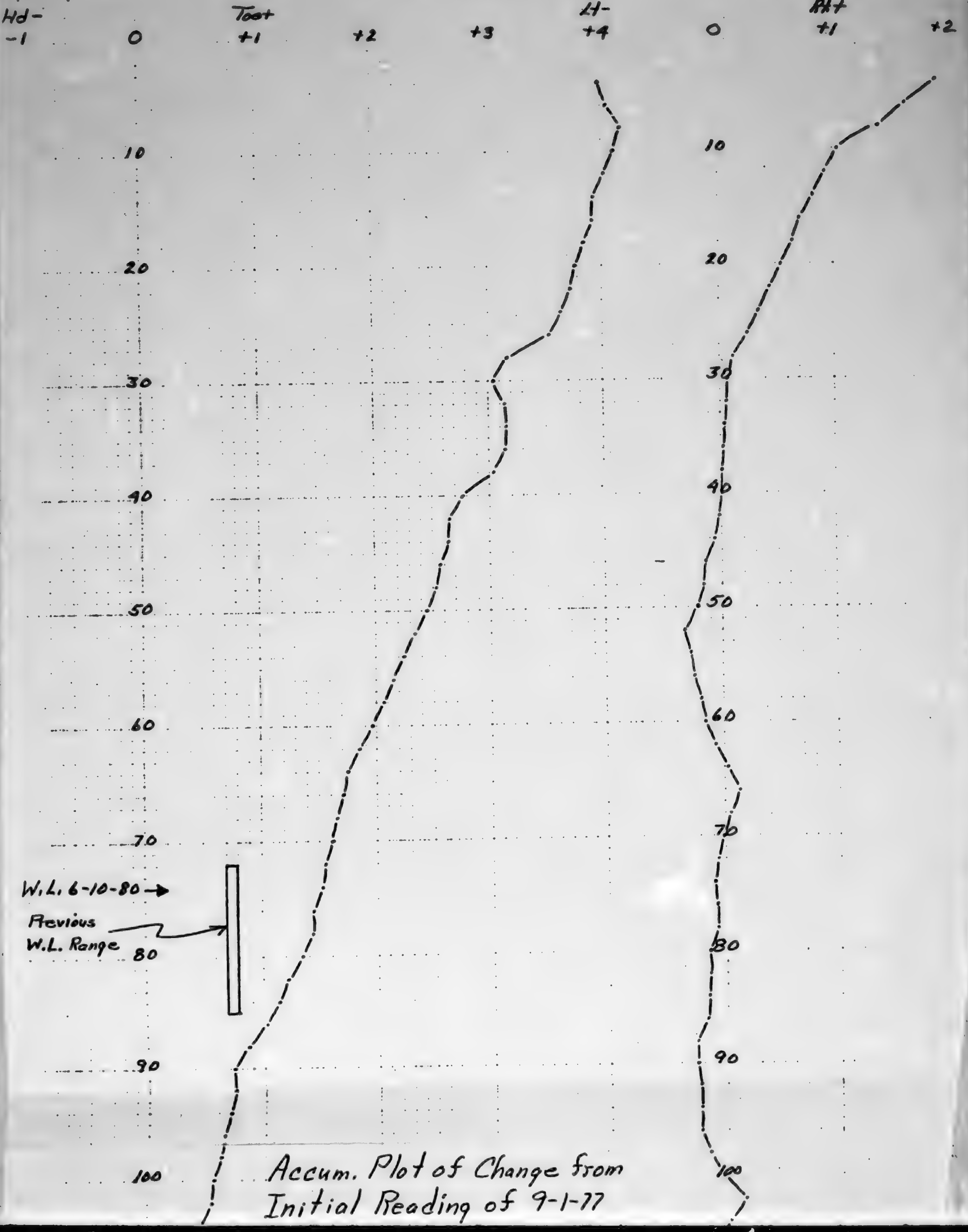


Direct Plot of Change from Initial Reading of 9-1-77

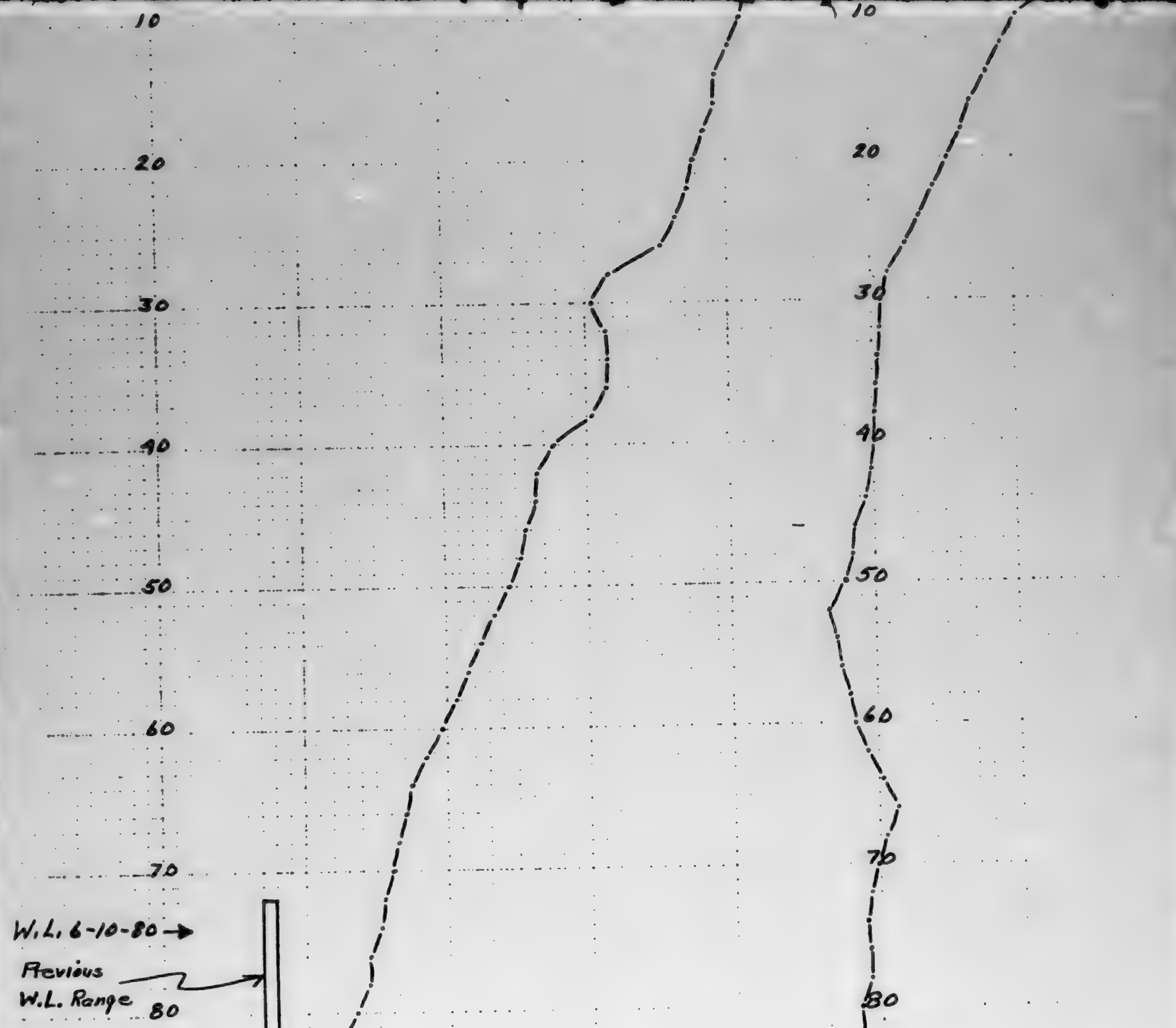
Scale:-
Horiz. 1" = 1"
Vert. 1" = 10'

Tube #

South Fill Failure
Robts. Mtn. Seg.
Pacific Hwy. (I-5)



Accum. Plot of Change from
Initial Reading of 9-1-77



Accum. Plot of Change from Initial Reading of 9-1-77

Scale:-
Horiz. 1" = 1"
Vert. 1" = 10'

Tube #2

Proj. No. 610-1921-910 **SLOPE METER DATA SHEET** Collar Elev ______

JOB Roberts Mtn. - So. Fill SHEET 1 OF 1

BY B. Beals & P. Pezernik TUBE NO. 3 (SB Shoulder)

DATE ~~8/31/77~~ 6-10-80 [redacted]

W.L. 74° [illegible] Reading S.U. 1S

Depth	Az.	Initial Reading	Change >.1	90°	Initial Reading	Change >.1	Remarks		
.2		-042			-003				
4	+ 109	-046	+155	+ 123	+024	+099	+2249		+ 4497
6	+ 101	-052	+153	+ 179	+040	+139	+2094		+ [illegible]
8	+ 042	-059	+131	+ 214	+056	+158	+ 1941 Ck. Readings		+ 4240
10	+ 047	-034	+081	+ 220	+045	+175	+ 1802	+032	+ 4082
12	+ 096	-054	+150	+ 196	+037	+159	+ 1729		+ 3905
14	+ 070	-062	+132	- 216	+057	+159	+ 1579		+ 3747
16	+ 070	-079	+129	+ 232	+028	+204	+ 1447		+3589
18	+ 018	-101	+119	+ 204	+027	+177	+ 1318		+3385
20	- 021	-131	+100	+ 200	+035	+165	+ 1199	+026	+3208
22	- 096	-119	+023	+ 214	+008	+196	+1099		+ 3043
.24	- 075	-135	+060	+ 113	+016	+097	+1076		+ 2947
26	- 094	-156	+042	+ 163	+014	+149	+1016		+ 2750
28	- 132	-179	+047	+ 169	+022	+147	+ 944		+ 2601
30	- 180	-196	+016	+ 184	+022	+162	+ 897	+005	+ 2454
32	- 222	-215	[illegible]	+ 178	+025	+153	+821		+ 2292
34	- 255	-162	[illegible]	+ 173	+024	+149	+895		+ [illegible]
36	- 186	-161	[illegible]	+ 125	+014	+111	+922		+ [illegible]
38	- 132	-158	+026	+ 150	+007	+143	+957		+ 1879
40	- 139	-155	+036	+ 133	-000	+133	+930	-015	+ 1736
42	- 123	-153	+030	+ 111	-007	+118	+895		+ [illegible]
44	- 117	-150	-033	+ 097	-004	+101	+865		+ 1485
46	- 102	-130	+025	+ 097	+ 045	+052	+832		+ 1384
48	- 075	-131	+056	+ 190	+032	+158	+804		+ 1322
50	- 075	-141	+066	+ 173	+014	+159	+748	-008	+ 1174
52	- 097	-142	+045	+ 133	-002	+135	+682		+1015
54	- 101	-141	-040	+ 121	-015	+136	+637		+880
56	- 102	-154	-051	- 069	-041	+110	+597		+ 744
58	- 126	-137	+011	+ 024	+028	-004	+ 546		+ 634
60	- 121	-136	+015	+ 095	+029	+069	+ 525		+ 622
62	- [illegible]	-122	+042	+ [illegible]	+039	+070	+ 520		+ 569
64	- [illegible]	-111	+074	- [illegible]	+045	+077	+ 478		+ 479
66	- 025	-116	+081	+ [illegible]	+049	+094	+ 404		+ 400
68	- 025	-115	+077	+ 141	+064	+077	+323		+ 306
70	- 025	-105	+040	+ 151	-009	+160	+ 246		+ 229
72	- 003	-114	+111	+ 045	+002	+072	+176		+069
74	- 045	-125	+080	+ 045	+019	+026	+065		-004
.76	- 097	-126	+029	+ 054	+024	+030	-015		030
78	- 077	-128	+050	+ 037	+027	+010	-044		-060
80	- 041	-134	+092	+ 029	+034	-005	-074 *Pass very slowly.		-070
82	- 039	-192	-231	+ 033	+028	+005	-187 progressive.		-065
84	- 140	-199	+059	+ 082	+022	-017	+044		-070
86.	- 192	-196	+006	+ 037	+045	-036	-015		-051
88	- 233	-195	-018	+ 064	+063	-014	-019		-015
90	- 191	-190	-001	+ 078	+079	-001	-001		-001
92									

[illegible]

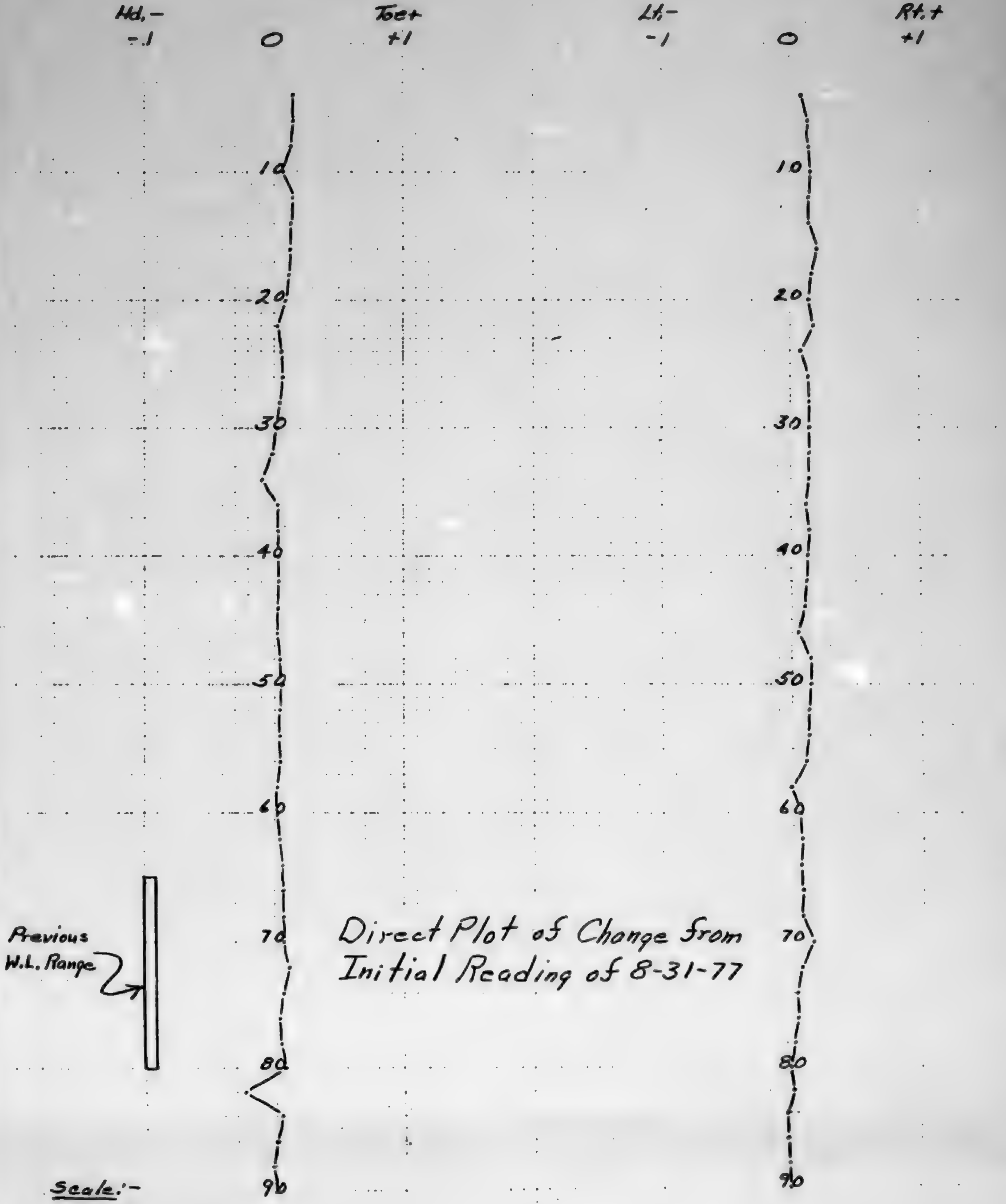
BY [illegible] TUBE NO. 3 (SB Shoulder)

DATE ~~8/31/77~~ 6-10-80. : [redacted]

W.L. 74° [illegible] Reading S.U. 15

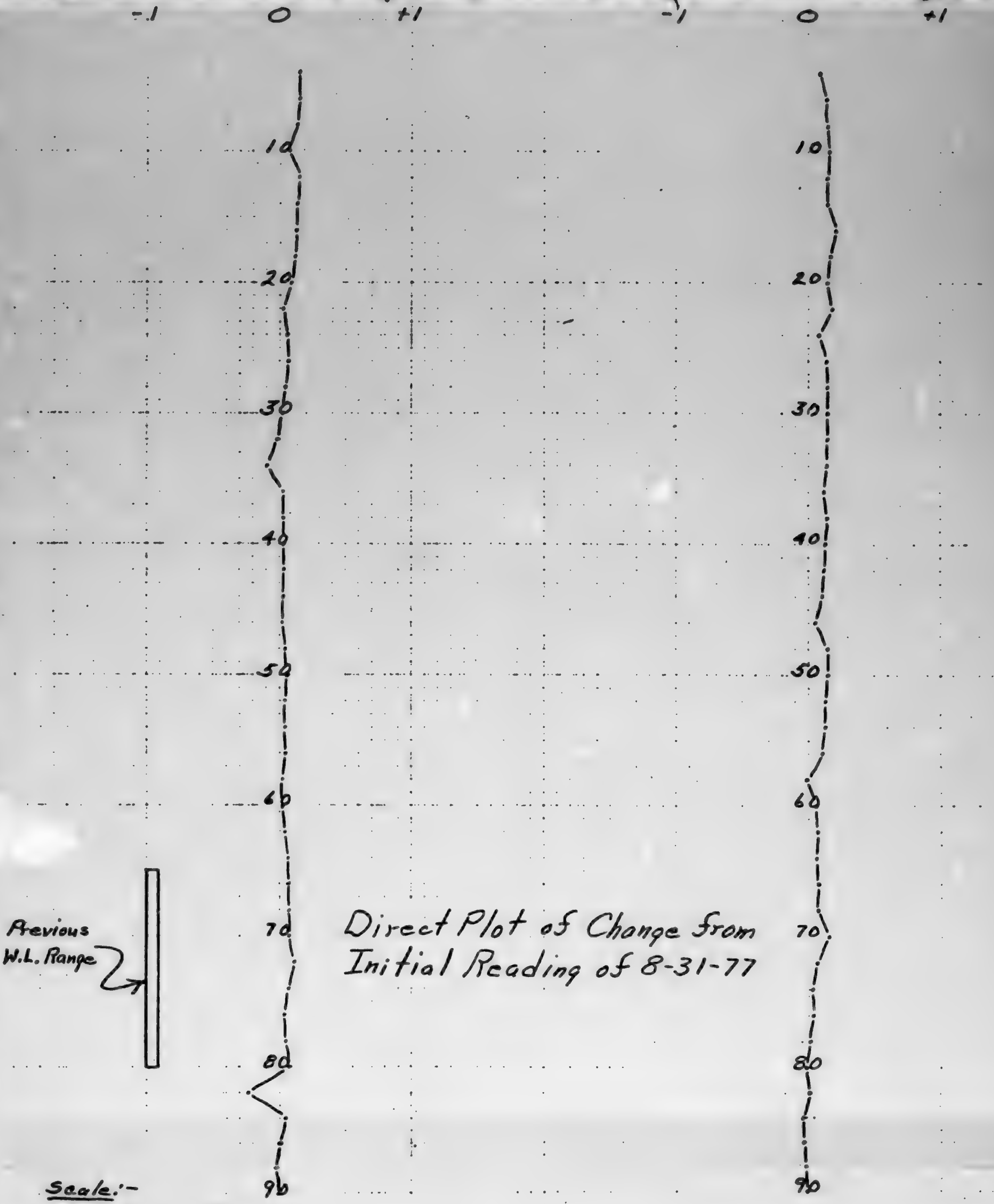
Depth	Az.	Initial Reading	Change Σ.I	90°	Initial Reading	Change Σ.I	Remarks		
.2		-042			-003				
4	+109	-046	+155	+123	+024	+099	+2249		+4477
6	+101	-052	+153	+179	+040	+139	+2094		+[illegible]
8	+092	-059	+131	+214	+056	+158	+1941 Ck. Readings		+4240
10	+047	-034	+081	+220	+045	+175	+1802	+032	+4082
12	+096	-054	+150	+196	+037	+159	+1729		+3905
14	+070	-062	+132	+216	+052	+159	+1579		+3747
16	+050	-079	+129	+232	+029	+204	+1447		+3589
18	+018	-101	+119	+204	+027	+177	+1318		+3385
20	-031	-131	+100	+200	+035	+165	+1199	+026	+3208
22	-096	-119	+023	+234	+008	+196	+1099		+3043
24	-075	-135	+060	+113	+016	+097	+1076		+2847
26	-084	-156	+042	+163	+014	+149	+1016		+2750
28	-132	-179	+041	+169	+022	+147	+944		+2601
30	-180	-196	+016	+184	+022	+162	+897	+005	+2454
32	-222	-215	+007	+178	+025	+153	+881		+2292
34	-253	-162	-004	+173	+024	+149	+895		+2139
36	-186	-161	[illegible]	+125	+014	+111	+992		[illegible]
38	-132	-158	+026	+150	+007	+143	+957		+1879
40	-119	-155	+036	+133	-000	+133	+930	-015	+1736
42	-123	-153	+030	+111	-007	+118	+895		[illegible]
44	-117	-150	+033	+097	-004	+101	+865		+1485
46	-102	-130	+025	+097	+045	+052	+832		+1384
48	-075	-131	+056	+190	+032	+158	+804		+1332
50	-075	-141	+066	+173	+014	+159	+736	-008	+1174
52	-090	-142	+045	+133	-002	+135	+672		+1015
54	-101	-141	-040	+121	-015	+136	+637		+880
56	-102	-154	-051	-069	-041	+110	+597		+744
58	-126	-137	+011	+034	+028	-004	+546		+634
60	-121	-136	+015	+098	+029	+069	+525		+633
62	[illegible]	-122	+042	[illegible]	+039	+070	+520		+569
64	[illegible]	-111	+074	-138	+045	+077	+478		+479
66	-025	-116	+081	+183	+049	+094	+404		+400
68	-028	-115	+077	+141	+064	+077	+323		+306
70	-025	-105	+040	+151	-009	+160	+246		+229
72	-003	-114	+111	+075	+002	+073	+176		+069
74	-045	-125	+080	+045	+019	+026	+065		-004
76	-099	-126	+029	+024	+024	+030	-015		030
78	-077	-128	+050	+037	+027	+010	-044		-060
80	-041	-134	+092	+029	+034	-005	-074	*Poss very slowly	-070
82	-039	-192	-231	+033	+028	+005	-187	progressive.	-065
84	-140	-199	+059	+002	+022	-017	+044		-070
86	-192	-196	+004	+037	+045	-036	-015		-051
88	-233	-185	-018	+063	+063	-014	-019		-015
90	-191	-190	-001	+078	+079	-001	-001		-001
92									

So. Fill Failure
Roberts Mtn. Sec.
Pacific Hwy (I-5)



Direct Plot of Change from
Initial Reading of 8-31-77

Scale:-
Horiz. 1" = 1"
Vert. 1" = 10'

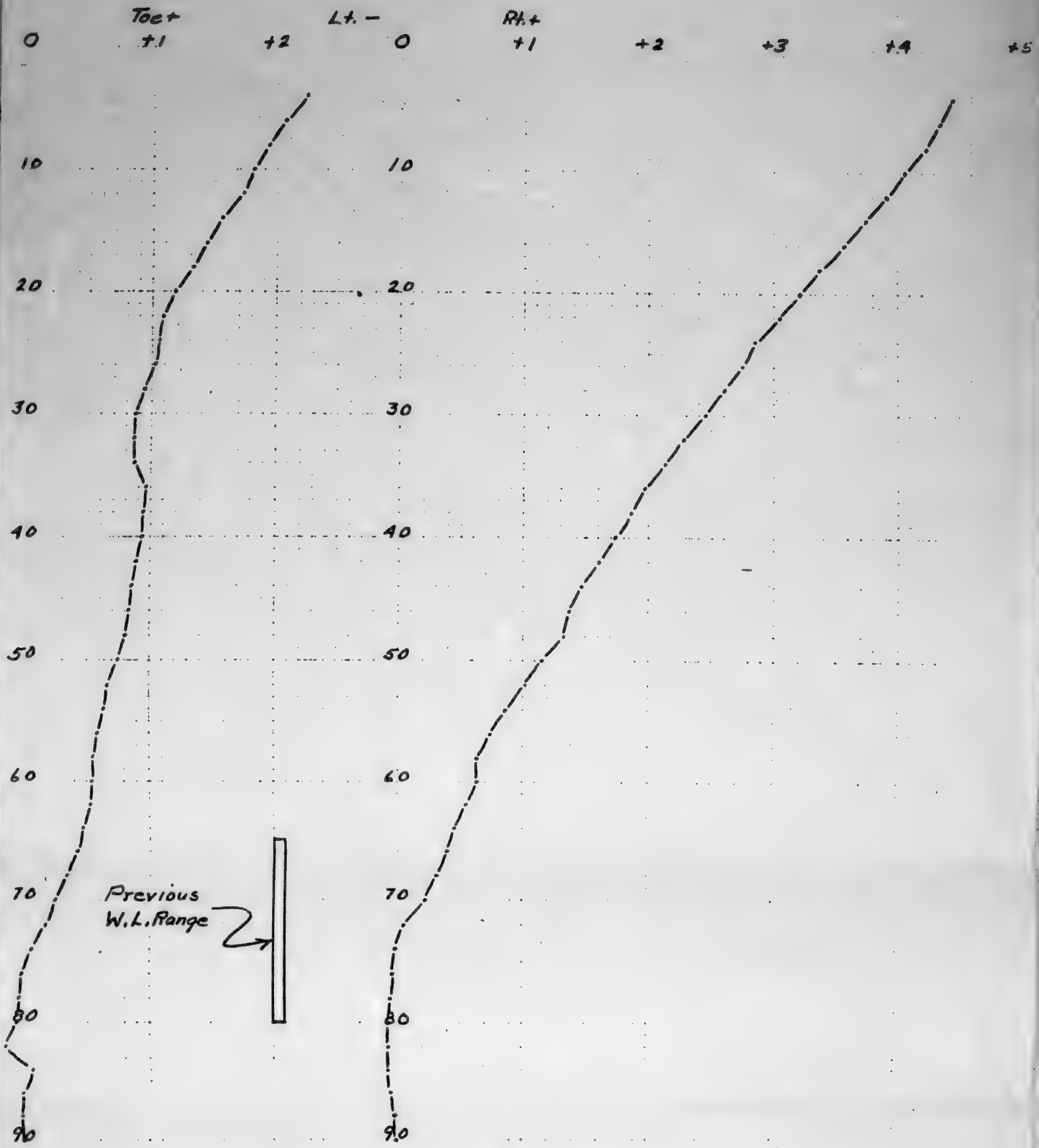


Direct Plot of Change from Initial Reading of 8-31-77

Scale:-
Horiz. 1" = 1"
Vert. 1" = 10'

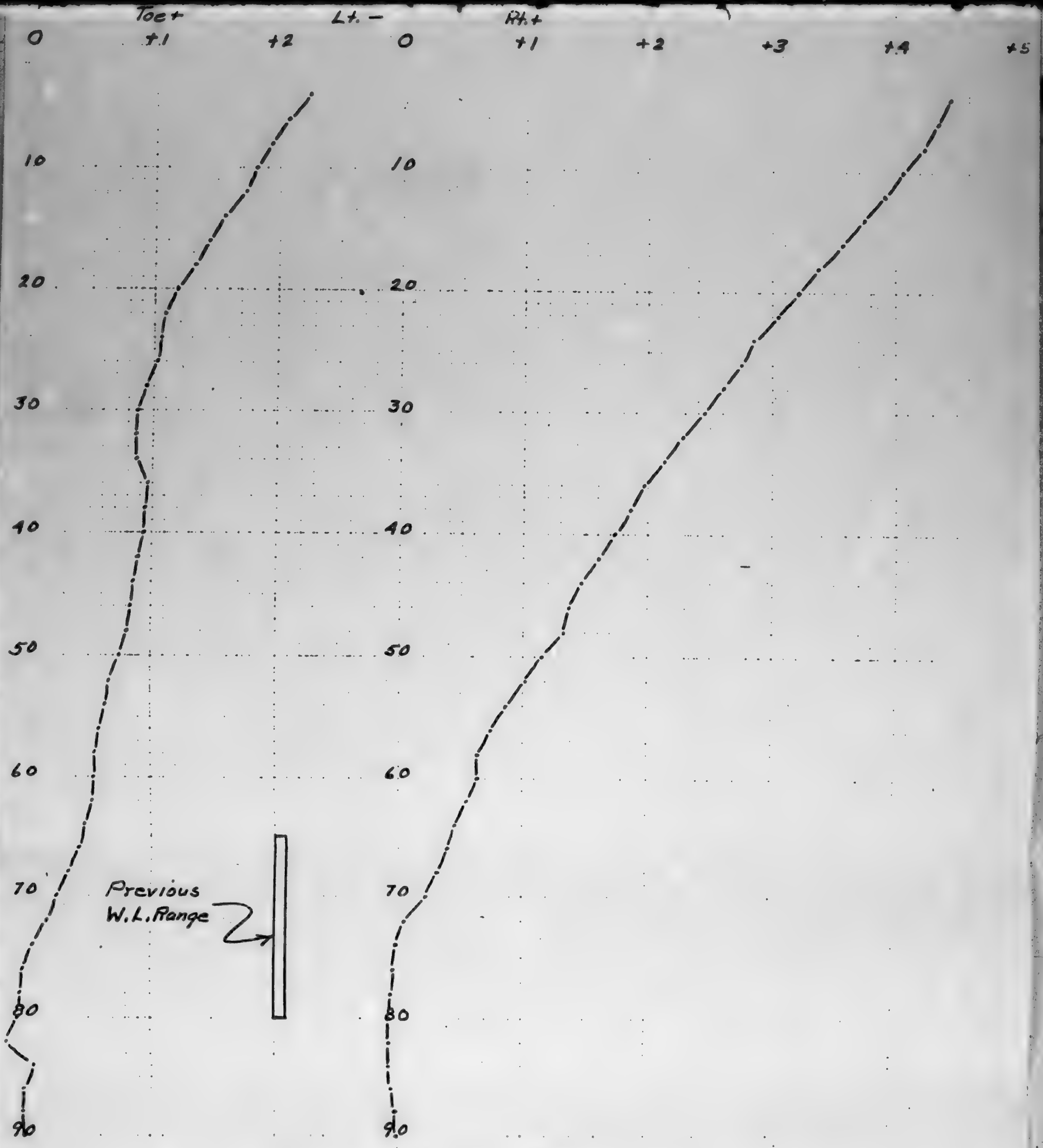
Tube #3
6-10-80

So. Fill Failure
Roberts Mtn. Sec.
Pacific Hwy. (I-5)



Accum. Plot of Change from
Initial Reading of 8-31-77

Tube #3
1-10-80



Accum. Plot of Change from Initial Reading of 8-31-77

Tube #3
6-10-80

[illegible] 1121-110

Collar Elev ______

SLOPE METER DATA SHEET

JOB Roberts Mtn.- So. Fill

SHEET 1 OF 2

BY Bealer & [illegible]nik

TUBE NO. 4 (SB Shoulder)
* S.O. tube

DATE ~~8/31/77~~ 6-10-80 [redacted]

~~Wt. 708~~ H₂O 96° [illegible] 5U.28

Depth	Az.	Initial Reading	Change Σ	90°	Initial Reading	Change Σ	Remarks			
2		+029			+229					
4	+ 570	+022	+548	- 224	+241	-465	+ 7428	-1254		
6	+ 348	-003	+351	+ 156	+264	-108	+ 7880	-789		
8	+ 270	+009	+261	+ 242	+275	-033	+ 7529	-681		
10	+ 280	+020	+260	+ 264	+271	-007	+ 7268	-648		
12	+ 301	+028	+273	+ 250	+257	-007	+ 7008	-641		
14	+ 253	-091	+344	+ 194	+300	-106	+ 6735	-634		
16	+ 085	-078	+163	+ 305	+273	+032	+ 6,391	-528		
18	+ 116	-075	+191	+ 249	+219	+030	+ 6,228	-560		
20	+ 120	-042	+162	+ 140	+205	-065	+ 6,037	-590		
22	+ 190	-011	+201	+ 131	+195	-064	+ 5875	-525		
24	+ 255	+024	+231	+ 097	+177	-080	+ 5674	-461		
26	+ 288	-181	+469	+ 084	+291	-207	+ 5443	-381	[illegible]	
28	- 065	-149	+084	+ 278	+265	+013	+ 4974	-174		
30	- 012	-118	+106	+ 289	+280	+009	+ 4890	-161	-121	+272
32	+ 034	-086	+120	+ 271	+283	-012	+ 4784	-170		
34	+ 102	-053	+155	+ 270	+273	-003	+ 4664	-158		
36	+ 169	-035	+204	[illegible]	+257	-005	+ 4509	-155		
38	+ 275	-115	+390	+ 174	+316	-142	+ 4305	-150		
40	- 023	-142	+119	+ 329	+301	+028	+ 3715	-008	-131	+294
42	- 003	-121	+118	+ 301	+292	+009	+ 3796	-036		
44	+ 038	-101	+139	+ 290	+290	000	+ 3678	-045		
46	+ 082	-074	+156	+ 264	+267	-003	+ 3539	-045		
48	+ 139	-045	+184	+ 243	+249	-006	+ 3383	-042		
50	+ 204	-125	+329	+ 193	+336	-143	+ 3567	-036	-125	+329
52	+ 035	-098	+133	+ 398	+335	+063	+ 3238	+107		
54	+ 082	-076	+158	+ 375	+324	+051	+ 3105	+044		
56	+ 132	-069	+201	+ 344	+308	+036	+ 2947	-007		
58	+ 146	-059	+205	+ 319	+292	+027	+ 2746	-043		
60	+ 182	-029	+211	[illegible]	+273	+010	+ 2541	-070	-029	+254
62	+ 260	-182	+442	[illegible]	+320	-073	+ 2330	-080		
64	- 045	-148	+103	+ 336	+304	+032	+ 1888	-008		
66	- 004	-126	+122	+ 298	+273	+025	+ 1785	-040		
68	+ 037	-107	+144	[illegible]	+272	-027	+ 1663	-065		
70	+ 076	-091	+167	+ 196	+216	-020	+ 1519	-038	-097	+250
72	+ 100	-086	+186	+ 173	+216	-043	+ 1352	-018		
74	- 122	-207	+085	+ 116	+387	-271	+ 1166	+025		
76	- 120	-208	+088	[illegible]	+362	+064	+ 1081	+296		
78	- 128	-195	+067	+ 394	+350	+044	+ 993	+232		
80	- 108	-181	+073	+ 384	+318	+066	+ 926	+188	-182	+305
82	- 084	-170	+086	[illegible]	[illegible]	+033	+ 853	+ 122		
84	- 051	-152	+101	[illegible]	[illegible]	-001	+ 767	+089		
86	- 031	-214	+183	+ 207	+435	-228	+ 666	+090		
88	- 155	-207	+052	[illegible]	+414	+131	+ 483	+318		

+431 +187 [illegible]

* Appears Progressive.

Collar El.

SLOPE METER DATA SHEET

JOB Roberts Mtn. - So. Fill

SHEET 2 OF 2

BY E. Beal E. Page

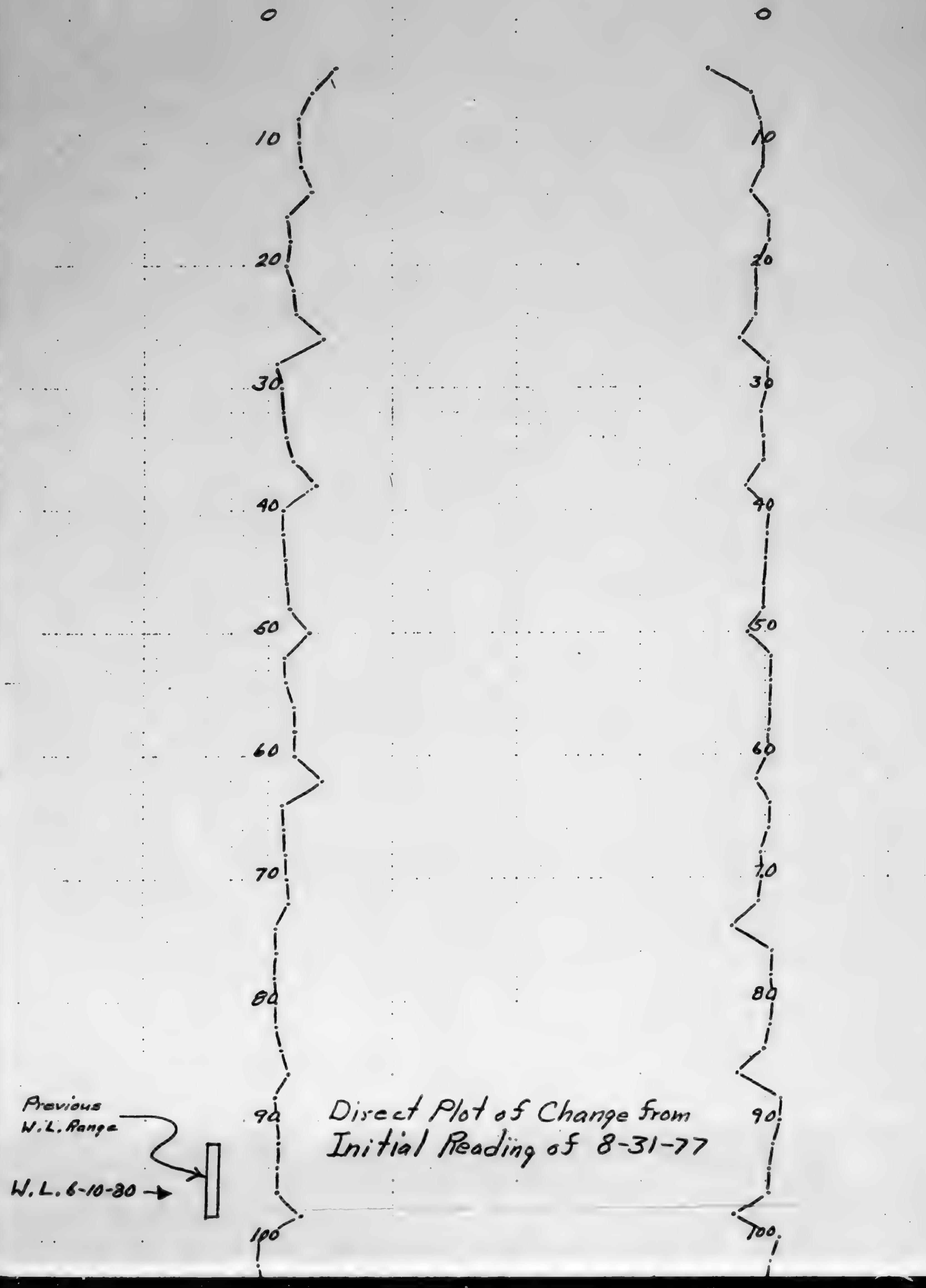
TUBE NO. 4 (SB Shoulder)

DATE ~~8/31/77~~ 6-10-80

[illegible]

	Az.	Initial Reading	Change Σ.I	90°	Initial Reading	Change Σ.I	Remarks		R.R.	
90	— 117	-203	+084	+ 474	+362	+112	+431	+197	-205	+35
92	— 130	-211	+081	+ 393	+323	+070	+347	+075		
94	— 140	-217	+077	+ 316	+287	+029	+266	+005		
96	— 126	-205	+079	+ 265	+247	+018	+189	-024		
98	— 088	-361	+273	+ 185	+450	-265	±110	-043		
100	— 413	-340	-073	+ 507	+378	+129	-163	+223	-337	+36
102	— 404	-316	-088	+ 402	+348	+054	-020	+094		
104	— 305	-299	-006	+ 336	+332	+004	-002	+040		
106	— 281	-289	+008	+ [illegible]	+324	+034	-004	+036		
108	— 293	-289	-004	+ 334	+332	+002	-004	+002	-299	+3

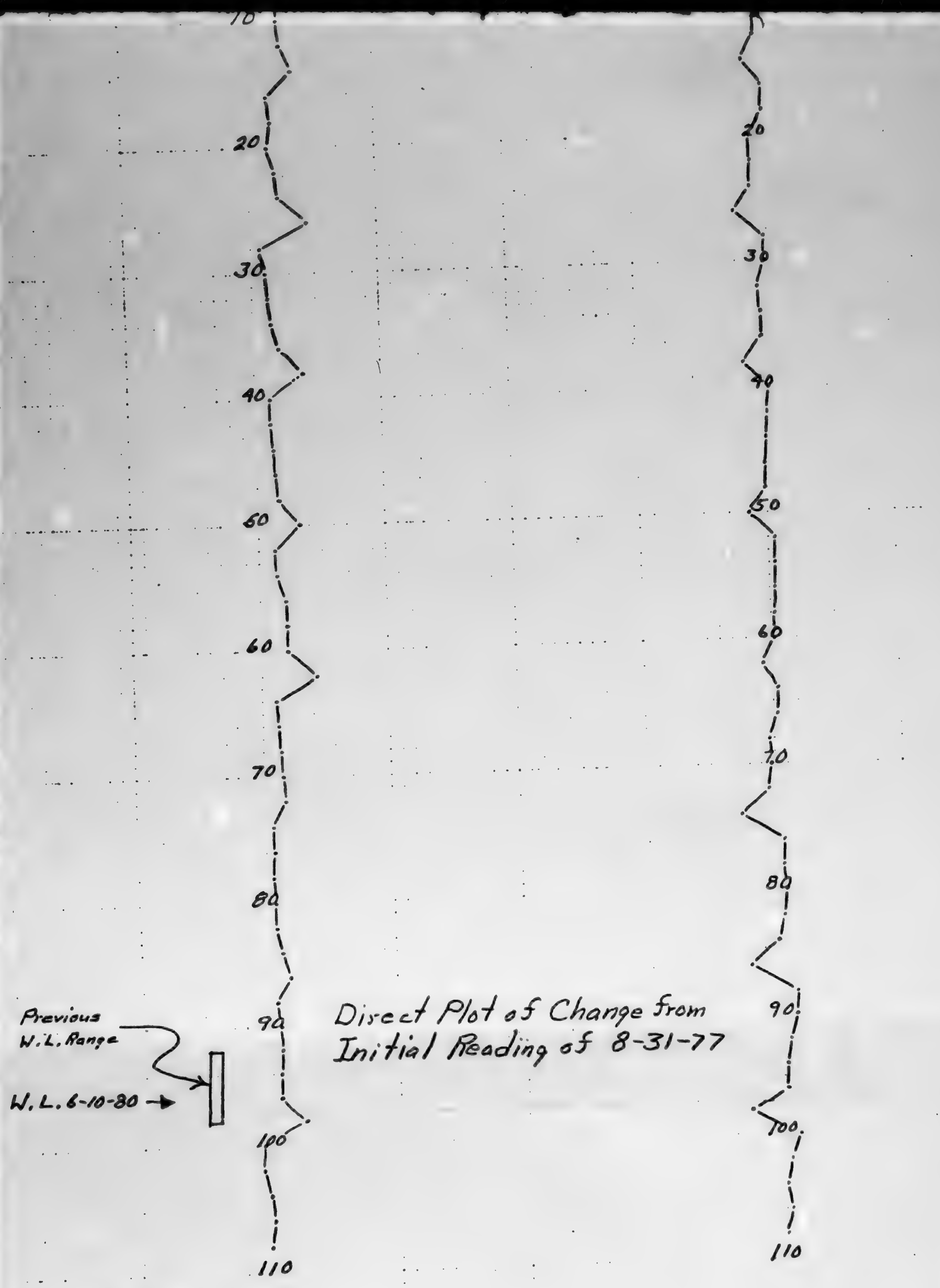
So. Fill Failure
Roberts Mtn. Sec.
Pacific Hwy. (I-5)



Direct Plot of Change from Initial Reading of 8-31-77

Previous W.L. Range

W.L. 6-10-80 →

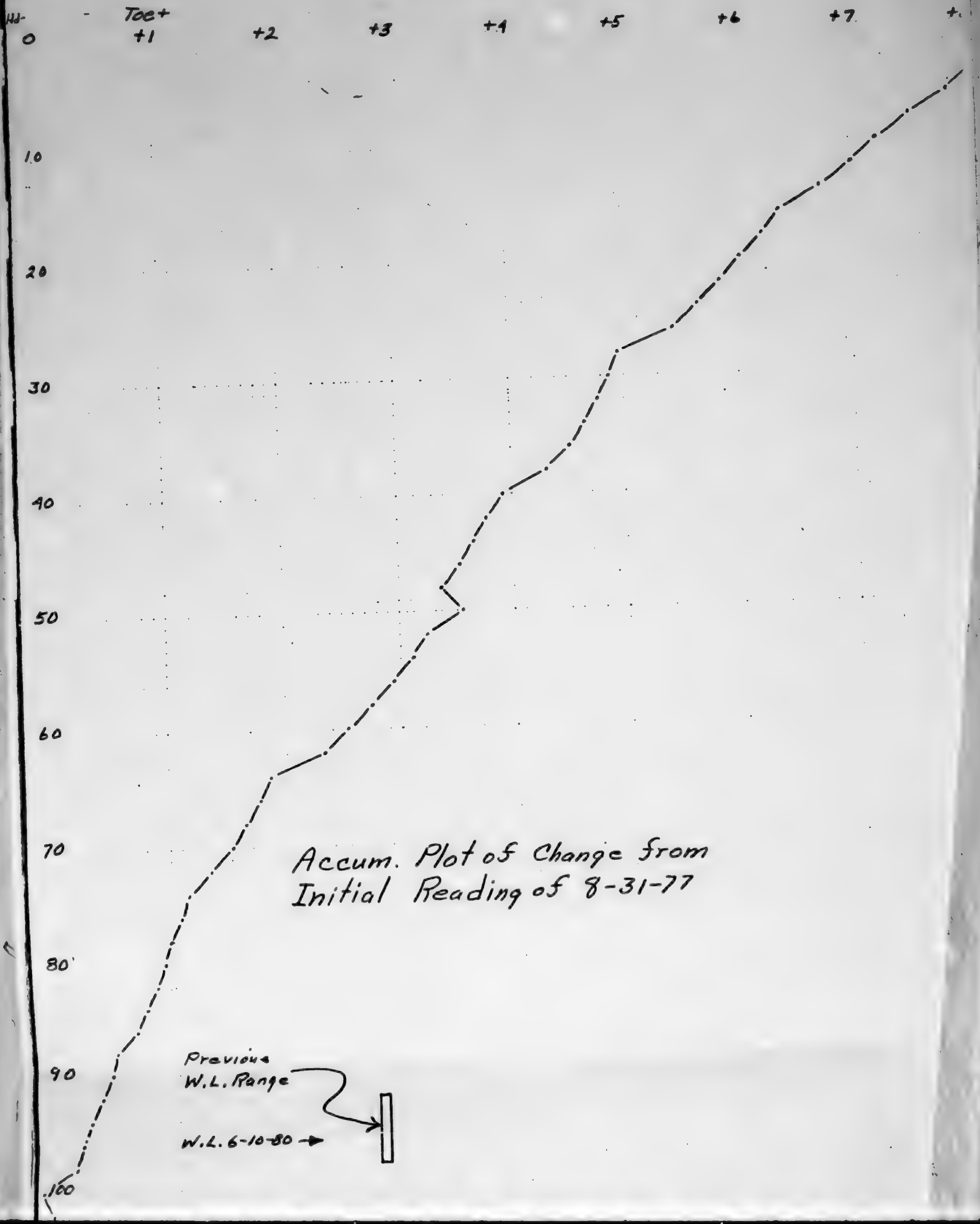


Direct Plot of Change from Initial Reading of 8-31-77

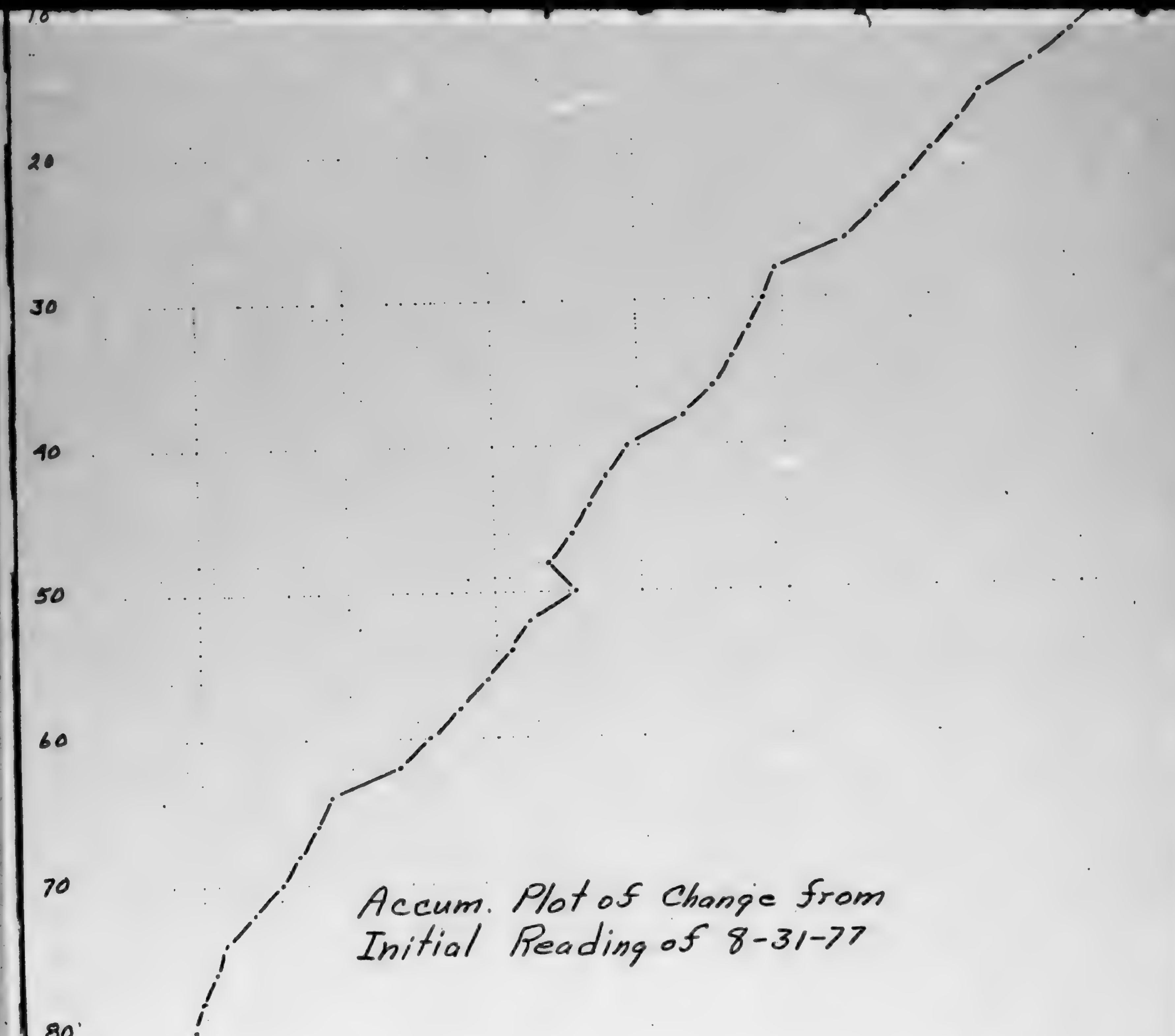
Scale:-
Horiz. 1" = 1"
Vert. 1" = 10'

Tube #4

So. Fill Failure
Roberts Mtn. Sec.
Pacific Hwy. (I-5)



Accum. Plot of Change from
Initial Reading of 8-31-77



Accum. Plot of Change from Initial Reading of 8-31-77

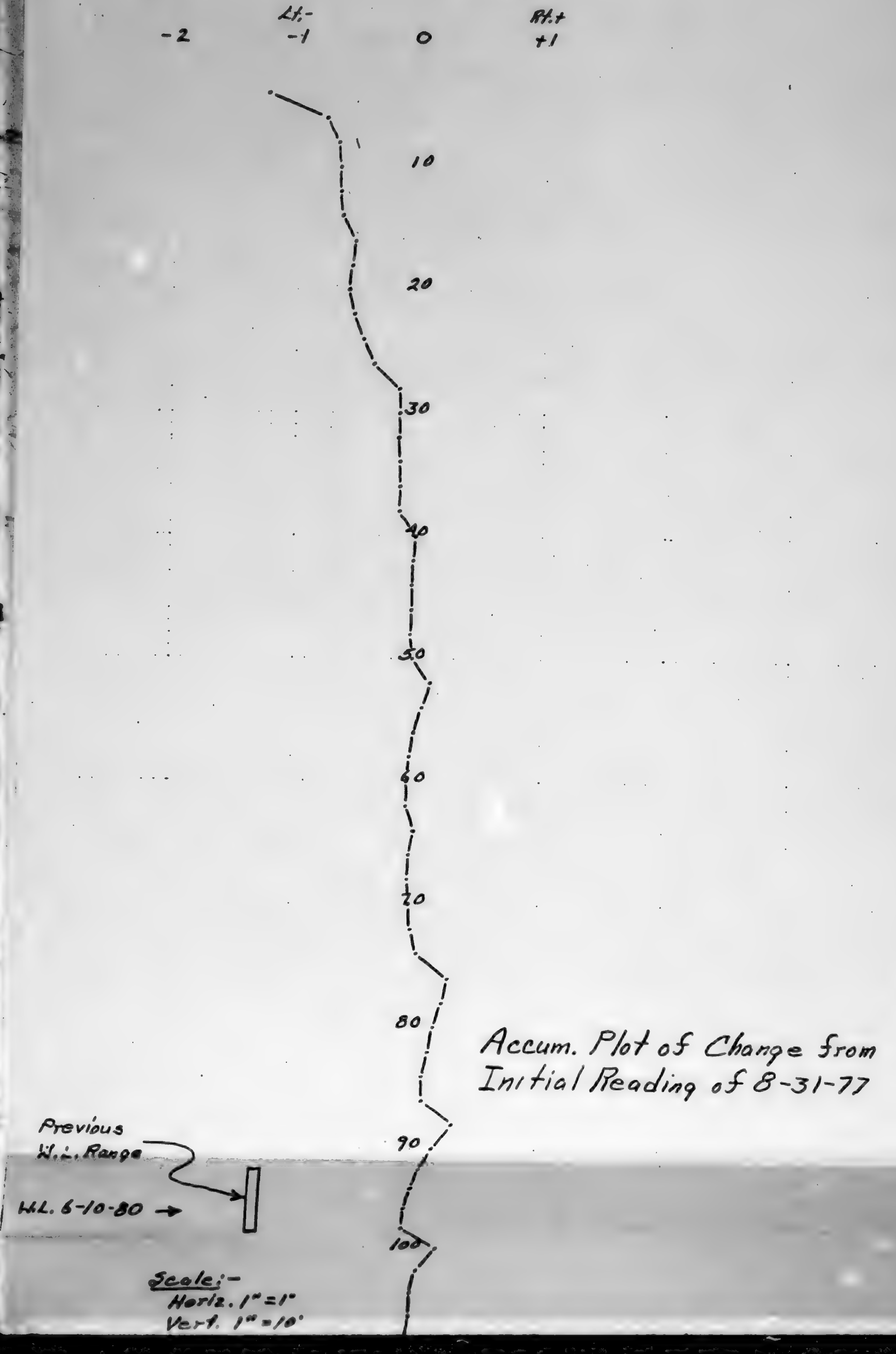
Previous W.L. Range

W.L. 6-10-80 →

Scale:-
Horiz. 1" = 1"
Vert. 1" = 10'

Tube #4
6-10-80

So. Fill Failure
Roberts Mtn. Sec.
Pacific Hwy. (I-5)

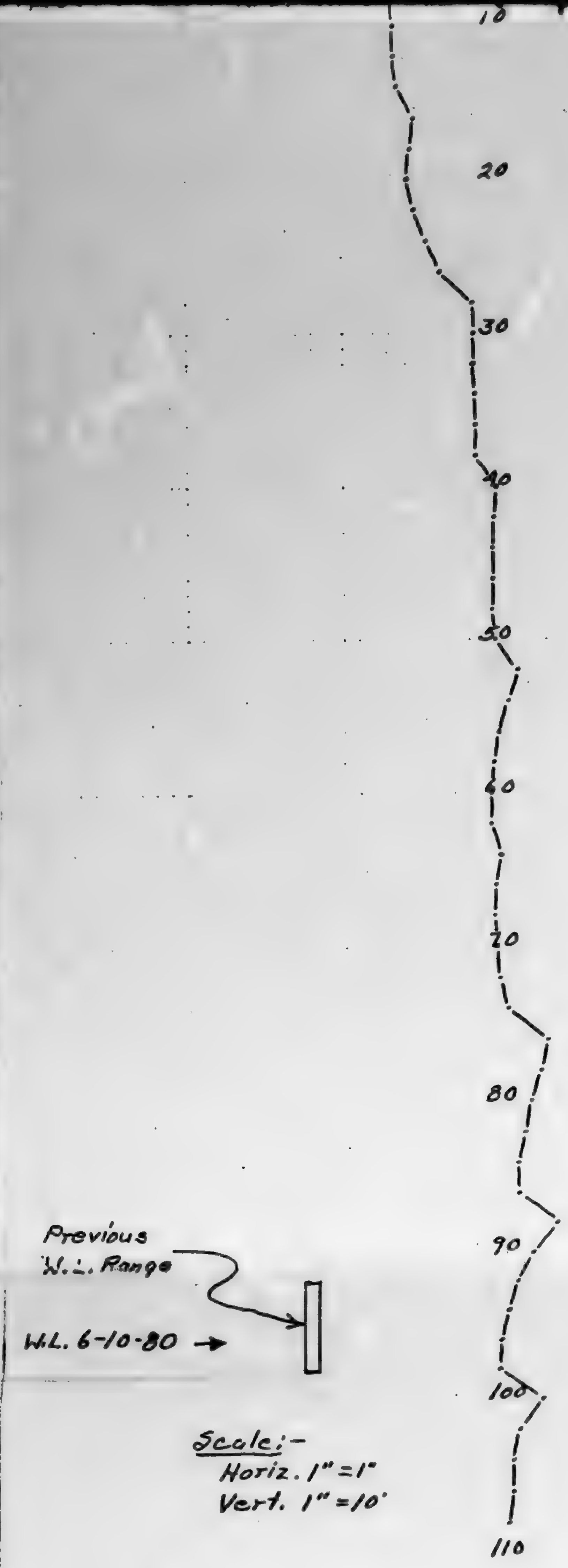


Accum. Plot of Change from Initial Reading of 8-31-77

Previous W.L. Range

W.L. 6-10-80 →

Scale:-
Horiz. 1" = 1"
Vert. 1" = 10'



Accum. Plot of Change from
Initial Reading of 8-31-77

Scale:-
Horiz. 1" = 1"
Vert. 1" = 10'

Tube #4
6-10-80 JB

9363

I-5

ROAD DESIGN SECTION

E. S. Hunter
Assistant State Highway Engineer

April 9, 1980

J. H. Versteeg
Road Design Engineer

Roberts Creek-Dillard Interchange
Section
Pacific Highway, I-5
Douglas County

The material from the slide correction cannot be used to construct the embankment for the future realignment project. If we go ahead with the slide correction project (130,000 cubic yards), some 94,000 cubic yards of this material will be wasted.

In the future when I-5 is reconstructed in this area 60,000 cubic yards of material will have to be borrowed to make the highway improvement.

REFERRED TO
✓ Beard ____ Stoudenmeyer ____
____ Cole ____ Mann ____
____ Eriksen ____ Watson ____
____ Hager ____ Dorn ____ Leu ____
[✓ Return] Discuss Do File Copy Due ____
BY FINAL DESIGN ENGINEER

JHV/db

____ Versteeg ____
____ Anderson ____
1 Christensen Doc
____ Olson ____
____ Sullivan ____
____ Terpin ____
2 Trout ____
____ Wakerlig ____

RECEIVED
APR 10 1980
ROAD DESIGN SECTION

Do Not F[illegible]
Return To ____
Bring Up ___/___/___
Action ____

9363

8/21 4-7-80 JHV

I-5

STATE OF OREGON
LOCATION SECTION

INTERC CE MEMO

LOC 13-1
2

TO: FILE

DATE: March 25, 1980

FROM: George C. Wills
Field Location Engineer

SUBJECT: Roberts Creek-Dillard Interchange Section
Pacific Highway, I-5
Douglas County

By letter of February 6, 1980 the Federal Highway Administration has indicated they will discontinue participation in slide correction on Interstate System projects after December 31, 1981. The subject project involves a major slide correction on Roberts Mountain.

Funding for this project has been set back and construction does not appear likely in the foreseeable future; therefore, under current circumstances, FHWA funding for the slide portion will be lost if the project is not undertaken within the noted time constraints. Our strategy should be established immediately. The following are a few possible schemes with approximate costs:

It is possible that a project could be staged by construction of a 3.1 million dollar project at this time and undertake the overlay-safety project at some time later when funds may be available. The costs will not translate directly ($8.5 - $3.1 = $5.4) since common excavation from the slide areas would need to be wasted rather than placed in future embankment areas.

The slide excavation is about 130,000 cubic yards, of which about 20,000 cubic yards can be used to construct fill for the drainage project. The complete project required wasting about 40,000 cubic yards. The remaining 70,000 cubic yards were utilized in the original project to construct embankments, primarily over existing pavements to achieve improvements for vertical and horizontal alignment. The drainage and slide correction project would require stockpiling or wasting this 70,000 cubic yards of excavated materials. At present prices, this would likely be in the range of 0.3 million dollars.

The Weber Slide and retaining wall on Roberts Mountain would not be substantially more costly under stage construction than as part of an over-all project. Approximate breakdown of costs for the project are as follows:

REFERRED TO
Beard WEC Stoudenmayer
1 Cole Sample
Eriksen Watson
Hager Dorn Lau
Return Discuss Do File Copy Due
BY FINAL DESIGN ENGINEER

1 Versteeg ✓
Anderson
2 Christensen
Olson
3 Sullivan JWB
Terpin
4 Trout
Wakerlig

RECEIVED
MAR 26 1980
ROAD DESIGN SECTION

Do Not File ☐
Return To
Bring Up / /
Action

125-1387

Weber Slide	$0.5 million
Retaining Wall	0.1 "
East & West Roberts Mtn.	2.5 "
Cost of Remainder	5.4 "
Total	$8.5 million

ALTERNATE 1 - Construct slide correction for East and West Roberts Mountain, Weber and retaining wall.

Stage One	$3.1 million
Cost of Remainder	5.4 "
Cost From Wasting Excavation	0.3 "
Cost of Stage Two	$5.7 "
Total	$8.8 million

ALTERNATE 2 - Construct slide correction for East and West Roberts Mountain, slide and drainage correction.

Stage One	$2.5 million
(Participation will be lost of retaining wall and Weber Slide.)	
Cost of Stage Two ($6.0-$0.5-$0.1)	5.4 "
Cost From Wasting Excavation	0.3 "
Total	$8.2 million

ALTERNATE 3 - Don't construct any slide corrections.

Cost of Original Project	$8.5 Million
Less Cost of E. & W. Roberts Mtn.	2.5 "
Less Cost of Retaining Wall	0.1 "
Less Cost of Weber	0.5 "
Plus Cost of Replacing Excavation	0.3 "
Total	$5.7 million

A course of action should be selected and the details coordinated with FHWA. Some of the decisions concurred in to date have been dependent on other determinations and any change in the plan will require FHWA approval for their participation.

GCW:ja

cc E. S. Hunter
D. H. Moehring
J. H. Versteeg
Frank Terpin
Alfred Shirley, Jr.

9563

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

May 6, 1981

In Reply Refer to
File No.: PRO 6-2

TO: Dale E. Wilken, Division Administrator
Federal Highway Administration

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Program Change
Item No. 90226
Project No. I-5-2(91)117
Roberts Mountain Section
Douglas County

I request your approval of a program change on the subject project to reduce the overall length of the project and decrease the estimated total cost and federal funds as reflected on the enclosed PR-9 forms.

This change will conform to the proposed contract on which bids are scheduled to be received in June 1981.

Authorization to proceed with actions necessary to advance the physical construction provided for by the original project was given on February 13, 1981 and approval of the program change will revise the total cost and federal funds obligated as follows:

	APPN. CODE	TOTAL COST	FEDERAL FUNDS
Original Authorization	042	$6,736,280	$6,212,200
Original Authorization	044	2,835,100	2,500,000
TOTAL		$9,571,380	$8,712,200
Revised	042	6,010,250	5,542,650
DECREASE		$3,561,130	$3,169,550

We propose to utilize the obligated federal funds released by this change to cover the final contract claim settlement on Project I-5-3(95)120 and other urgent projects.

CL:pf

cc: General Files

Form 734-3122

9343 2

STATE OF OREGON
ROAD DESIGN SECTION

INTEROFFICE MEMO
DES 16-1

TO: MEMO TO THE FILE

ORIGINAL SIGNED
DUANE O. CHRISTENSEN

DATE: March 4, 1981

FROM:

Duane O. Christensen
Final Design Engineer

SUBJECT:

Roberts Creek-Dillard Interchange
Pacific Highway
Douglas County

The subject project is presently being carried on the February 1981 "Schedule of Contract Lettings" for a July 23, 1981 bid opening. Also listed on the same document is the Roberts Mountain Section, which is a part of the subject section. The subject project contains the work that has been broken out to make the plans for the Roberts Mountain Section, therefore only one or the other will go to contract, not both.

The following factors should be taken into account when making a decision on which and when to contract:

1. The design year for FAI funding runs out in Fiscal Year 1984.

2. The work associated with slide corrections ($2,500,000) is only eligible for FAI funding until December 1981; after that time, FAI (RRR) or other funds would have to be used.

3. If the Roberts Mountain Section work (slides and drainage) were to be done, there is some question as to whether the remaining overlay and safety work would be eligible for FAI funding. Other funds would probably have to be used.

NOTED
E. S. HUNTER
H

DOC:ja

cc E. S. Hunter ✓
D. H. Moehring
Alfred Shirley
W. E. Cole

RECEIVED
TECHNICAL SERVICES
MAR 6 '81
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

9363

2-13-81

2.

U. S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

FEDERAL AID PROJECT NO.: I-IR-5-2(91)113

STATE PROJECT NO.: See below

FROM:
E.J. Valach, Acting Division Admin
FHWA - Oregon Division

PROGRAM NO.:

ITEM NO.: 90226

COUNTY NAME: Douglas

PROGRAM STAGE (Check) ☐ 1. ☐ 2.

TO:

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

orig to
2-19-81

RECEIVED
STATE HWY ENGR
FEB 19 '81
REFER TO [illegible]
FOR
Info [illegible] [illegible] [illegible] Sign Act File

DATE PS&E APPROVED	DATE AUTHORIZATION EFFECTIVE 2/13/81	FEDERAL ROUTE NUMBER Interstate 5 STATE ROUTE NUMBER Primary 1

GENERAL LOCATION:

Roberts Creek - Dillard Interchange Section

GENERAL DESCRIPTION OF WORK:

Grade, drain, high type pavement and structures

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

PRELIMINARY ENGINEERING TO DETERMINE
☐ LOCATION ONLY
PRELIMINARY ENGINEERING FOR SURVEY AND PLAN
☐ PREPARATION
☒ OTHER (Specify) See below

☐ ACQUISITION OF RIGHT-OF-WAY
CONSTRUCTION - ADVERTISE FOR RECEIPT
☐ OF BIDS
☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of 2/12/81 you are now authorized to proceed with actions necessary to advance the physical construction provided for by the above project at a total estimated cost of $9,571,380 Federal Funds $8,712,200.

DATE 2/13/81	SIGNATURE OF APPROVING OFFICIAL G K Hossner	TITLE for Acting Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 8-68) WILL BE USED

9363

L.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6-2

February 12, 1981

TO: Executive Department
Federal Aid Coordination Unit

Original Signed By
D. E. Swan

FROM: D.E. Swan
Operation Programming Engineer

SUBJECT: Revised Federal-Aid Funding Application

In compliance with step 7 of Procedure 13-020-02 of Executive Memorandum 02-270-20, we are submitting one copy of the completed application for federal-aid funding of the following:

Item No.	Project No.	Section Name & PNRS No.
90226	I-IR-5-2(91)113	Roberts Creek-Dillard Interchange #7904-2-760

JLG:bkc
Attachments

cc: E.J. Valach (FHWA)
General Files

Form 734-3122

9363 1.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6-2

February 12, 1981

TO: E.J. Valach, Acting Div. Administrator
Federal Highway Administration

Original Signed By
D. E. Swan

FROM: D.E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 90226
Project No. I-IR-5-2(91)113
Roberts Cr.-Dillard Intchge. Section
Douglas County

Attached support data consists of PR-1 forms and project maps for the subject joint funded project.

I request authorization to proceed with actions necessary to advance the physical construction of the project at an estimated total cost of $9,571,380 with an obligation of $8,712,200 in Federal Funds.

A copy of the State Clearinghouse A-95 review letter of approval was previously forwarded.

JLG:bkc
Attachments

cc: General Files

Form 734-3122

9363

2

STATE OF OREGON

INTEROFFICE MEMO

HIGHWAY DIVISION

PRO 6-2

TO: Rod Henry
Right of Way Section

DATE: January 26, 1981

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Roberts Creek-Dillard Jct. Sec.
Project No. I-5-2(88)113
Douglas County

The listed right of way project was programmed for a total cost of $2,400 which included two files No's 50513 and 50514.

Total costs to date are $9,405.48 as indicated on the enclosed tabulation of which $6,000 plus are acquisition charges.

We have sent the project to FHWA for a project agreement reflecting the current costs. However, they refuse to approve the agreement until we can justify the large increase in cost.

Would you please look into the matter and furnish information necessary to get the project agreement approved.

CL:bkc
Enc.

cc: General Files

Contains
Recycled
Materials
81-125-1387

9363

2.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6

March 26, 1980

NOTED
E. S. HUNTER

TO: G. L. Green, Division Administrator
Federal Highway Administration

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: PS&E Data Submission
Item No. 90226
Project No. I-5-2(91)113
Roberts Cr. - Dillard Inter. Section

We are forwarding documentation for PS&E approval of the subject project in the amounts tabulated below.

It is the Oregon State Highway Division's intention to receive bids for this project very soon but request PS&E approval and authorization to proceed with actions necessary to advance the physical construction at this time. Right-of-way, Utility, Environmental Certification and other status reports will be submitted at the time we request advertising authorization.

Federal Funds (92.22%)	$7,545,367
State Funds	636,555
Total Cost	$8,181,922

DAR:bke
Attachments
cc: E.S. Hunter
W.J. Hart
J.H. Versteeg

RECEIVED
TECHNICAL SERVICES
MAR 27'80
REFER TO
FOR
Info | Inves | R/D | D/R | Sign | Act

Form 734-3122

4363

2

Phone call from Warren Richards 3:20, Feb. 15.
TT received in Construction 2/15.

To Scott Coulter

It has taken seven years of study and discussion with FHWA to reach consensus on slide correction for Roberts Mt.-Dillard Section. Would hate to lose all that effort now. Additional data on motorist cost if detour is needed will be in tonight's mail.

Bud Shirley.

2.25 Clf

Mocking - see that projct is in 6 year program at an appropriate time.

R

FORM 81-724-3030

OREGON STATE HIGHWAY DIVISION

INTER-OFFICE CORRESPONDENCE

FILE: LOC 17

Roseburg, Oregon
February 12, 1980

FROM: ALFRED SHIRLEY, JR.
Regional Engineer

SUBJECT: Roberts Creek-Dillard Section
Pacific Highway
Douglas County

TO: H. S. Coulter
State Highway Engineer

This office is in receipt of a copy of a letter addressed to you from Glen Green, Division Administrator for the FHWA, concerning the proposed project Roberts Creek-Dillard Interchange Section on I-5 in Douglas County.

RECEIVED
STATE HWY ENGR
FEB 13 '80
REFER TO
FOR
Info | Inves | R/D | D/R | Sign | Act | File

2-14

Mr. Green's letter indicates that interstate funding cannot be made available for the proposed drainage work. He also indicates that PS&E approval must be obtained by December 31, 1981 in order to obtain interstate funding for the slide correction work on this project.

This office strongly urges the Highway Division to proceed with obtaining the PS&E approval as soon as possible. We are very concerned that the slides might become very active and it may be necessary to close I-5. The only detour available is by the use of the Dillard Secondary and the Coos Bay-Roseburg Highways.

R

The Dillard Secondary is a two-lane facility, part of which goes right through the middle of a very large Roseburg Lumber Co. timber processing plant. Traffic volumes vary between 1500 and 7900 a day. I-5, on the above mentioned section, has an ADT of 15,900.

As you can see the traffic volumes could result in a high user cost and energy consumption if it were necessary to detour I-5.

The project as conceived, which includes the slide correction work, also provides for some needed safety improvement on the section and the total project is the most economical way to go rather than attempt to do two or more smaller projects.

Every year we are spending from $5,000 to $8,000 of maintenance funds just to remove the east slide materials from the shoulder. There is a possibility that if the west slide becomes active, we will be in the same situation there.

as/cw

Form FHWA 121 (6/79)

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

THE OREGON DIVISION - SALEM
UNITED STATES GOVERNMENT

memorandum

Subject: Oregon Project I-5-2(91)113
Roberts Creek -
Dillard Interchange Sec.

Date: February 6, 1980

From: G. L. Green, Division Administrator

Reply to Attn. of: HFO.3-OR

2-11 cys

To: Mr. H. S. Coulter, State Highway Engineer

RECEIVED
STATE HWY ENGR
FEB 7 '80
REFER TO [illegible]
FOR
Info | Inves | R/D | D/R | Sign | Act | File

Mr. Swan's memo of January 28 requests my concurrence that (1) FAI funding is eligible to replace a partially incapacitated 48-inch CMP @ Sta. 2981 and (2) the work in one will not jeopardize previously approved FAI "slide" funds in the area.

First, correction of the partially incapacitated 48-inch culvert is not directly eligible for Interstate funding.

Secondly, unless funding is obligated (PS&E approval) by December 31, 1981, all of the previously approved Interstate slide correction funds will be lost. (Attached is a copy of our current Interstate slide policy).

[illegible]

On February 4, Messrs. Chassie & Yarbrough again inspected the Robert's Mountain slides. New activity is apparent in both the "East side" and "West side" slides.

The East side slide is a mud flow which has slid during the winter for many years. Mr. Wilson indicated maintenance has spent about $5,000 so far this year removing mud from the shoulder.

The West side slide for the first time is beginning to fill the roadway ditch. Messrs. Chassie & Yarbrough feel this slide has about a 20% chance of suddenly breaking loose and closing I-5. The only N-S detour is very poor. In any event, they both agreed the west side slide is building up pressure at the bottom and will, at best, require annual removal from the shoulder.

Originally the subject project involved correction of four slide areas utilizing slide evacuation to realign a high accident location. Also, a pavement overlay and general safety upgrading of the section was planned.

Excess slide excavation was planned to be placed in a random fill SE of Sta. 2981. This random waste area would cover the inlet of a 48-inch diameter culvert which happened to be partially incapacitated due apparently to fill substance and/or backfill erosion.

Therefore, installation of a new culvert was approved for Interstate funding as part of the overall slide correction under our landslide policy.

It is important to note that three slides exist at the summit of Roberts Mountain. Two of these slides, (1) the East side fill slide and (2) the East side cut slide were not considered individually to be of sufficient magnitude to warrant Interstate participation. The third slide - the West side slide is, by itself, of sufficient magnitude to warrant FAI funding.

Due to the proximity and magnitude of all three slides, we approved a specific correction plan in which safety improvements, drainage and slide correction work complimented each other.

I will be glad to discuss this matter or any other modified plans you may wish to explore.

G. L. Green

Attachment:
FAI Participation in Landslide Correction
w/Region 10 Policy Statement

cc: w/attachment
OSHD (E S Hunter)
(D H Moehring)
(A Shirley, Jr.)Reg 3

222 S. W. Morrison St.
Portland, Oregon 97204

December 13, 1979

HED-010.8

CONCURRENCES		
RTG. SYMBOL	INITIALS/SIG.	DATE
Chassie	R.G. Chassie	12/13/79
Scott	L. Scott	12/13/79

FAI Participation in Landslide Corrections

Regional Geotechnical Engineer
Office of Environment and Design - Region 10

DIVISION ADMINISTRATORS
Mr. R. C. Cowdery, Boise, Idaho
Mr. G. L. Green, Salem, Oregon
Mr. P. C. Gregson, Olympia, Washington

The attached memorandum from our Washington Office cancels the 1969 Landslide Policy and specifies those conditions under which FAI participation may now be approved for the correction of failures caused by soil and rock instabilities on completed interstate segments.

We interpret "segments... which have been identified" to mean those sections which have been pointed out to or by a representative of FHWA as being unstable or potentially unstable, those sections on which preliminary engineering to design a repair has begun, or those sections where the State is collecting data from geotechnical instrumentation to define the limits of an instability.

The attached memorandum also advises that a Technical Advisory will be issued. Until the Technical Advisory is issued, the portions of the attached Region 10 Position Statement on Landslide Corrections (issued June 1976) dealing with eligibility determination, approval authority, and support data, will remain in effect.

Questions concerning these changes should be directed to Ron Chassie at FTS 423-2071.

Ronald G. Chassie

Attachments

cc: M.E. Green (HDRA-010)

RGChassie:jad

Form DOT F 1320.65 (4-67)

OFFICIAL FILE COPY

F[illegible] FHWA 121 (Rev. 5-73)

HRA-010

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
Washington, D.C. 20590

DATE: NOV 23 1979

In reply refer to: HHO-33

RECEIVED
DEC 3 1979
REGION 10

SUBJECT: Participation in Correction of Soil and Rock-Related Subsurface Instabilities

FROM: Associate Administrator for Engineering and Traffic Operations

TO: Regional Federal Highway Administrators Regions 1-10

Effective immediately, participation for correction of soil and rock related instabilities with Federal-aid Interstate funds on completed projects will be approved for only the following:

1. Failures on segments opened to traffic for more than 3 years which have been identified as of the date of this memorandum. Funding for construction on these projects must be approved and obligated prior to January 1982.

2. Failures that occur and are identified on completed segments that have been open to traffic for less than 3 years.

A completed Interstate project, for purposes of this memorandum, is any segment of the Interstate System which has been constructed with Interstate funds and has been open to traffic. Eligible projects will continue to be submitted through the regional offices to Washington Headquarters for Federal-aid Interstate funding approval. Non-Interstate funding may be approved for such work on any system, including the Interstate System, by the division offices as is current policy.

Our objective for the past 10 years has been to promote thorough geotechnical engineering investigation and analysis at the preliminary engineering stage, thereby, minimizing the risks of failure. To achieve this objective, we have provided the States and FHWA field offices with both technical assistance on individual highway projects, and instructional programs to upgrade their geotechnical engineering capabilities. Adequate subsurface investigation should now be routinely used by States to identify any subsurface problems, and allow rational analysis and design based on factual data. This, in combination with the intent of Congress, as expressed in the Surface Transportation Assistance Act of 1978, to complete the Interstate System at an early date, justifies limiting the eligibility for Interstate funds for this type of work.

We have been operating since 1969 under a policy statement dated February 7, 1969, and a memorandum to the regional offices from the Director of the Office of Engineering and Operations dated August 14, 1969. These issuances are hereby cancelled. A technical advisory entitled "Correction of Soil and Rock-Related Subsurface Instabilities on Federal-Aid Projects" will be issued from this office. This will contain guidelines on the evaluation of instabilities and a descriptive list of suggested technical documentation to support funding approval.

We strongly encourage the Division Administrators to contact the regional geotechnical engineer for technical assistance in the review of all State submissions. Technical assistance is available to the regional offices through the Geotechnical and Materials Branch staff (HHO-33) of this office.

S LaHue.
for R. D. Morgan

FHWA - REGION 10

POSITION STATEMENT ON LANDSLIDE CORRECTIONS

Policy

On February 7, 1969, the Federal Highway Administration issued "A Policy Statement Regarding Work for Corrections of Slides or of Instabilities in Natural and Placed Materials on Federal-aid Projects and Participation in Cost of Such Work." Further clarification of the policy statement was contained in a memorandum from G. M. Williams to all Regional Administrators dated August 14, 1969. The intent of the policy statement was to specify the requirements that must be satisfied in order for landslide corrections on completed Federal-aid Projects to be eligible for Federal-aid participation. The policy was prepared in recognition of the fact that some slides would occur subsequent to construction and in an attempt to ease the financial burden on the States resulting from excessive landslide repair costs.

The intent of this position statement is to provide a definitive interpretation of the points set forth in the policy memorandum.

Background

Landslides of various types continue to present some of our most serious and costly problems in the States' Federal-aid highway programs. We conservatively estimate that approximately 15 million dollars is being spent annually for landslide repairs in Region 10 alone.

Insofar as deemed practicable, the risks of becoming involved in slide problems can normally be minimized in the preliminary engineering stage by avoiding potential trouble spots at the time of centerline location, or by incorporating preventive design measures where avoidance is not practical. Thorough geotechnical engineering input is essential for detecting problem areas and formulating safe and economical designs. An acceptable level of risk is also estimated on the basis of engineering judgment as influenced by such basic considerations as anticipated initial construction costs and the potential seriousness of consequences, should failure occur.

It is recognized that it is neither possible to anticipate and prevent slides nor adequately estimate the possible risk in all cases. The net result is that some slides will occur during or after construction.

Interpretation

The following major points are set forth in the policy statement: (1) Title 23 CFR states that it is the duty and obligation of a State Transportation agency to maintain or cause to be maintained any project constructed with Federal-aid fund participation in the cost of that project, and there is not to be any Federal-aid participation in the costs of maintaining that project; (2) work on the Federal-aid highway system, exlcuding Interstate, that is classified as construction or reconstruction is eligible for participation with the F-S-U classes of Federal-aid funds; (3) work on Federal-aid Interstate projectsthat is classified as construction is eligible for participation with FAI funds; and (4)work on a Federal-aid Interstate project that is classified as reconstruction is not eligible for participation with FAI funds, but such reconstruction work on an Interstate project may be eligible for participation with the normal F-S-U classes of Federal-aid funds.

Eligibility Determination

On a completed Federal-aid project, the work required to correct an existing slide or to correct an instability that could lead to a slide, may be classified as either construction or reconstruction if all of the following requirements are met: (1) the work to correct the slide is of a size and scope beyond that of normal maintenance, (2) the State can show the corrective work requires a change in design for the segment involved, and (3) the slide or instability was not caused by improper acts or negligence on the part of the contractor or the State.

"Change in design" refers to establishment of a factor or factors which have changed from those originally considered, or which were not anticipated in the original design studies, and which must now be included in a corrective analysis to assure future stability of the facility. Such factors may include, but not be limited to, changes in ground water regime, unusual and orignally undetected geologic and soil conditions, or nonhighway construction which subsequently changed normal drainage or slope loading conditions.

For slides that are determined to be eligible for participation, preliminary engineering costs are also eligible. In some cases, preliminary engineering investigative work may have to be undertaken in order to show that a changed design condition exists. For such problems, the State must bear the initial P.E. costs. If it is later determined that the slide corrective work is eligible for participation, the State can be reimbursed for the initial P.E. costs incurred.

Participation in the cost of the work described herein is distinct and separate from the work for the repair or reconstruction of (1) natural disaster over a wide area such as by floods, hurricanes, tidal waves, earthquakes, severe storms, or landslides, or (2) catastrophic failures from any cause in any part of the United States, as provided for under Section 125 of Title 23, CFR.

Approval Authority

Approval authority for slide correction work utilizing F-S-U classes of Federal-aid funds rests with the Division Office.

Approval authority for slide correction work on completed Interstate projects utilizing FAI funds is still retained by the Washington Office. Where the States request FAI funds and you concur that the work is beyond normal maintenance and meets the "changed design condition" requirements, the individual requests with adequate support data should be forwarded with Division Office comments and recommendations to the Regional Office for review. The Regional Office will forward requests to the Washington Office.

Support Data

Requests for FAI participation on completed projects should include, but not be limited to the following:

(1) Site plan and typical cross-section(s) representing ground surface conditions prior to failure, along with the surface configuration after failure. Photographs, if available, would also be beneficial.

(2) Cross section(s) showing soil and/or rock conditions determined usually by drilling and sampling and possibly geophysical surveys.

Stratification of the various soil and/or rock types, as interpreted from the borings should be shown on the cross-section(s). Location of water table and any water bearing strata should also be shown.

(3) Description of the latent state of the slide mass - whether movement has stopped or is still occurring and, if so, at what rate.

(4) Boring logs.

(5) Instrumentation data and/or other information used to define the depth and location of the failure zone. The underground location of the failure zone should be shown on the cross-section(s).

(6) Shear strength parameters of the material(s) through which failure is occurring based on sampling and testing or assumptions and backfigured strength using a factor of safety = 1 at the time of failure.

(7) Proposed corrective schemes with safety factors and estimated costs.

(8) Narrative report containing slide history; record of maintenance costs and activity and preventive measures taken, if any; reasons for inadequacy of the original design; description and results of subsurface investigation performed; summary and results of stability analyses performed; and recommendations for correction.

(9) Other pertinent information.

The above support data must be forwarded with requests for FAI participation on completed projects.

For all other requests, whether for slides occurring on completed projects or on active construction projects, the Division Office has both approval authority and the prerogative of deciding what support data will be required. We recommend the following general points be kept in mind when making a determination of required support data:

The reliability of any corrective measure will be approximately proportional to the amount and quality of surface and subsurface data available on which to perform analyses. The amount of data necessary will also be influenced by the complexity of the soil and/or rock conditions. If a problem is potentially large in terms of consequences of failure, considerable effort and expense can be justified for investigation and engineering analyses. It would be advisable in this instance to obtain all of the previously listed support data. On smaller problems of a less serious consequence, the investigation effort and expense can generally be scaled down accordingly. The smaller problems may require less data for acceptable analysis and solutions.

In general, therefore, the less complicated the slide, the less support data which should be required. However, we can envision few, if any, instances where no support data would be necessary. Although past experience is extremely valuable, where slides do occur their solution must be based on a rational engineering approach rather than solely a "past experience" approach. In many cases, this "seat of the pants" type solution has either aggravated the problem or resulted in expensive overdesign.

In no case should we spend Federal funds to correct a slide or potential instability without reasonable assurance that we are, in fact, solving the instability, and doing so for the least possible cost.

General

For slide corrections where a request for FAI funds is anticipated, the Regional Office and Washington Office Soil and Rock Mechanics Branch should be involved at the early stages. This will speed the review process and reduce the possibility of a State putting time and effort in a study which will not be acceptable.

At the Division's request, the Regional Office will provide assistance on eligibility determinations, assessing type and amount of support data which should be obtained for a particular slide problem, and any other administrative or technical aspects relating to landslide corrections. Region 10 will make every effort to assist the States in minimizing their landslide problems.

9363

HS COULTER

STATE OF OREGON

INTEROFFICE MEMO

MAI 15-7

Highway - Traffic
DEPT.

378-6537
TELEPHONE

TO: Alfred Shirley, Jr.
Region 3 Engineer
ATTN:
J. X. Wilson

DATE: February 14, 1980

FROM: L. E. George
Traffic Engineer

SUBJECT: Roberts Mountain Slide Detour
Pacific Highway
Interstate 5
Douglas County

ROSEBURG REGION
RECEIVED
FEB 15 1980

RE	[illegible]	RCE	ROE	TE
RUE	DES	RSR	RPR	RLE
ENV	FAE	RBI	SEC	

The following is in response to your request to calculate the daily cost to motorists if the Interstate 5 freeway was closed at the Roberts Mountain Slide Area. Under the closure condition, traffic would be detoured at the Interstate 5-Shady Interchange onto old 99E, proceed through the Cities of Winston and Dillard and rejoin Interstate 5 at the Dillard Interchange. The 15,900 daily vehicles presently using Interstate 5 just south of Shady Interchange would travel an additional 5.1 miles on the detour route.

Two factors were used in calculating the cost to motorists; mileage costs and time costs. The traffic stream was then divided into three categories; (1) passenger cars, (2) light trucks and (3) heavy trucks, each having a designate cost as shown in Table 1.

RECEIVED
STATE HWY ENGR
FEB 19 '80
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

TABLE 1

Vehicle Type	Mileage Cost 1/	Hourly Cost
Passenger Cars	6 cents	$4.68/veh. hr.
Light Trucks	23 cents	7.65/veh. hr.
Heavy Trucks	32 cents	8.90/veh. hr.

1/ Mileage cost included gas, oil, tires and maintenance.

If the freeway was closed at Roberts Mountain, the detoured traffic would experience a significant time delay, as well as an additional 5.1 miles in travel distance. The average detour speed on the old 99E route would be about 31 MPH, compared to the existing speed of 47 MPH. This significant drop in speed is caused by the increased traffic volumes which will severely tax the capacity of the detour route.

Summary:

Based on the costs shown in Table 1, we calculate motorists would travel an additional 81,000 vehicle miles which equates to a cost of $9,500 per day. Time delays of approximately 4,800 hours per day would also result. This time loss is equal to $26,800 per day. We estimate the total detour cost to motorists at $36,300 per day.

In addition to operating and time costs, an adverse impact with respect to energy conservation would also result. Because 15,900 vehicles would travel an extra 5.1 miles, 5,500 additional gallons of fuel per day would be used.

L. E. George
Traffic Engineer

JH:ds

cc: H.S. Coulter ✓
D.H. Moehring

9363

I-5
2

Department of Transportation
HIGHWAY DIVISION
Region 3
1058 W. HARVARD BLVD., ROSEBURG, OREGON 97470 PHONE 672-6755

IN REPLY REFER TO
FILE NO

January 23, 1980

~~Mr. and Mrs. E. G. Zeigler~~
~~Rt. 4 Box 1420 Lookingglass Rd.~~
~~Roseburg, OR 97470~~

FILE NO: 50676
UNIT: Roberts Cr.-Dillard Jct.
SECTION: Roberts Mt.-Myrtle Cr.
HIGHWAY: Pacific
COUNTY: Douglas

Dear Mr. & Mrs. Zeigler:

I am returning the Lease and Sale of Materials you signed.

The project has been postponed for two years. Since you did not care to extend the term of the lease, it would expire before we would be able to use it.

Thank you for your time and consideration during the negotiation for the lease.

Sincerely,

Dora Folsom

Dora Folsom
Right of Way Agent

DF/sgp
Encl.
Copy to J. B. Boyd ✓

RIGHT OF WAY ADMINISTRATION
RECEIVED
JAN 2[illegible] 1980

☐	☐	☐	☐	☐	☐
	AM	ADM	RBR	CA	RS
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cc Versteeg
Take Note

✓ Versteeg ✓
Anderson
Christensen
Olson
Sullivan
Terpin
Trout
Wakerlig

RECEIVED
JAN 25 1980
ROAD DESIGN SECTION

Do Not File ☐
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Bring Up / /
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FORM 734 3122

9363 I-5

ENVIRONMENTAL REVIEW CHECKLIST

ALL CLEAR 12/19/79
Donald L Rout

January 24, '80 Bid Letting ______________ All Clear Deadline

SECTION Roberts Creek-Dillard
Highway Pacific Highway
County Douglas Region 3
Type of Work P-Sn-Safe Funds FAI
State __ Consultant __ Plans Avail. __ Yes __ No

DOCUMENTS:	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR	
EIS	☒					
Negative Declaration	☒					
Project Assessment		☒			☒	
Write-off Letter	☒					

PERMITS:	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR	
Division of State Lands		☒	☒	☒	☒	Streams & Weigel Bar
D.O.G.M.I.		☒			☒	
Corps of Engineers		☒			☒	
Coast Guard	☒					
Co. Conditional Use	☒					
NPS Air Pollution	☒					
NPS Water Pollution	☒					

CULTURAL:	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR	
Cultural Survey		☒			☒	
Cultural Salvage	☒					

NOISE:	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR	
Noise Study		☒			☒	

9363

OREGON DEPARTMENT OF TRANSPORTATION
NOISE STUDY REPORT

Project Roberts Creek-Dillard Junction
Preparer Lee Doss
Highway Pacific (I-5)
Date 12-3-79
County Douglas
~~City~~ Length: 5 miles

Project Description:

The project is an improvement of I-5, resurfacing and upgrading this section to present standards of safety. From station 2948+50 to station 3025+00, (approx.), the grade will be raised as much as seven feet, while changes in horizontal alignment will ease three curves.

Versteeg
Anderson
cy Christensen
cy Olson
8/14 cy Sullivan
Terpin
Trout
Wakerlig

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AUG 14 1981
ROAD DESIGN SECTION

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Existing Land Use Activities:

Land in this section is in forest and timber-pasture, with some areas having recently been subdivided into small acreages. Several newly built residences are changing the character of the land between Roseburg and Myrtle Creek from rural to rural suburban.

Traffic Data:

	No-Build		Build	
	1980 (year)	2000 (year)	1980 (year)	2000 (year)
Design Hourly Volume				
Autos	622	995	622	995
Speed	42 mph	40 mph	42 mph	42 mph
Peak Truck Hour				
M. Trucks	17	27	17	27
H. Trucks	147	235	147	235
Speed	42 mph	40 mph	42 mph	42 mph

Traffic Noise Levels:

Measured Leq Noise Level			Volume			
Measured	Model Prediction	Distance from Center Line	Autos	Med. Truck	Heavy Truck	Speed
NO FIELD	MEASUREMENTS	WERE TAKEN.				

	No-Build 1980 (year)	No-Build 2000 (year)	Build 1980 (year)	Build 2000 (year)	
Leq Level Along R/W Line (150 feet from ℄)	69 dBA	71 dBA	69 dBA	71 dBA	
Leq 67 dBA Contour Location (Distance from centerline)	250'	400'	250'	400'	Hard
	132'	165'	132'	165'	Soft

Traffic Noise Impacts:

None of the three proximate residences built prior to the Freeway are impacted, due to sheltering terrain. Eleven new dwellings and a motel have been placed within 400 feet of the Freeway (℄ nearest lane). Five of these are in overlooking positions directly exposed to noise. One residence is under construction on a directly exposed site.

Traffic Noise Mitigation:

The recently built homes mentioned above have been constructed since the advent of heavy traffic on I-5, apparently oblivious to noise considerations. No mitigation is proposed.

Construction Noise - Impacts and Mitigation:

Seven residences will be temporarily impacted by quarrying and hauling operations. Construction time restraints shall be imposed in accordance with the Statewide Noise Statewide Noise Study Report. In addition, hauling from the Weigel Gravel Bar shall be restricted to the hours of 8 a.m. to 6 p.m. on regular workdays, unless directed otherwise by the Engineer.

Local Coordination:

A copy of this report will be sent to:

1. Douglas County Planning Commission
2. Umpqua Regional Council of Governments

15V-8

ROBERTS CREEK ~ DILLARD INTCHGE. SEC. PACIFIC HIGHWAY DOUGLAS COUNTY				Sheet No. 1
FED. ROAD DIV. NO.	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
10	OREGON	I-5-2(91)113		See Index

FAI

Overall Length Of Project 5.08 Miles

PRELIMINARY COPY
JUN 2 1981
SUBJECT TO CHANGE
FINAL DESIGN UNIT

STATE OF OREGON
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY DIVISION
PLANS FOR PROPOSED PROJECT

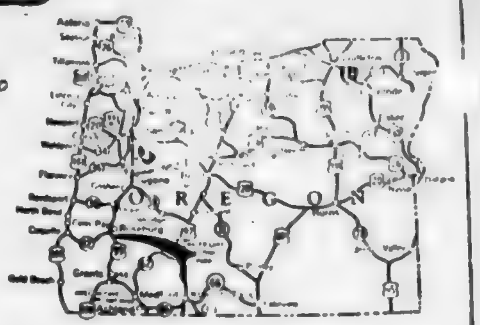
GRADING, PAVING, BARRIERS, STRUCTURES & SIGNING
ROBERTS CREEK - DILLARD INTCHGE. SEC.
PACIFIC HIGHWAY
DOUGLAS COUNTY

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	Title Sheet
2, 2A, 2B	Typical Sections
2C, 2C-2, 2D, 2E	Details
2F, 2F-2, 2F-3	Random Fill & Drainage Details
2H, 2J, 2K	Details
2L	Gabion Wall Details
2M, 2M-2	Prospective Material Sources (Plan & Details)
2N	Summary
2P, 2P-2, 2P-3, 2P-4, 2P-5, 2P-6, 2P-7, 2P-8, 2P-9, 2P-10, 2P-11	Stage Construction, Temporary Protection & Direction Of Traffic
2Q, 2Q-2, 2Q-3	Pipe Data
2R, 2R-2, 2R-3	Signing
3, 3A	Plan & Profile ; Construction Notes
4-13 Incl.	Plan & Profile

Drg. No's.

2050	Multi-Layer Pavement Construction
2051	Drainage Curb
2085	Fence
2091, 2091B, 2112, 2121, 2123	Pipe Installation
2105, 2105A	Concrete Inlets
2122	Rounding Cutbanks
2126, 2126A, 2126B, 23257	Guard Rail
2127	Concrete Barrier
S-708	Delineators
10509, 17332	Box Culvert
21082	Type K Retaining Wall
34614, 34615, 2070	Bridge End Panels
34561, 34566	Retaining Wall
S-1, S-2, S-4, S-5, S-6, S-7, S-12, S-13, 2126C, 23836, 29406	Temporary & Permanent Signing
34973, 34974, 34975, 31016	Temporary Illumination



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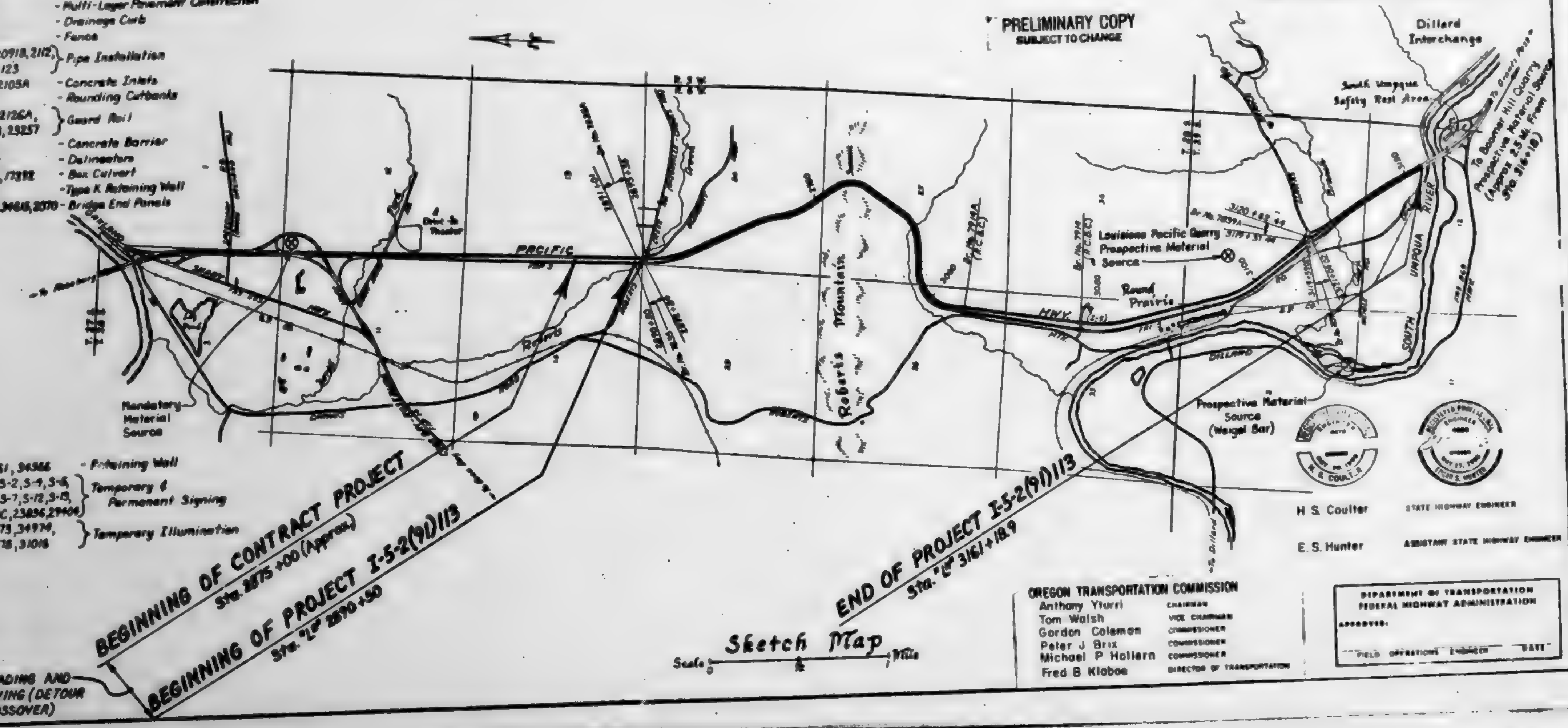
Dillard Interchange
South Umpqua Safety Rest Area
To Beamer Hill Quarry Prospective Material Source (Approx. 2.5 Mi. From Sta. 316+18)
To Canyonville
Louisiana Pacific Quarry Prospective Material Source
Round Prairie
PACIFIC HWY
Roberts Mountain
SOUTH UMPQUA RIVER
DILLARD
Prospective Material Source (Weigel Bar)
To Dillard
Mandatory Material Source
Dr.-In Theater
To Roseburg
BEGINNING OF CONTRACT PROJECT Sta. 2875+00 (Approx.)
BEGINNING OF PROJECT I-5-2(91)113 Sta. "L" 2890+50
END OF PROJECT I-5-2(91)113 Sta. "L" 3161+18.9
GRADING AND PAVING (DETOUR CROSSOVER)
Sketch Map
Scale 0 ½ 1 Mile

H. S. Coulter — STATE HIGHWAY ENGINEER

E. S. Hunter — ASSISTANT STATE HIGHWAY ENGINEER

OREGON TRANSPORTATION COMMISSION

Anthony Yturri	CHAIRMAN
Tom Walsh	VICE CHAIRMAN
Gordon Coleman	COMMISSIONER
Peter J Brix	COMMISSIONER
Michael P Hollern	COMMISSIONER
Fred B Klaboe	DIRECTOR OF TRANSPORTATION

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED:
FIELD OPERATIONS ENGINEER — DATE

9363

L,

Form FHWA 121 (6/79)

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

THE OREGON DIVISION - SALEM
UNITED STATES GOVERNMENT

memorandum

Subject: Oregon Project I-5-2(91)113
Roberts Creek - Dillard Int.
Pacific Highway - Douglas County

Date: November 26, 1979

Reply to Attn. of: HFO.3-OR

From: G. L. Green, Division Administrator

To: Mr. H. S. Coulter, State Highway Engineer

I concur with the proposal in Mr. Versteeg's November 21 letter to salvage existing guardrail on the subject project. Federal funds will be credited $0.056/lb. for the actual weight of rail salvaged and stockpiled at your Brockway Maintenance Yard.

G. L. Green

RECEIVED
STATE HWY ENGR
NOV 28 '79
REFER TO
Versteeg
FOR

Info	Inves	R/D	D/R	Sign	Act	File

11-29
cy

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No

November 21, 1979

RECEIVED
TECHNICAL SERVICES
NOV 21 '79
REFER TO
FOR

Info	Invest	R/O	D/R	Sign	Act	File

Glen L. Green
Division Administrator
Federal Highway Administration
The Equitable Center, Suite 100
530 Center Street
Salem, OR 97310

Dear Mr. Green:

Re: Roberts Creek-Dillard Int.
Pacific Highway
Douglas County

We propose to require the contractor to remove the existing guardrail and metal median barrier. The contractor will be permitted to use any part of the removed material which meets current standards in the construction of new guardrail. Approximately 57,102 lin. ft. of rail members and accompanying hardware are to be removed. At least 75% of this is reusable. It is anticipated that there will be an excess of 11,240 lin. ft. of guardrail members and accompanying hardware.

We will specify the unused rail members and hardware remain the property of the State. The contractor will stockpile the salvaged material at the Brockway Maintenance Yard on County Road No. 47, between Brockway and Dillard.

Initially the project will be credited in the amount of $0.056 per pound of rail members and hardware salvaged. This sum was arrived at as follows:

1. Scrap value of rail members and hardware equals $0.023 per pound.
2. Extra cost to contractor for hauling and stockpiling at the maintenance yard equals $0.033 per pound.

The estimated quantities and costs are:

11,240 lin. ft. x 7.9463 lbs/lin. ft. x $0.056/lb. = $5,001.72

Credit to the project will be adjusted when the actual amount of material salvaged and stockpiled is determined.

We solicit your concurrence that it is in the public interest to salvage this material.

Very truly yours,

J. H. Versteeg
Road Design Engineer
By:

Duane O. Christensen

Duane O. Christensen
Final Design Engineer

WEC:ab
cc: E. S. Hunter
D. H. Moehring
D. E. Swan
Alfred Shirley, Jr.
Jack Sullivan
W. E. Cole

9363

File 1-5

ROAD DESIGN SECTION 378-6558

October 24, 1979

J. B. Boyd
Manager, Right of Way

J. H. Versteeg
Road Design Engineer

File 50676
Roberts Mountain-Myrtle Creek
(Boomer Hill Quarry) Sec.
Pacific Highway
Douglas County

Attached is a description, an authorization, and prints for the subject section quarry lease, which is needed for the Roberts Creek-Dillard Jct. project scheduled for January 24, 1980.

ORIGINAL SIGNED BY
W. H. WAKERLIG

By:
W. H. Wakerlig
R/W Descriptions Engineer

WHW:cj
Attachments

9363

2.

Form FHWA 121 (6/79)

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

THE OREGON DIVISION - Salem
UNITED STATES GOVERNMENT

memorandum

Subject: Oregon Project I-5-3(-)
Roberts Cr.-Dillard Junction
Pacific Highway
Douglas County

Date: October 19, 1979

From: G. L. Green, Division Administrator

Reply to Attn. of: HFO.3-OR

To: Mr. H. S. Coulter, State Highway Engineer, ODOT

I approve the reconstruction and widening of existing shoulders as proposed in Mr. Versteeg's September 11, 1979, letter.

From discussions with your designer I understand that only a minor amount of extra grading will be required to obtain twelve-foot shoulders.

G.K. Hosmer
fr G. L. Green

cc:
OSHD (J H Versteeg)

RECEIVED
STATE HWY ENGR

OCT 23'79

REFER TO
Hunter

FOR

Info	Inves	R/D	D/R	Sign	Act	File
X						

10-24
cg

R

9363

1-5

ROAD DESIGN SECTION 378-6558

October 18, 1979

Martin Havig
Resident Engineer

From: W. E. Cole
Design Engineer Supervisor

Subject: Roberts Creek-Dillard Junction
Pacific Highway
Douglas County
(Boomer Hill Quarry)

The total quantity of rock proposed to be removed from the Boomer Hill Quarry is estimated to be 158,082 cubic yards.

The amount on State right-of-way is 39,599 cubic yards and the amount on private property is 118,483 cubic yards.

WEC:ja

cc Jim Gix

RECEIVED
OCT 18 1979
ROAD DESIGN SECTION

Versteeg
Anderson
Christensen
Olson
Sullivan
Terpin
Trout
Wakerlig

file
Do Not File ☐
Return To
Bring Up __/__/__
Action

9363

1-5

ROAD DESIGN SECTION

Alfred Shirley
Region III Engineer

October 18, 1979

Attention Jim Gix
Region Construction Engineer

From: W. E. Cole
Design Engineer Supervisor

Subject: Roberts Creek-Dillard Interchange Section
Pacific Highway
Douglas County

A plans-in-hand review will be held on the subject project in Roseburg on Tuesday, November 6, 1979 at 1:00 p.m.

Please notify me if you plan to attend.

NOTE: When you receive your preliminary plans, please review the stage construction and slide correction details and be prepared for comment during the review session.

WEC:ja

cc Tom Lowe, FHWA
C. T. Keasey
Jack Sullivan
Jack McCormick
Fred Yarbrough

Disscussed with Cole 10/25/79
An agenda will be prepared and
sent out which will speak to
specific issues prior to Nov 6.
Dol

1 Versteeg ✓
Anderson
2 Christensen
Olson
Sullivan
Terpin
Trout
Wekerlig

RECEIVED
OCT 18 1979
ROAD DESIGN SECTION

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Action

9363

2.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:

September 11, 1979

RECEIVED
TECHNICAL SERVICES
SEP 11 '79
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

NOTED
E. S. HUNTER

Glen L. Green
Division Administrator
Federal Highway Administration
The Equitable Center, Suite 100
530 Center Street NE
Salem, OR 97310

Dear Mr. Green:

Re: Roberts Cr.-Dillard Junction
Pacific Highway
Douglas County

The purpose of the subject project is to reconstruct the roadway as it crosses Roberts Mountain, correcting four slides and resurfacing and safety improvements over the entire length. The present ADT is 14,500, including 17.3 percent trucks. The projected ADT is 16,500 (1983), including 17.6 percent trucks.

This section of Interstate 5 in Southern Oregon traverses a mountainous area with frequent periods of snow and ice during winter months. Typical of mountainous topography, the roadway alignment is torturous with five to six percent grades. This is the main north-south truck route, and a hazardous roadway situation exists when icy conditions prevail. Over the past several years we have experienced an operational problem with slow moving trucks operating on the slow lane, shoulder, or a combination of both on the grades.

The grade is covered with the slow moving truck signing. Since the construction of the grade lane on the shoulder of the Siskiyou Summit in 1977, we have noted an increasing tendency for trucks to use the existing shoulder on Roberts Mountain as a grade (climbing) lane. The present shoulder is too narrow and becomes dangerous due to trucks sweeping shoulder aggregates away causing a dangerous dropoff on the outer edge of the shoulder.

We have checked the accident records and find there is a problem of rear-end accidents that one would expect with this type of operation.

Therefore, we request approval for the reconstruction and widening of the existing shoulders similar to the South Ashland-California State Line project, be included in the proposed project.

We have estimated this additional work to be $120,000.00. The total project is estimated at $7,687,000.00, not including the proposed additional work.

Very truly yours,

J. H. Versteeg
Road Design Engineer
By:

Duane O. Christensen

Duane O. Christensen
Final Design Engineer

WEC:ab
Enclosure
cc: Alfred Shirley
E. S. Hunter
W. E. Cole

9363

1-5

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

INTER-OFFICE CORRESPONDENCE

FILE:

Roseburg, Oregon
July 16, 1979

for Roger E Patitz
FROM: C.H. Duval
Res. Engr.

TO: J.H. Versteeg
Road Design Engr.

SUBJECT: Supplemental Location Report
Roberts Cr. - Dillard Jct.
Pacific Hwy Douglas Co.
Prefix 610 - 1921

This additional information has been compiled to supplement the original location survey as requested by the Design Section.

RETAINING WALL - North Fill Slide

Recommend a length of 280 feet of wall from sta 2952+25 to sta 2954+00. Existing pavement edge is 50 feet left of centerline due to the previous line change. Recommend the wall be constructed 51 feet left so the pavement will not have to be removed to permit backfilling of the wall. Recommend we specify sand backfill material as there will be no way to use compaction equipment. Also recommend filter cloth be used between the embankment material and the sand. The old H-beams placed over the void area should be removed to permit backfilling this area. Suggest we then repave this area to keep out all possible water.

SAWTOOTH SECTION 3140+00 - 3160+00

Pavement X-sections show water to be accumulated for a distance of 300± feet along the north bound median sawtooth from sta 3144 to 3147 which then runs across the south bound lanes between sta 3144+00 & 3144+50. This has evidently not caused any problems. To the south the water accumulates along median sawtooth from sta 3147 to sta 3160 +50± where it dumps into an inlet. This has not been reported as a problem either. However both areas have potential as hazards.

GABION WALLS

Propose use of gabions for bridge column protection for Bents #3, Roberts Creek structures and for bridge end protection at the NW corner of the south bound Roberts Cr. structure. Erosion at Bents 3 apparently caused by steep slopes and water. At the NW corner of the south bound structure it would appear the embankment was never constructed as needed. Recommend rock gabions along the toe of the fills with rock slope protection on remainder of slopes.

1 Versteeg ✓
Anderson
AXP Copy Christensen
Olson
Copy Sullivan
Terpin
Copy Trout
Wakerlig

RECEIVED
JUL 16 1979
ROAD DESIGN
SECTION

Do Not File ☐
Return To
Bring Up __/__/__
Action

WASTE AREAS

X-sections are submitted to support possible waste areas from sta 2899+50 to 2903+00 & from sta 2918+50 to 2928+00±. These areas are suitable but would involve considerable cost in hauling to the sites. The lower bench on the right side fill from sta 2982± ahead would also be suitable. A haul road of approximately 18% grade would be necessary to utilize this area.

SHEET PILING

All structures on the project have rough approaches & show signs of settlement at the bridge ends. Sheet piling would help alleviate this problem. Profiles were taken from the bridge ends down the existing ground slopes to determine existing slopes and help establish criteria for sheet pile lengths.

PROPOSED SOURCES - ROCK INLAY MATERIAL

Recommending we offer two possible sources for rock inlay material. The Boomer Hill source is partially on hwy R/W and is also closer to the project. The Bryden source is approximately one mile further haul. A suitable quantity of satisfactory material is available at both sources.

BRIDGE IMPACT SLABS

Recommend all structures on project have approach impact slabs constructed to alleviate settlement and resulting rough approaches.

BOOMER HILL STRUCTURE

This structure is not within the present limits of the project. However it is in need of sheet piling, impact slabs and construction of a suitable tie between the widening and main structure. Plates and bolts were used in an attempt to tie in the widening but it has been unsatisfactory. Recommend alterations comparable to method used to correct this similar problem on the Calapooya Creek bridge on Contract #8654. Recommend project be extended to include this work.

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION
INTER-OFFICE CORRESPONDENCE
Roseburg, Oregon
July 16, 1979

FILE:

Roger E Patitz

for FROM: C.H. Duval
Res. Engr.

TO: J.H..Versteeg
Road Design Engr.

SUBJECT: Supplemental Location Data
Roberts Cr. - Dillard Jct.
Pacific Hwy Douglas Co.
Prefix 610 - 1921

Submitted herewith is the below listed supplemental location data on the subject project.

1 Book Field Notes
1 Pad Pictures
1 Roll Pavement x-sections, 3140+00 - 3160+00
1 Roll Sketch of proposed Gabion Wall @ Roberts Cr.
1 Roll x-sections for proposed Gabions
1 Roll Typical Ditch sections, Erosion Controlled & Eroded
2 Rolls x-sections for proposed waste areas
1 Roll x-sections & profile for retaining wall- North Fill slide
1 Roll Sub-surface Exploration, North Fill slide
1 Roll Ground profile @ Bridge ends - Proposed Sheet Pile lengths
2 Mylar contour maps - Proposed sources for rock inlay material
2 Rolls x-sections - Proposed sources for rock inaly material

9363 U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION 6-20-79

LETTER OF APPROVAL A /OR AUTHORIZATION

FEDERAL AID PROJECT NO.	I-5-2(88)113
STAT [illegible]JECT NO.	See below
COUNTY NAME	Douglas
PROGRAM STAGE (Check)	☐ 1. ☐ 2.

FROM:
G. L. Green, Division Administrator
Salem, Oregon

PROGRAM NO.

ITEM NO. 90226

TO:
Mr. H. S. Coulter
State Highway Engineer, ODOT
Salem, Oregon

RECEIVED
STATE HWY ENGR
JUN 22 '79
REFER TO, [illegible]
FOR
Info | Inves | R/D | D/R | Sign | Act | File

6-22
orig
fd

DATE PS & E APPROVED	
DATE AUTHORIZATION EFFECTIVE	6-15-79
FEDERAL ROUTE NUMBER	Interstate 5
STATE ROUTE NUMBER	Primary 1

GENERAL LOCATION:
Roberts Creek - Dillard Jct. Section

GENERAL DESCRIPTION OF WORK:
Right of Way

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

- ☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
- ☐ PRLIMINARY ENGINEERING FOR SURVEY AND PLAN PREPARATION
- ☐ OTHER (Specify)
- ☒ ACQUISITION OF RIGHT-OF-WAY
- ☐ CONTRUCTION - ADVERTISE FOR RECEIPT OF BIDS
- ☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of June 12, 1979, you are authorized to proceed with all pahses of right of way acquisition as outlined on right of way map 8B-29-3, File Nos. 50513 and 50514, at a TEC of $2,400 with Federal participation limited to $2,210.

Federal participation is limited to that right of way actually incorporated in the final location.

DATE	SIGNATURE OF APPROVING OFFICIAL	TITLE
6-20-79	G. K. Hessner	for Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U.S. GOVERNMENT PRINTING OFFICE: 1976—626-787

9363

2.

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

Intergovernmental Relations Division
Room 306, State Library Building
Salem, Oregon 97310, Phone: 378-3732

STATE A-95 REVIEW CONCLUSIONS

APPLICANT: OR DOT, HWY DIV

PROJECT TITLE: Roberts Creek-Dillard Junction

DOUGLAS

DATE: May 15, 1979

The state has reviewed your project and reached the following conclusions:

RECEIVED
STATE HWY ENGR
MAY 18 79
REFER TO
FOR

☒ No significant conflict with the plans, policies or programs of state government have been identified ~~and your proposal is endorsed as presented~~

☒ Relevant comments of state agencies are attached and should be considered in the final design of your proposal.

☐ Potential conflicts with the plans and programs of the state agency(s) have been satisfactorily resolved. No significant issues remain.

☐ Significant conflicts with the plans, policies or programs of state government have been identified and remain unresolved. The final proposal has been reviewed and the final comments and recommendations of the state are attached.

NOTED
H.S. COULTER
4-16-79

BEN GIFFORD

5-18-79 copies sent to:
G. L. Green
H. S. Coulter ✓
F. E. Terpin
J. B. Boyd
J. H. Versteeg
Gary Potter
W. J. Hart
Paul Burket, Aeronautics
A. Shirley, Region 3
J. C. McCormick, Dist. 6
B. L. Gifford

NOTICE TO FEDERAL AGENCY

The following is the officially assigned State Identifier Number:

7904 2 76

This number should be used on all correspondence and particularly on SF 424 as required by OMB A-98.

A copy of this notification and attachments, if any, must accompany your application to the federal agency as required by OMB A-95. Comments of the appropriate local reviewing agencies will be submitted to you separately and must also be included.

PNRS #2

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

Intergovernmental Relations Division
Room 306, State Library Building
Salem, Oregon 97310, Phone: 378-3732

RECEIVED
APR 19 1979
DIVISION OF STATE LANDS

PNRS STATE REVIEW

Project #:______________________ Due Date:__________________

To Agency Addressed: If you intend to comment but cannot respond by the return date, please notify us immediately. If no response is received by the due date, it will be assumed that you have no comment and the file will be closed.

PROGRAM REVIEW AND COMMENT

To State Clearinghouse: We have reviewed the subject Notice and have reached the following conclusions on its relationship to our plans and programs:

( ) It has no adverse effect.

( ) We have no comment.

( ) Effects, although measurable, would be acceptable.

( ) It has adverse effects. (Explain in Remarks Section)

( ) We are interested but require more information to evaluate the proposal. (Explain in Remarks Section)

( ) Please coordinate the implementation of the proposal with us.

(✓) Additional comments for project improvement. (Attach if necessary)

- - - - - - - - - - -

If the project would require the removal, fill or alteration of 50 cubic yards or more of material within the banks of the waterway(s), we urge the applicant to apply for state fill or removal permits well in advance of construction deadlines to prevent unnecessary project delays. Specific information on the need for permits may be obtained from the Division of State Lands' office at 1445 State Street, Salem, OR 97310. Phone 378-3805.

Thank you for the opportunity to comment on this project.

Agency Lands By

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

Intergovernmental Relations Division
Room 306, State Library Building
Salem, Oregon 97310, Phone: 378-3732

PNRS STATE REVIEW

Project #: [illegible] Due Date: [illegible]

To Agency Addressed: If you intend to comment but cannot respond by the return date, please notify us immediately. If no response is received by the due date, it will be assumed that you have no comment and the file will be closed.

PROGRAM REVIEW AND COMMENT

To State Clearinghouse: We have reviewed the subject Notice and have reached the following conclusions on its relationship to our plans and programs:

( ) It has no adverse effect.

( ) We have no comment.

( ) Effects, although measurable, would be acceptable.

( ) It has adverse effects. (Explain in Remarks Section)

( ) We are interested but require more information to evaluate the proposal. (Explain in Remarks Section)

( ) Please coordinate the implementation of the proposal with us.

( ) Additional comments for project improvement. (Attach if necessary)

- - - - - - - - - - -

REMARKS (Please type or print legibly)

Agency LCDC By

I.

Department of Land Conservation and Development
Review #
7904 2 760

This project and its related land use implications must be coordinated and consistent with the Douglas County Comprehensive Plan and efforts to develop or update the Plan. (The County anticipates requesting Plan Acknowledgment from the LCDC on / / .)

The County is responsible for determining compliance with applicable Statewide Planning Goals prior to the commencement of this project. This determination of compliance with Goals

(applicable goals)

may be stated in simple conclusory form without extensive findings. In addition, the applicant should recognize citizen and agency involvement programs established by the local jurisdiction.

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

Intergovernmental Relations Division
Room 306, State Library Building
Salem, Oregon 97310, Phone: 378-3732

PNRS STATE REVIEW

Project #: 7904 2 760 Due Date: MAY 11 1979

To Agency Addressed: If you intend to comment but cannot respond by the return date, please notify us immediately. If no response is received by the due date, it will be assumed that you have no comment and the file will be closed.

PROGRAM REVIEW AND COMMENT

To State Clearinghouse: We have reviewed the subject Notice and have reached the following conclusions on its relationship to our plans and programs:

- ( ) It has no adverse effect.
- ( ) We have no comment.
- ( ) Effects, although measurable, would be acceptable.
- ( ) It has adverse effects. (Explain in Remarks Section)
- ( ) We are interested but require more information to evaluate the proposal. (Explain in Remarks Section)
- (X) Please coordinate the implementation of the proposal with us.
- (X) Additional comments for project improvement. (Attach if necessary)

- - - - - - - - - - -

REMARKS (Please type or print legibly)

Please see attached.

Agency Fish & Wildlife By Jerry Mayfield

[illegible]/30/7[illegible] Environmental Management Section

PNRS 7904-2-760

The Oregon Department of Fish and Wildlife does not oppose the proposed Roberts Creek-Dillard Junction Highway Improvement Project. We are concerned, however, about possible impacts on adjacent waterways. We request that further planning and construction of this project, particularly culvert replacement, be coordinated with our District Fish Biologist, Dave Anderson. He can be contacted at 3140 N.E. Stephens St., Roseburg, OR., 97470, 672-7726.

bc: Clyde Smith
Dave Anderson
Ron Bartels

9363'

1-5

STATE OF OREGON

INTEROFFICE MEMO

TO: Mr. Alfred Shirley
Region 3 Engineer

FROM: T G Thompson
T. G. Thompson
Supervising Structural
Design Engineer

DATE: April 19, 1979

SUBJECT:
Retaining Walls
Roberts Cr.-Dillard Jct. Sec.
~~Pacific Highway~~
Douglas County
Bridge 16285

Enclosed are two reduced prints of drawings 34561 and 34566, which are the advance detail drawings for the subject structure.

It is planned to call for bids on this section on August 23, 1979.

We ask that you give particular attention to the proposed beginning and ending points of the wall. These were determined by Bridge Section and Road Design Section personnel from cross sections. Field investigation may indicate that the ends should be at some other point. We will appreciate your making a field review.

Please return one set of prints by April 30, 1979 with your comments and/or corrections noted thereon.

ATB:dh
Enclosures

cc H. A. Schell /w/ 2 sets encls. - Please return 1 copy with your approval or comments noted thereon.

Specs Unit /w/ 1 set encls. plus estimate sheet (unchecked) and designer's notes.

Construction /w/ 1 set encls.
Maintenance /w/ 1 set encls.
Utility Unit /w/ 1 set encls.
Safety Unit /w/ 1 set encls.
Road Design /w/ 1 set encls.

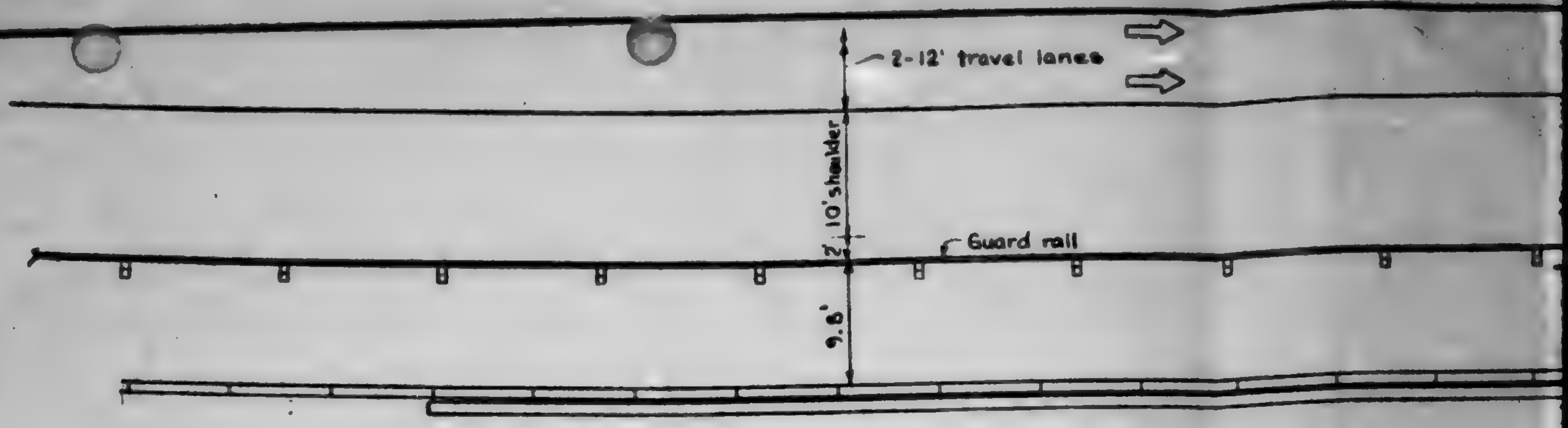
REFERRED TO
W.E.C.

Versteeg
Anderson
✓ Christensen Doc
Olson
Sullivan
Terpin
Trout
Wakerlig

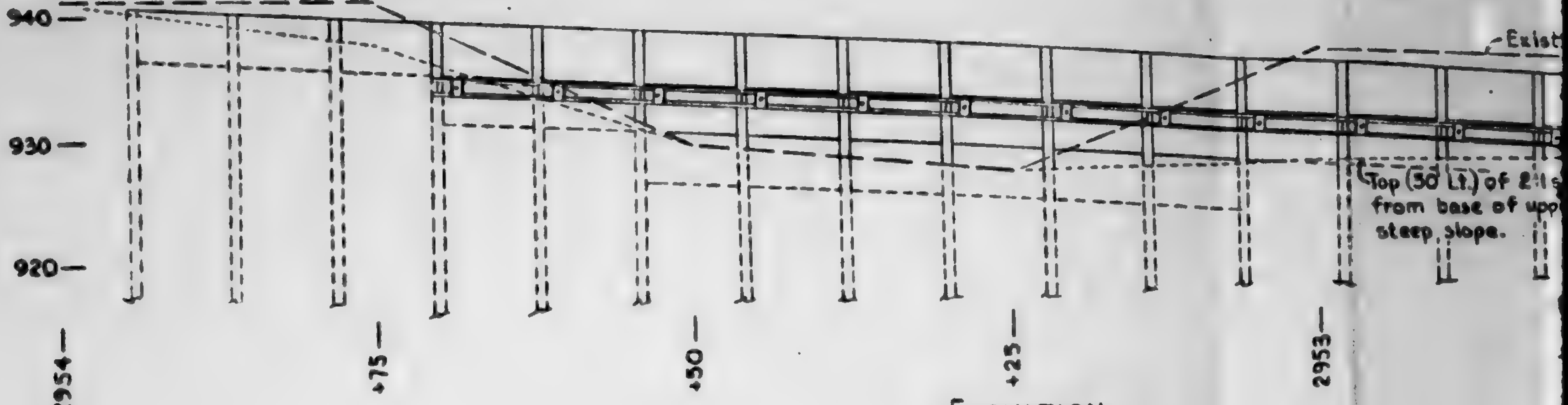
RECEIVED
APR 20 1979
ROAD DESIGN SECTION

Do Not File ☐
Return To
Bring Up / /
Action

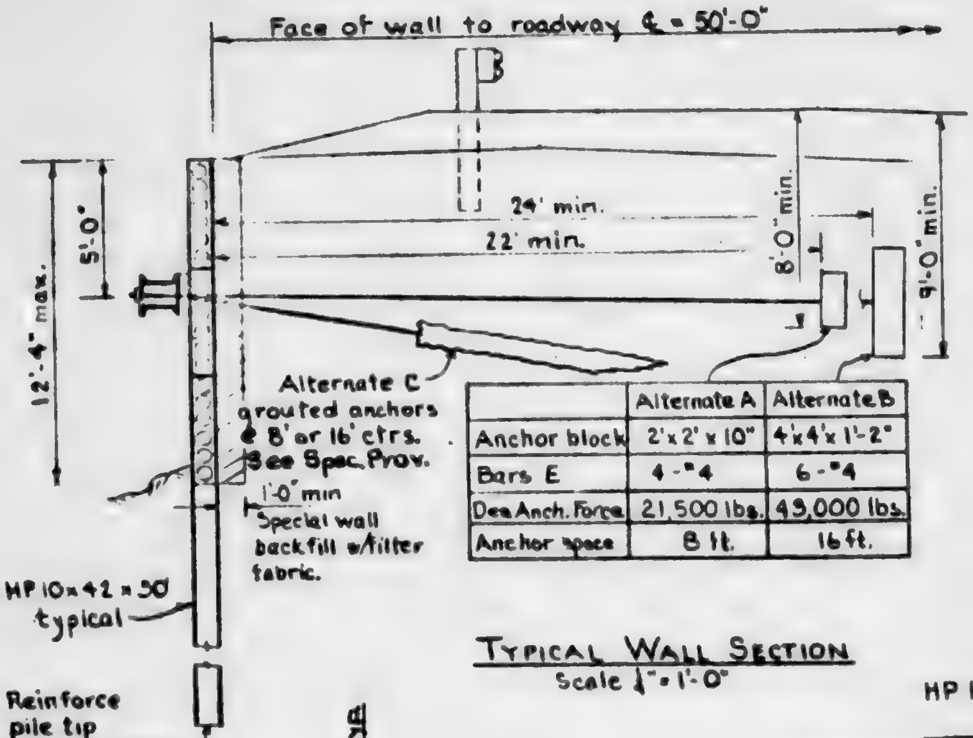
81-123-1387


2-12' travel lanes
10' shoulder
2'
Guard rail
9.8'

PLAN
Scale ⅛"-1'-0

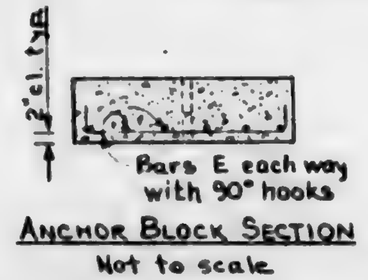

940
930
920
Exist
Top (50' Lt.) of 2:1 s
from base of upp
steep slope.
2954
+75
+50
+25
2953

ELEVATION
Scale ⅛"-1'-0"

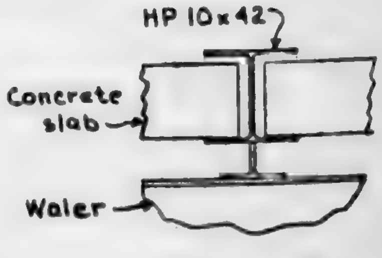

Face of wall to roadway ℄ = 50'-0"
24' min.
22' min.
8'-0" min.
9'-0" min.
5'-0"
12'-4" max.
Alternate C grouted anchors @ 8' or 16' ctrs. See Spec. Prov.
1'-0" min
Special wall backfill w/filter fabric.
HP 10x42 x 50' typical
Reinforce pile tip per Dwg 34566

	Alternate A	Alternate B
Anchor block	2'x2'x10"	4'x4'x1'-2"
Bars E	4-#4	6-#4
Des. Anch. Force	21,500 lbs.	43,000 lbs.
Anchor space	8 ft.	16 ft.

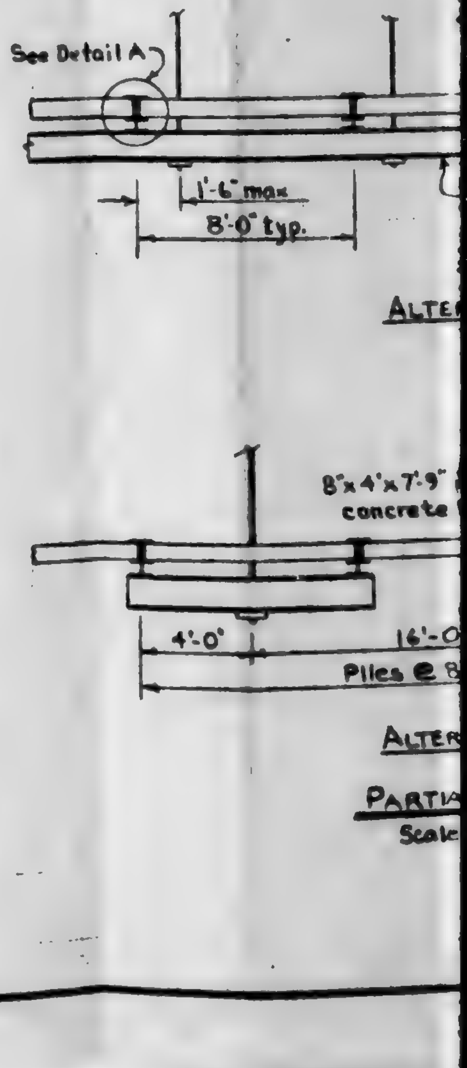
TYPICAL WALL SECTION
Scale ¼"-1'-0"


2" cl. typ.
Bars E each way with 90° hooks

ANCHOR BLOCK SECTION
Not to scale


HP 10x42
Concrete slab
Waler

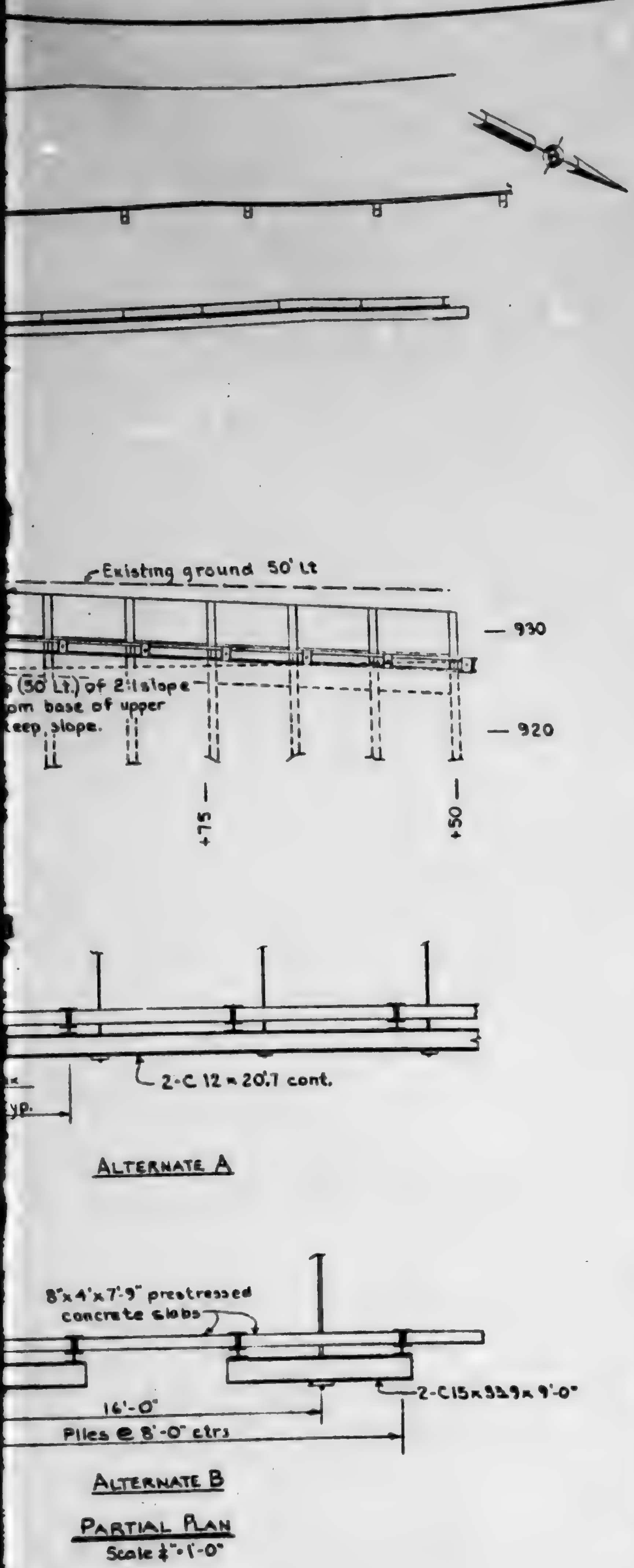
DETAIL A
Scale 1"-1'-0"

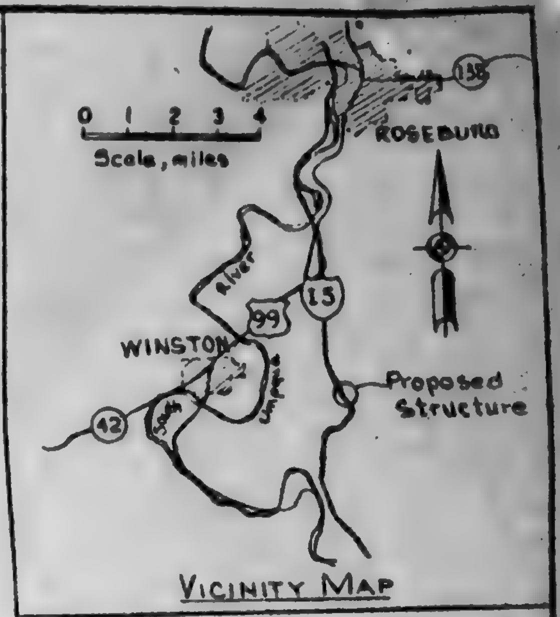

See Detail A
1'-6" max
8'-0" typ.
8"x4'x7'-9"
concrete
4'-0"
16'-0
Piles @ 8

ALTE

ALTER

PARTIA
Scale


Existing ground 50' Lt
— 930
(50' Lt.) of 2:1 slope
om base of upper
teep slope.
— 920
+75
+50
2-C 12 × 20.7 cont.
yp.
ALTERNATE A
8"x 4'x 7'-9" prestressed
concrete slabs
2-C15 × 33.9 × 9'-0"
16'-0"
Piles @ 8'-0" ctrs
ALTERNATE B
PARTIAL PLAN
Scale ¼"=1'-0"


0 1 2 3 4
Scale, miles
138
ROSEBURG
River
99
15
WINSTON
42
South Umpqua
Proposed Structure
VICINITY MAP

GENERAL NOTES

All materials and workmanship shall conform to the Standard Specifications for Highway Construction of the Oregon State Highway Division.

Walls are designed for earth pressure plus three feet of surcharge to simulate live load. Angle of internal friction of soil assumed to be 30°. Unit weight of soil assumed to be 110 lbs./ft.³.

Prestressing steel in prestressed concrete slab lagging shall be 1/2" diameter 7-wire strand with a minimum ultimate strength of 41,300 pounds (ASTM A416-Grade 270). Strands shall be stressed initially to 28,900 pounds.

Concrete in prestressed concrete slab lagging shall be Class 5000. Holes, not to exceed 10 inches in diameter, may be made in slabs for anchorage systems as required.

Structural steel shall conform to ASTM Specification A-36.

All bolts except anchor rods shall be high strength bolts conforming to ASTM Specification A-325 and shall be hot dip galvanized after fabrication.

Earth anchors may consist of anchor rods and concrete anchor blocks (deadmen), or of rods or 7-strand prestressing cable grouted into drilled holes. The connection at the waler end shall be adjustable for length during construction.

ADVANCE PLANS
APR 1 1979
DO NOT SCALE
DO NOT USE FOR CONSTRUCTION

APPROVED: P.E.
STRUCTURAL DESIGN ENGINEER P.E.
TECHNICAL SERVICES ENGINEER
DESIGNED ~~SCHERCY~~
DRAWN TS
CHECKED
REVIEWED
REVIEWED
CALC. BOOK 1730

DATE	REVISION

OREGON DEPARTMENT OF TRANSPORTATION
STRUCTURAL DESIGN SECTION

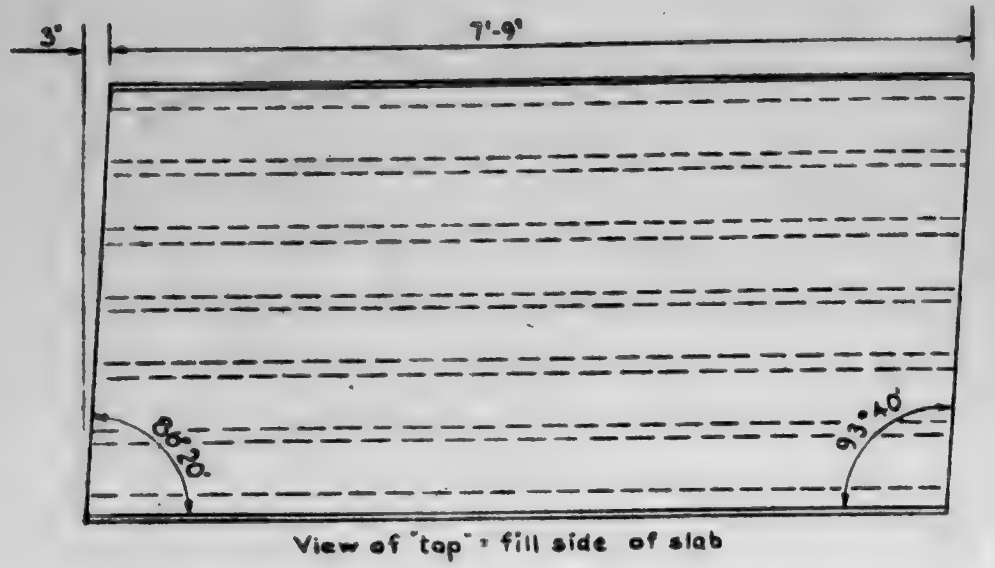
RETAINING WALL
LEFT OF STA. 2952+50 TO 2954+00
ROBERTS CREEK-DILLARD JCT. SEC.
PACIFIC HIGHWAY DOUGLAS COUNTY

PLAN & ELEVATION

ACCOMPANIED BY DWGS. 34566

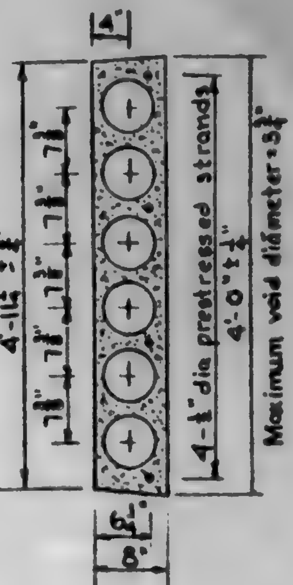
DATE April 1, 1979
BRIDGE NO. 16285
SHEET 1 OF 2
DRAWING NO. 34561

Engineering

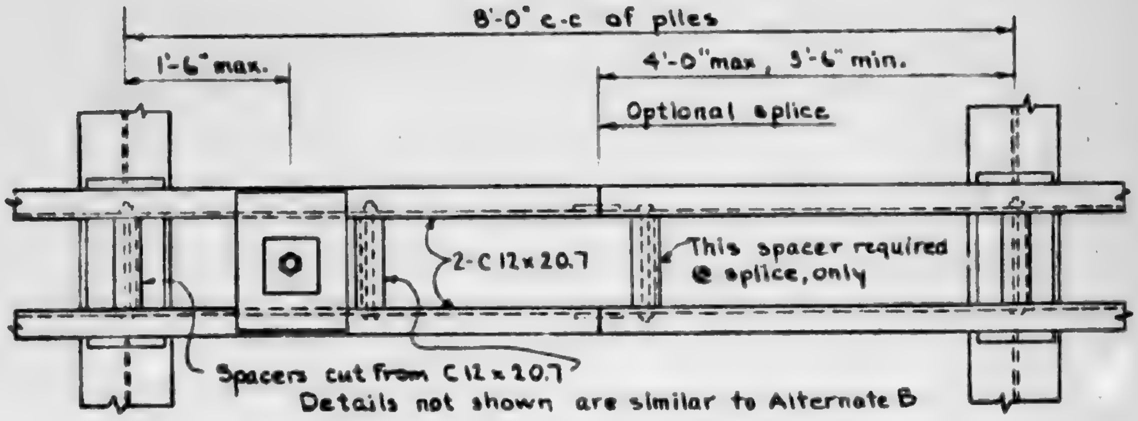

3"
7'-9"
86°20'
93°40'

View of "top" = fill side of slab

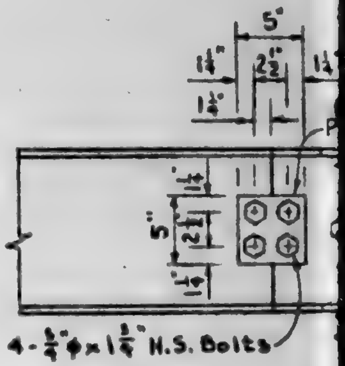
PLAN OF PRESTRESSED CONCRETE SLAB
Scale 1" = 1'-0"


4"
4'-11¼" ± ⅛"
7⅛"
7⅛"
7⅛"
7⅛"
7⅛"
4-½" dia prestressed strands
4'-0" ± ¼"
Maximum void diameter = 5¾"
6¼"
8"

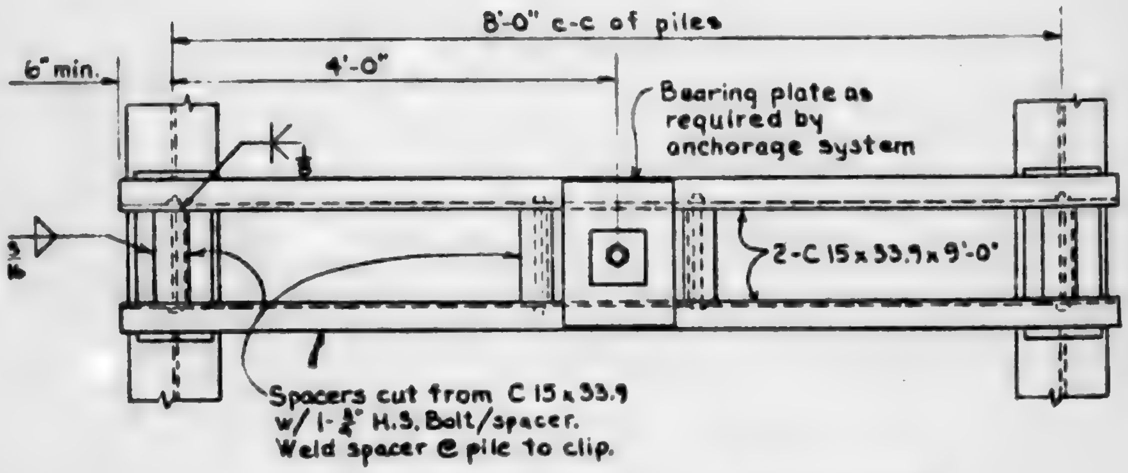
TYPICAL SECTION
PRESTRESSED CONCRETE SLAB
Scale 1" = 1'-0"


8'-0" c-c of piles
1'-6" max.
4'-0" max, 3'-6" min.
Optional splice
2-C 12 x 20.7
This spacer required @ splice, only
Spacers cut from C 12 x 20.7
Details not shown are similar to Alternate B

WALER DETAILS, ALTERNATE A
Scale 1" = 1'-0"

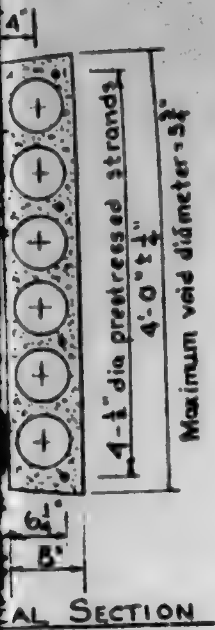

5"
1¼"
2½"
1¼"
1¼"
P
1¼"
5"
2½"
1¼"
4-¾" φ x 1¾" H.S. Bolts

WALER SPLICE DE
Scale 1½" = 1'-0"

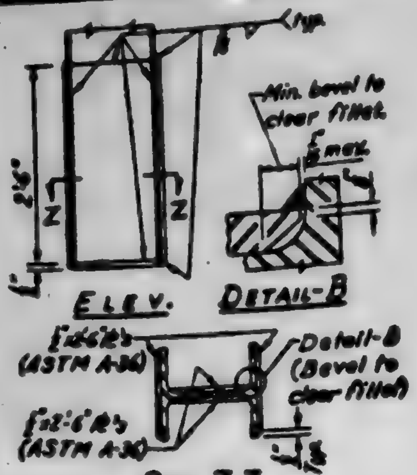

8'-0" c-c of piles
6" min.
4'-0"
⅛
3/16
Bearing plate as required by anchorage system
2-C 15 x 33.9 x 9'-0"
Spacers cut from C 15 x 33.9
w/ 1-⅞" H.S. Bolt/spacer.
Weld spacer @ pile to clip.

WALER DETAILS, ALTERNATE B
Scale 1" = 1'-0"

WALER


4"
4-½" dia prestressed strands
4'-0" ±¼"
Maximum void diameter = 5¼"
6¼"
8"

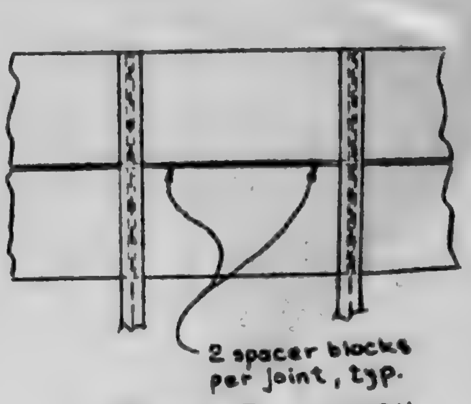
AL SECTION
SED CONCRETE SLAB
Scale 1"=1'-0"


typ.
Min. bevel to clear fillet
⅛ max.
2'-6"
Z
Z
1"
ELEV.
DETAIL-B
Detail-B (Bevel to clear fillet)
(ASTM A-36)
(ASTM A-36)

SEC. Z-Z

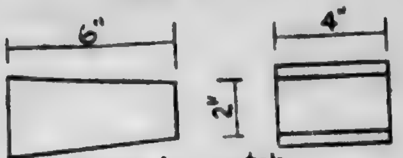
PILE TIP REINFORCING

Pile tip may be reinforced with Pruyn Point Model 75750, as mfg. by Associated Pile and Fitting Corp. in lieu of this detail.


2 spacer blocks per joint, typ.

PARTIAL ELEVATION

Scale ¼"=1'-0"



Slope to match edge of slab

CONCRETE SPACER BLOCK

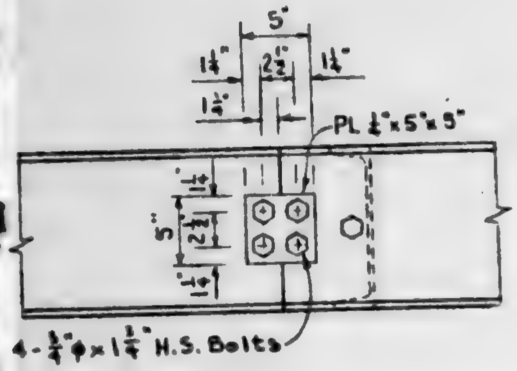
Scale 3"=1'-0"

CONSTRUCTION SEQUENCE FOR WALLS WITH H GREATER THAN 4'-0"

1. DRIVE SOLDIER PILES
   WHEN PILES HAVE BEEN DRIVEN, THE HORIZONTAL DISTANCE FROM THE CENTER LINE OF THE ROADWAY TO THE PILE AT THE ELEVATION OF THE WALER SHALL BE MEASURED AND RECORDED.
2. PLACE BOTTOM COURSE OF SLABS AND BACKFILL.
   BACKFILL SHALL BE PLACED LOOSELY, WITH A MINIMUM OF COMPACTION, IN THE ZONE 4 FEET BEHIND WALL. MAXIMUM BACKFILL HEIGHT 4 FEET. ①
3. INSTALL WALERS AND SOIL ANCHORS.
   WHERE ANCHOR BLOCKS ARE USED THE EXCAVATION FOR ANCHOR RODS AND BLOCKS SHALL BE BACKFILLED TO THE LEVEL OF THE ORIGINAL GROUND.
4. TIGHTEN ANCHOR RODS AS REQUIRED TO RESTORE PILES TO POSITION IMMEDIATELY AFTER DRIVING. ①
5. INSTALL REMAINDER OF SLABS AND BACKFILL.
   TIGHTEN ANCHOR RODS AS REQUIRED TO MAINTAIN ORIGINAL POSITION OF PILES BUT DO NOT EXCEED DESIGN ANCHOR FORCE IN RODS. ①

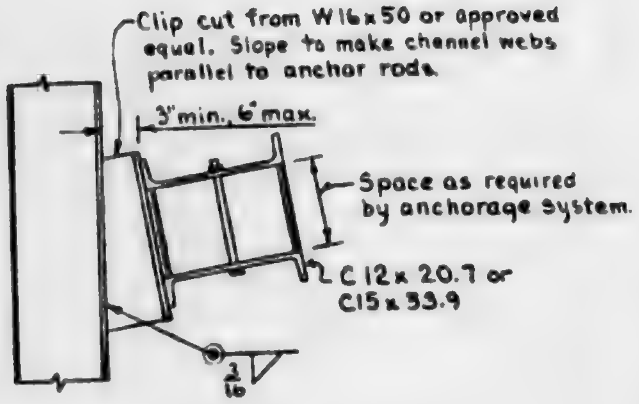
① THIS PROCEDURE MAY BE VARIED AS INDICATED BY JOB EXPERIENCE WITHIN THE FOLLOWING LIMITATIONS:

- A. NO MORE THAN 4 FEET OF BACKFILL SHALL BE PLACED BEFORE INSTALLING ANCHOR RODS.
- B. THE FINAL POSITION OF THE PILES AT THE LEVEL OF THE WALERS SHALL BE THE SAME AS IMMEDIATELY AFTER DRIVING.
- C. THE TENSILE FORCE IN THE ANCHOR RODS SHALL NOT EXCEED THE DESIGN TENSILE FORCE.


5"
1¼"
2½"
1¼"
1¼"
PL ½"x5"x5"
5"
2½"
4-¾"φx1¾" H.S. Bolts

WALER SPLICE DETAIL

Scale 1½"=1'-0"


Clip cut from W16x50 or approved equal. Slope to make channel webs parallel to anchor rods.
3"min. 6"max.
Space as required by anchorage system.
2 C12x20.7 or C15x33.9
3/16

WALER CONNECTION DETAILS

Scale 1"=1'-0"

APPROVED: P.E.
STRUCTURAL DESIGN ENGINEER
DESIGNED AS
DRAWN AS
CHECKED
REVIEWED
REVIEWED
CALC. BOOK 1130

DATE	REVISION

OREGON DEPARTMENT OF TRANSPORTATION
STRUCTURAL DESIGN SECTION

RETAINING WALL
LEFT OF STA. 2952+50 TO 2954+00

GENERAL DETAILS

DATE April 16, 1979
BRIDGE NO. 16285
SHEET 2 OF 2
DRAWING NO. 34566

9363 2.

STATE OF OREGON **INTEROFFICE MEMO**

TO: Mr. J. H. Versteeg
Road Design Engineer

Attention Mr. D. O. Christensen
Final Design Engineer

DATE: April 17, 1979

SUBJECT:
Roberts Creek Br.-Dillard Jct. Sec.
Pacific Highway
Douglas County

FROM: Walter J. Hart
Bridge Engineer

NOTED
E. S. HUNTER

Your letter of April 12, 1979 requested our recommendations on bridge deck overlay treatment on the subject section. We recommend removal of the existing AC wearing surfaces from both the Roberts Creek and Clarks Branch Overcrossing structures and overlaying the decks with a two inch bonded concrete wearing surface.

The decks on the twin structures at Roberts Creek and Clarks Branch are the H15 designed, six inch, thin decks of the 1950s and early 1960s. The bonded concrete overlays are necessary to provide the additional deck stiffness to carry present legal axle loads.

The twin structures at Roberts Creek have 30 foot roadways. Traffic cross-overs at this site will be required during the overlay work. The Clarks Branch overcrossings have 36 foot and 40 foot roadways. Two alternates are, therefore, available to handle traffic during the overlay work. The traffic can be carried on one lane - 16 foot minimum - on the existing structures or it can be put on cross-overs.

We do not recommend raising either of the existing structures to match a proposed new grade line.

WJH:dh

cc E. S. Hunter

RECEIVED
TECHNICAL SERVICES
APR 18 '79
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

81-125-1387

9363

1.5

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

INTER-OFFICE CORRESPONDENCE

FILE:

Salem, Oregon

April 16, 1979

W. E. Cole

FROM: W. E. Cole
Design Engineer Supervisor

TO: MEMO TO THE FILES

SUBJECT: Roberts Creek-Dillard Junction
Pacific Highway
Douglas County
Material Sources

On April 12, 1979, I called Jim Gix, Region 3 Construction Engineer, and informed him of the materials required for the subject project. The materials required are:

Class 50 to 100 riprap - 20,000 c.y.
Rock inlay for slide correction - 152,000 c.y.
Rock surfacing materials - 59,000 c.y.

The riprap and rock inlay material will come from the Boomer Hill Quarry just west of Myrtle Creek.

The surfacing aggregates are the crushed aggregates stockpiled at a site located on the west side of and adjacent to the Oakland-Shady Highway just south of the North Shady Interchange. These aggregates were crushed for the production of Class "C" and Class "E" mixtures for the Fairgrounds Interchange-Roberts Creek Section but the contractor used materials from another source. To produce a Class "B" mix, called for on the subject project, the contractor will have to import additional aggregates. The existing stockpile site now has approximately 93,400 tons of 1/2"-0 size aggregates and 10,400 tons #10 aggregates in separate piles, and the site is suitable for an asphalt plant setup.

Jim will follow up with a written report after the stockpiles are tested and remeasured.

All required reclamation plans will be furnished by the Region.

WEC:ab
cc: Jim Gix
Don Trout
Jack Sullivan
Clarence Gregg

1 Versteeg ✓
2 Anderson WEC
Sullivan
Turpin
Wakerlig

RECEIVED
APR 1? 1979
ROAD DESIGN SECTION

Do Not File
Action

REFERRED TO
Beard
✓ Cole WEC
Sample
Watson
Return Discuss
BY FINAL DESIGN ENGINEER

9363

(#2)

L

ROBERT W. STRAUB
GOVERNOR

Department of Transportation

TRANSPORTATION BUILDING, SALEM, OREGON 97310

April 16, 1979

TO: Executive Department
Federal Aid Coordination Unit

Umpqua Regional Council of Governments
Room 101, Courthouse
Roseburg, Oregon 97470

FROM: D. E. Swan
Federal Aid Manager

SUBJECT: Notice of Intent for Federal Aid Funds
State Admin. Dist. No. 6
Section: Roberts Creek-Dillard Jct.
Highway: Pacific Hwy., I-5
County: Douglas

In accordance with Executive Memorandum 02-270-20, attached are copies of the Notices of Intent for the subject project.

Early programming of this project for advance planning in anticipation of future construction is necessary; therefore, your prompt attention to this proposal will be appreciated.

Allowing time for your review, we estimate the date of filing for federal aid funds on this project to be May 25, 1979.

BLG:pf
Attachments

cc: G. L. Green
H. S. Coulter ✓
F. E. Terpin
J. B. Boyd
J. H. Versteeg
Gary Potter
W. J. Hart

Region 3 : A. Shirley, Jr.
District 6 : J. C. McCormick
Aeronautics Division
David Powers, Parks
Gerald Wimer
B. L. Gifford

RECEIVED
STATE HWY ENGR
APR 16 '79
REFER TO
FOR

Info	Inves	R/D	D.R.	Sign	Act	File
						✓

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

NOTIFICATION OF INTENT TO APPLY FOR FEDERAL AID

For Internal Use Only	1-8] PNRS #	Page One

02 12] APPLICANT [45: Department of Transportation — 46] DIVISION [79: Highway

03 12] APPLICANT ADDRESS STREET [45: O'DOT Building — 46] CITY [60: Salem — 76] ZIP [80: 97310

04 12] CONTACT PERSON [45: D. H. Moehring — 46] AREA CODE [48: 503 — 49] PHONE [55: 378 — 56] EXTENSION [59: 6563

01 12] PROJECT TITLE [71: Roberts Creek-Dillard Jct.

11 12] PROJECT LOCATION—CITY: Pacific Hwy. I-5 — PROJECT LOCATION—COUNTY: Douglas — PROJECT LOCATION SEC: T: R:

SUMMARY PROJECT DESCRIPTION (ATTACH SUPPORTING DOCUMENTS AS NECESSARY—SEE INSTRUCTIONS ON BACK)

05 Rebuild I-5 as it crosses Roberts Mountain, correcting slide problems and curves. [71

06 12] Resurfacing and safety improvements over the entire project length.

07 12] New guard rails and median barriers would be placed where needed along this section. [71
The north end would have a 4 inch overlay. Parts of the center section (Roberts

08 12] Mountain) would be raised on fill and curves slightly straightened. Slide areas [71
would be cut and backfilled with hard rock. The culvert south of the mountain would

09 12] be replaced. On the southern end, there would be a 2-inch overlay and similar work [71
on a smaller slide. [71

10 12]

12

AMOUNT REQUESTED—FEDERAL FUNDS		NON-FEDERAL MATCHING FUNDS		OTHER	TOTAL
12] (A) Grant [19	20] (B) Other [27	28] (C) State [35	36] (D) Local [43	44] (E) FUNDS [51	52] (F) FUNDS [60
6,900,000	---	600,000	---	---	7,500,000

13 12] TYPE OF OTHER FEDERAL FUNDS (See 12B) [45 — 46] TYPE OF OTHER NON-FEDERAL FUNDS (See 12E) [79 [71

14 12] FEDERAL PROGRAM TITLE [79: Title 23 USC Highways

15 12] FEDERAL AGENCY NAME [45: U. S. Department of Transportation — 46] FEDERAL SUB-AGENCY NAME: FHWA

17 **(A) TYPE OF APPLICANT:** (Check (X) the single most applicable box)

STATE ☒ 12 — INTER-STATE ☐ 13 — COUNTY ☐ 14 — CITY ☐ 15 — SCHOOL DISTRICT ☐ 16 — SPECIAL DISTRICT ☐ 17 — COMMUNITY ACTION ☐ 18 — SPONSORED ORGANIZATION ☐ 19 — OTHER ☐ 20

(B) TYPE OF ACTION: (Check (X) as many boxes as apply to this action)

NEW GRANT ☒ 21 — CONT. GRANT ☐ 22 — SUPPL'T GRANT ☐ 23 — INCREASE DURATION ☐ 24 — DECREASE DURATION ☐ 25 — CANCELLATION ☐ 26 — INCREASE DOLLARS ☐ 27 — DECREASE DOLLARS ☐ 28

(C) HAS DISTRICT CLEARINGHOUSE BEEN NOTIFIED? Yes ☒ 29 No ☐ 30 Date: April 16, 1979

(D) REVIEW REQUIRED by A-95: Yes ☒ 31 No ☐ 32

(E) ENVIRONMENTAL IMPACT: Yes ☐ 33 No ☒ 34

(F) HOUSING RELOCATION REQUIRED: Yes ☐ 35 No ☒ 36

(G) ESTIMATED APPLICATION FILING DATE: 41] MONTH [42: May — 43] DAY [44: 25 — 45] YEAR [46: 1979

ADDITIONAL INFORMATION—ALL APPLICANTS

I. A. Is the project consistent with the city or county comprehensive plan, zoning and subdivision ordinance? No ☐ Yes ☒

I. B. Is the proposal consistent with statewide land use goals? No ☐ Yes ☒

I. C. Is the proposal consistent with state and regional plans? No ☐ Yes ☒

II. Will the project have an impact on a neighboring jurisdiction? No ☒ Yes ☐

If so, is the project consistent with the comprehensive plan for that jurisdiction? No ☐ Yes ☐

III. Explain deviations if any, from pertinent plans.

IV. Federal Catalog number (or Public Law no. and title) 20.205 Highway Planning & Construction

V. Has funding agency been notified? No ☐ Yes ☒ Date: April 16, 1979

VI. If project includes state funds (12C), identify agency Highway

STATE AGENCIES ONLY

VIII. (a) IS PROGRAM BUDGETED ☐ NON-BUDGETED ☐

(b) STATE SHARE

GENERAL FUND CASH	OTHER FUND CASH	IN KIND
$	$	$

(c) FUNDING METHOD

	FEDERAL SHARE		STATE SHARE		TOTAL	
First Year	%	$	%	$	%	$
Second Year	%	$	%	$	%	$
Third Year	%	$	%	$	%	$

(d) WILL PROGRAM REQUIRE HIRING OF NEW STATE EMPLOYEES? No ☐ Yes ☐ Number

(e) Will accounting for this grant be administered by the Executive Dept. Accounting Division? Yes ☐ No ☐

PLEASE ATTACH ANY ADDITIONAL NARRATIVE OR REMARKS

This is a Category 3 Project of Non-Major environmental impact under Oregon's Action Plan.

I-5-[illegible]

OREGON STATE HIGHWAY DIVISION
PROJECT ASSESSMENT

PART 1. GENERAL INFORMATION

A. Project Identification:

Date April 4, 1979

Section Roberts Creek-Dillard Junction

Unit (if appl) --

County Douglas

City --

Highway Pacific (I-5)

State Hwy. No. 1

Termini: M.P.(if appl) 112.2 to 119.5

Length 7.3 miles

Region 3

Construction Estimate $7.5 million
Program Amount

B. Purpose of Project:

Rebuild I-5 as it crosses Roberts Mountain, correcting slide problems and curves. Resurfacing and safety improvements over the entire project length.

C. Origin & History of Project:

This section of I-5 has been a problem (on Roberts Mountain) due to landslide activity and substandard curves south of the pass. Slope failures have occured since 1955 (shortly after the original freeway construction). Corrective measures were attempted in 1956, 1957, 1964-5, and 1969 as well as considerable maintenance effort. The culvert for an unnamed stream has collapsed creating a wet area and undermining of the roadway fill. This project is on the Oregon Six-Year Highway Improvement Program.

D. General Description of Project:

New guard rails and median barriers would be placed where needed along this section. The north end would have a 4 inch overlay. Parts of the center section (Roberts Mountain) would be raised on fill and curves slightly straightened. Slide areas would be cut and backfilled with hard rock. The culvert south of the mountain would be replaced. On the southern end, there would be a 2 inch overlay and similar work on a smaller slide.

Alignment: New ______ Existing XXXX Combined ______

Typical Section: Existing: No. Lanes 4 ; Med. or divided; Shldrs. some less than 10' ; Parking none

Proposed: No. Lanes same; Med. same ; Shldrs. 10' ; Parking none

Traffic: Existing Facility: Existing ADT 13,700 ; Projected ADT N/A ; Yr. 1977

Existing Level of Service N/A

Proposed Facility: Projected ADT N/A ; Yr. N/A

Projected Level of Service N/A

Proposed improvement would not change highway capacity

734-3953 (10-75)

Right of Way: Additional anticipated Yes ; if yes, give approx. No. Parcels 3
Yes, No

Acres about 1.4 ; Type of Relocation Req. none ; No.

Materials Source, Borrow, Waste Disposal Requirements, if any:

Material excavated from the slides and cut areas would be used in fill areas along the route; it is estimated that the cut and fill would balance. Approximately 150,000 cu. yds. of granite or basalt would be needed to backfill the slide areas. The source of this material is presently unknown; depending on the site found, there may or may not be significant environmental impacts due to the excavation.

Type of Structure(s):

48" culvert on unnamed stream south of mountain has collapsed (50' of fill material on top of it) and would be replaced. There are also 3 equipment passes, a culvert for the Clark Branch of the S. Umpqua, an overpass at Clark Branch Road, and bridges across Roberts Creek and the South Umpqua River.

Brief Description of River or Stream and Type of Involvement, if any:

Culverts for unnamed stream (tributary to South Umpqua River) would be replaced with slight channel change to stay out of unstable fill area. Other streams are not altered.

Local City, County or COG priorities of project:

N/A

FHWA and/or OSHD approvals given, if any:

Project is on the Oregon Six-Year Highway Improvement Program

Location or Design Alternatives (identify and describe):

None

Other Descriptive Information or Comments:

(Attach project sketch map.)

PART II. ENVIRONMENTAL ASSESSMENT

A. Brief Environmental Setting of Project Area:

1. Natural:

The project is located in the rolling, sometimes steep, valley and upland topography of the interior Umpqua Basin. Roberts Creek and a number of smaller creeks cross the freeway to join the South Umpqua River to the west of the highway. Vegetation is characterized by grass, poison oak, wild rose, oak, and madrone in most open exposures, and by additions of Douglas Fir, Cedar, and Bigleaf Maple in more shade ravines.

Three geologic formations are represented through the project section: 1) Quaternary alluvium (silts, sand and gravel), 2) Basalts of the Umpqua Formation, and 3) the Dothan (massive to thickly bedded graywacke sandstone with thin interbeds of dark siltstone) and Otter Point (a diverse assemblage of sheared graywacke, siltstone, greenstone, and limestone) Formation. It is the latter formation that is causing the persistent difficulty on Roberts Mountain because the material deteriorates when exposed to air and water and acts much as a mudflow. Embankment slopes have bulged and moved, shoulders have sunken, massive cut slopes are failing, and benches of waste material have slumped*.

2. Cultural:

The area is mostly open space with some grazing and light residential and farm building development.

Most of the work would fall wholly within the present state-owned right-of-way.

---

*For more information on the geologic problems, see the Environmental Assessment for the McLain Avenue-Dillard Junction section of the Pacific Highway, June 18, 1975.

B. Preliminary Assessment of Environmental Impacts:

1. Consequences and Significance of Right-of-Way Acquisition:

   Minor - No relocation is required.

2. Estimated Impact on Traffic Patterns:

   No change upon project completion.

   During construction, traffic would likely be restricted to 1 downhill and 2 uphill lanes. Traffic speeds would be slower.

   Consequences--Air Quality, Noise, Safety, etc.:

   Noise would increase during construction.

   Upon completion of the project, air quality and noise levels would be similar to what exists today. There would be improved safety around the curves and less risk of landslide activity.

3. Estimated Impact on Land Use:

   No impact on land use.

   Consequences:

4. Expected Impact on Natural Ecological Resources:

   Very little devegetation would occur.

   Short-term degradation of surface runoff would occur during grading and excavation and during channelization of the unnamed stream.

   Consequences:

   A serious slide problem now exists, causing sediment to enter streams. When the project is completed, these areas would be less likely to slide and thus sediment runoff would be less.

5. Expected Impact on Cultural and Scenic Resources:

   No impact on cultural resources.

   Temporary degradation of scenic resources during construction.

   Consequences:

   Likely that the area would look better when slides are stabilized.

6. Preliminary Identification of Areas of Critical Concern:
   Slide areas hard to control

7. Potential for Controversial Issues:

8. Potential for Consistency of Proposal With:

   a. Clean Air Implementation Plans
      Project would not change the road's capacity or speeds, so it would be consistent.

   b. Noise Standards
      A Noise Study Report will be done on this project prior to contract letting.

   c. Water Quality Standards
      Temporary degradation of water quality during construction is possible. Improvement in water quality should follow completion.

   d. Area Land Use and Transportation Plans, and Zoning

      N/A

C. Recommended Type of Action and Documentation:

-------------MAJOR ACTION-----------------   XXX-NON-MAJOR ACTION-----

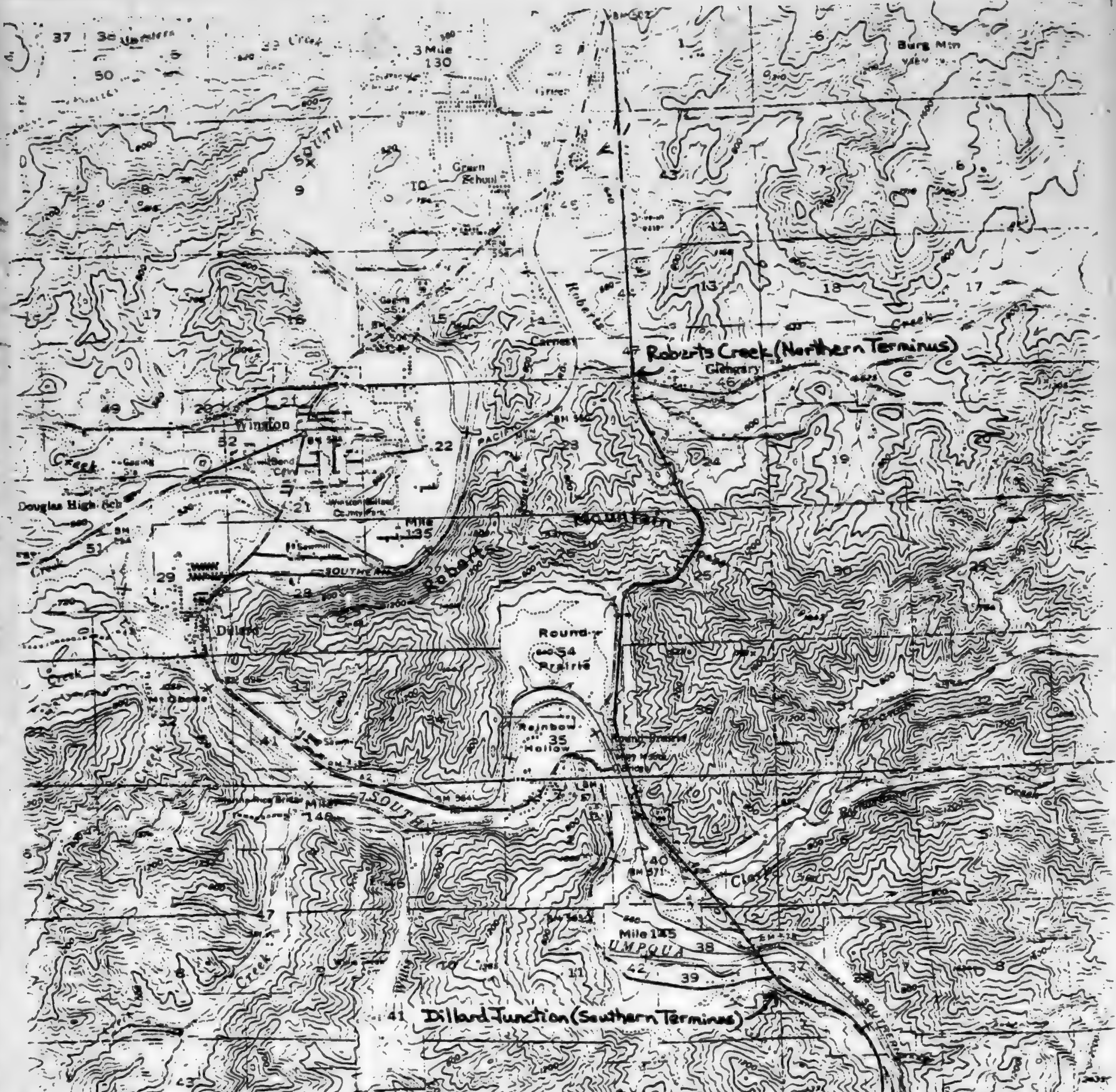
SIGNIFICANT: NON-SIGNIFICANT:

____ D & FEIS   ____ D & F Neg.Dec.   XXX ASSESSMENT ONLY

____ Section 4(f)   ____ Section 4(f)   ____ STATEWIDE ASSESSMENT

Basis for Type of Action and Documentation:
The Federal-Aid Highway Program Manual Vol. 7, Chapter 7, Section 2, part 10e. lists types of actions that are ordinarily considered to be non-major actions including "modernization of an existing highway by resurfacing, widening less than a single lane width, adding shoulders, ... and correcting substandard curves... and safety projects such as ... safety barriers, ... etc."

D. Recommended Project Category: ____ 1   ____ 2   XXX 3   ____ 4


Roberts Creek (Northern Terminus)
Dillard Junction (Southern Terminus)
Winston
Douglas High Sch
Dillard
Round Prairie
Rainbow Hollow
Roberts Mountain
Green School
Glenbrook
Mile 135
Mile 140
Mile 145
Mile 150
UMPQUA
RIVER
SOUTH
Burg Mtn
Ruckles
Clark
Creek

9363

1 Versteeg ✓
Anderson
Christensen
Olson
Sullivan
Terpin
Trout
Wakerlig

RECEIVED
MAY 0 2 1979
ROAD DESIGN
SECTION

1-5
Do Not File ☐
Return To
Bring Up / /
Action

Salem, Oregon
April 12, 1979

ORIGINAL SIGNED
DUANE O. CHRISTENSEN

Duane O. Christensen
Final Design Engineer

Len Wallace
Bridge Design Engineer

Roberts Cr. Bridge-Dillard Jct.
Pacific Highway
Douglas County
(Surfacing Treatment at Existing
Bridge Ends)

Three proposals normally considered on the subject are:

1. Raise the structure to the new grade. This treatment, generally the most desirable, is expensive. Interference with traffic is significant, but not to the degree as with excavating the existing surfacing.

2. Excavate the existing surfacing for a distance from each end of the structure and replace with full-depth asphalt as needed to provide the C.B.E. requirements.

   The problems encountered removing the existing surfacing at bridge ends and replacing with deep lift asphaltic concrete surfacing on overlay projects can be numerous especially when existing traffic has to be staged through narrow width bridges (less than 38 feet).

3. Reduce the overlay thickness for a distance from each end of the structure the amount necessary to meet the structure or to overlay the structure as permitted by load requirements. This treatment would, therefore, not provide the required strength at the ends of the structures.

   On those projects requiring three-inch overlays or less, this problem is perhaps not too significant. On those projects that require over three inches, this could be a major problem since the pavement strength would be reduced substantially.

Each bridge end should be studied as to the seriousness of the problem. Refer to the list of bridges below that will be encountered on this project.

BRIDGE AND NO'S.		WIDTHS	PROPOSED OVERLAY
Roberts Creek	7835 & 7835A	30'	4" Class "B" plus 1" Future Friction Course
Clarks Branch O'Xing	7839 & 7839A	30'	2" Class "B" plus 1" Future Friction Course
S. Umpqua River	7841A & 7841D	30'	2" Class "B" plus 1" Future

Would you please review the proposals and give us your recommendations? This information is required at an early stage so we can complete the "Temperary Protection and Direction of Traffic" details.

9363 C

1-5

1 Versteeg ✓
Anderson
Christensen
Olson
Sullivan
Terpin
Trout
Wakerlig

RECEIVED
MAY 0 2 1979
ROAD DESIGN
SECTION

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Return To
Bring Up / /
Action

Salem, Oregon
April 12, 1979

ORIGINAL SIGNED
DUANE O. CHRISTENSEN

Duane O. Christensen
Final Design Engineer

Len Wallace
Bridge Design Engineer

Roberts Cr. Bridge-Dillard Jct.
Pacific Highway
Douglas County
(Surfacing Treatment at Existing
Bridge Ends)

Three proposals normally considered on the subject are:

1. Raise the structure to the new grade. This treatment, generally the most desirable, is expensive. Interference with traffic is significant, but not to the degree as with excavating the existing surfacing.

2. Excavate the existing surfacing for a distance from each end of the structure and replace with full-depth asphalt as needed to provide the C.B.E. requirements.

   The problems encountered removing the existing surfacing at bridge ends and replacing with deep lift asphaltic concrete surfacing on overlay projects can be numerous especially when existing traffic has to be staged through narrow width bridges (less than 38 feet).

3. Reduce the overlay thickness for a distance from each end of the structure the amount necessary to meet the structure or to overlay the structure as permitted by load requirements. This treatment would, therefore, not provide the required strength at the ends of the structures.

   On those projects requiring three-inch overlays or less, this problem is perhaps not too significant. On those projects that require over three inches, this could be a major problem since the pavement strength would be reduced substantially.

Each bridge end should be studied as to the seriousness of the problem. Refer to the list of bridges below that will be encountered on this project.

BRIDGE AND NO'S.		WIDTHS	PROPOSED OVERLAY
Roberts Creek	7835 & 7835A	30'	4" Class "B" plus 1" Future Friction Course
Clarks Branch O'Xing	7839 & 7839A	30'	2" Class "B" plus 1" Future Friction Course
S. Umpqua River	7841A & 7841D	30'	2" Class "B" plus 1" Future

Would you please review the proposals and give us your recommendations? This information is required at an early stage so we can complete the "Temporary Protection and Direction of Traffic" details.

This project has been placed on a priority list to be contracted as soon as plans can be completed. Therefore, it would be appreciated if we could have your decision by April 30, 1979.

WEC:mm
cc: W. E. Cole

936.3

Form FHWA 121 (Rev. 5-73)

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
The Equitable Center, Suite 100
530 Center NE. - Salem OR 97301

DATE: March 15, 1979

In reply refer to: HFO.3-OR

SUBJECT: Oregon Project I-5-2(-)109
Roberts Mountain-East Side Slide
Douglas County

FROM : G. L. Green, Division Administrator

NOTED
E. S. HUNTER

TO : Mr. H. S. Coulter, State Highway Engineer, ODOT

The slide corrective work proposed for the "east side slide" in Mr. Terpin's letter of January 31, 1979, is approved subject to the following minor conditions:

1. A layer of woven filter fabric be placed along the excavation backslope and base of the buttress key trench.
2. The backslope above the top of the buttress be sloped to a 2:1 slope.
3. Construction be done in the summer.

It is recommended that the woven filter fabric be placed along the excavation backslope and base of the key trench as shown on Attachment 1. Since the slide is a mudflow during wet periods of the year, the filter fabric is recommended to keep the soil from oozing and flowing into the voids in the buttress rock and plugging off drainage. Also, the fabric will help keep the buttress rock placed on the backslope from mixing into the weaker soil on which it will be placed. Woven filter fabric is recommended. Although woven fabric is more expensive than non-woven, the woven fabric has several advantages for this type of installation. The woven fabric has greater strength and thus will stand up better to impact and weight of the rock to be placed on it. Also, the woven fabric will not stretch as much as a non-woven would. This is important in this installation since fine-grained soil is to be retained. Some of the openings in a non-woven fabric increase in size when the fabric is stretched, and fine-grained soils can pass through.

Since the native soil at this site is fine-grained, woven fabric with small opening sizes are recommended. Fabrics with an EOS of 70 and higher are recommended. EOS is "equivalent opening size" and is defined as the number of the U.S. Standard sieve having openings closest in size to the filter cloth opening. Woven

LWR

fabrics such as Filter X, Polyfilter X, Erosion Control Cloth Type I, Nicolon 6642 4, or approved equal should be specified. Manufacturer's addressees for the listed fabrics are given on attachment 2. Using an estimated cost of $.30/S.F. (price includes materials and installation) and assuming a 300-foot installation length parallel to the road, gives an estimated cost of approximately $10,000 for this installation. Also, the State is referred to FHWA Report No. TS-78-211 for sample woven fabric specifications if they do not already have a standard specification for woven fabrics.

The cross-section in the State's support data shows a 1:1 slope for the backslope above the top of the proposed buttress. It is unlikely the backslope would remain stable on a 1:1 slope over the long term. Therefore, the backslope should be flattened to a 2:1 slope for long term stability.

Finally, to provide the best chance of success for cutting the backslope of the buttress excavation on as steep as the proposed 1:1 slope, the construction should only be allowed during the driest time of the year, i.e., during the summer.

G Green
G. L. Green

Attachments

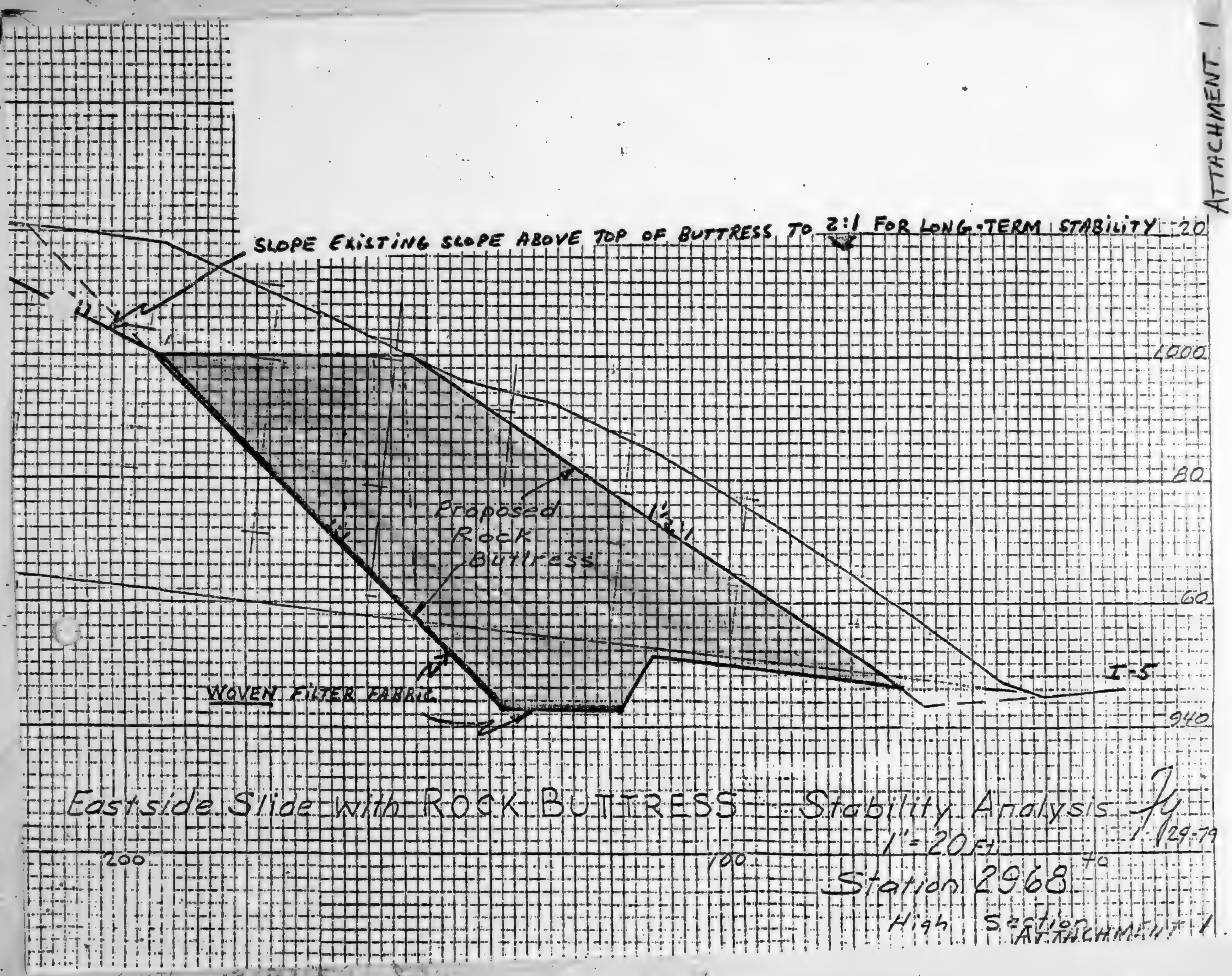
cc:
J. H. Versteeg (OSHD)
F. E. Terpin (OSHD)
A. Shirley (ODOT/Roseburg)

RECEIVED
TECHNICAL SERVICES
MAR 22 '79
REFER TO
FOR
Info Inves R/D O/R Sign Act File

RECEIVED
STATE HWY ENGR
MAR 20 '79
REFER TO
~~Hunter~~
FOR
Info Inves R/D O/R Sign Act File

R

ATTACHMENT 1


SLOPE EXISTING SLOPE ABOVE TOP OF BUTTRESS TO 2:1 FOR LONG-TERM STABILITY
Proposed Rock Buttress
1½:1
1½:1
WOVEN FILTER FABRIC
I-5
20
1000
80
60
940
200
100

Eastside Slide with ROCK BUTTRESS Stability Analysis Jy 1-29-79

1" = 20 Ft

Station 2968+0

High Section

ATTACHMENT 1

WOVEN FABRIC SUPPLIERS

1. Carthage Mills Inc.
   Erosion Control Division
   124 W. 66 Street
   Cincinnati, Ohio 45216
   Phone: 513-242-2740

   Filter X (EOS=100)
   Polyfilter X (EOS=70)

2. Advanced Construction Specialties Co. Inc.
   P. O. Box 17212
   Memphis, Tennessee 38117
   Phone: 901-362-0980

   Laurel Erosion Control Cloth Type I (EOS=100)

3. Nicolon
   4229 Jeffery Drive
   Baton Rouge, Louisiana 70815
   Phone: 504-292-3010

   Nicolon Fabric 66424 (EOS=70)

Attachment 2

7

9363 C 1-5

HIGHWAY DIVISION 378-6538

March 14, 1979

J. B. Boyd
Right of Way Manager

J. H. Versteeg
Road Design Engineer

Files 50513 & 50514
Roberts Creek-Dillard Junction Sec.
Pacific Highway
Douglas County

Attached are descriptions, an authorization, and prints for the subject project, scheduled for 8-23-79.

By:
W. H. Wakerlig
R/W Description Engineer

WHW:cj
Attachments

9363

GENERAL FILES

Form FHWA 121 (Rev. 5-73)

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
The Equitable Center, Suite 100
530 Center NE. - Salem OR 97301

DATE: March 5, 1979

In reply refer to: HFO.3-OR

SUBJECT: Oregon Project I-5-2(-)
Roberts Creek-Dillard Jct.
Pacific Highway

FROM : G. L. Green, Division Administrator

TO : Mr. H. S. Coulter, State Highway Engineer

I concur with the following surfacing designs as proposed in Mr. Terpin's February 9, 1979 letter:

STRUCTURAL SECTIONS

	Actual Thickness	Component	Credit
Sta. 2890± - 2950±	1"	F.C.	
(Williams Method)	4"	A.C.O.L. w/extra allowance (1") for leveling	
Sta. 2950± - 3026±	1"	F.C.	-
(New Work)	2"	A.C.W.S.	4"
	20"	P.M.B.B.	36"
			40"
Sta. 3026± - 3162±	1"	F.C.	
(Stage Constructed)	2"	A.C.O.L. w/extra allowance (1") for leveling	

G. K. Hosner
for G. L. Green

cc:
OSHD (F Terpin)

IVED
HWY ENGR
MAR - 7'79
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Orig to

9363

L

OREGON STATE
HIGHWAY DIVISION

HIGHWAY BUILDING • SALEM, OREGON • 97310

February 14, 1979

Mr. Glen L. Green, Division Engineer
Federal Highway Administration
Equitable Center Building
Suite 100
530 Center St. N.E.
Salem, OR 97301

NOTED
E. S. HUNTER

Re: Shady Interchange-Dillard Junction
Pacific Highway I-5
Douglas County
Roberts Mountain Eastside Slide

Dear Mr. Green:

Our check of the Soils Engineer's report transmitted to you on January 31 under subject as above, shows that it contains some inapplicable data. The report is titled "I-5 Slide Stabilization, Eastside Slide Correction Plan" dated January 31, 1979.

Drill Hole Logs in the report numbered 1-76 through 5-76 are Westside Slide data instead of Eastside. The applicable data, logs of drill holes numbered 1-77 through 5-77 are enclosed herewith.

Mr. Ron Chassie has been notified of this mistake by telephone and he and Mr. Dick Suedkamp have been furnished correct data by direct mail.

We regret your inconvenience on account of this mistake.

Frank Terpin
Location Engineer

by F. W. Yarbrough
Soils Engineer

RECEIVED
TECHNICAL SERVICES
FEB 20 '79
REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

FWY:af

cc: E. S. Hunter
J. H. Versteeg
Alfred Shirley
Ron Chassie
Dick Suedkamp

9363 1-5

STATE OF OREGON

INTEROFFICE MEMO

ODOT - Traffic
DEPT.

378-6537
TELEPHONE

TO: W. E. Cole
Design Engineer Supervisor

DATE: January 24, 1979

FROM: L. E. George
Traffic Engineer Supervisor

SUBJECT: Roberts Creek-Dillard Junction
MP 112.23 - MP 117.74
Pacific Highway No. 1
Douglas County

I have reviewed the accident history for the subject section of highway, as you requested. There were 36 accidents that occured in the 3 year period ending December 31, 1977. The 1977 accident rate for this section was 0.65, the comparable State rate for 1977 was 0.43.

There were 24 fixed object type accidents, 11 of which occured on the long reverse horizontal curve on the southside of Roberts Mountain. There has been numerous low cost improvements made to help alleviate the situation, including extra warning signs. The Region Office in Roseburg, can supply you with profiles and other pertinent information concerning this section of highway.

In view of the high number of fixed object accidents, I suggest that concrete median and shoulder barriers be included in this project.

L. E. George
L. E. George
Traffic Engineer Supervisor

RTS:cs

bc: Alfred Shirley, Jr.

REFERRED TO
Beard
Stoudenmeyer
✓ Cole WEC
Sample
Eriksen
Watson
Hager
[Return] Discuss Do File Copy Due
BY FINAL DESIGN ENGINEER

1 Versteeg ✓
3 Christensen Don
George
Olson
Terpin
Sullivan
Scott
Anderson

RECEIVED
JAN 26 1979
ENGINEERING SECTION

Trout
Do Not File ☐
Return To
Bring Up / /
Action

OREGON STATE HIGHWAY DIVISION

TRAFFIC ENGINEERING SECTION

Rural Motor Vehicle Accident Listing

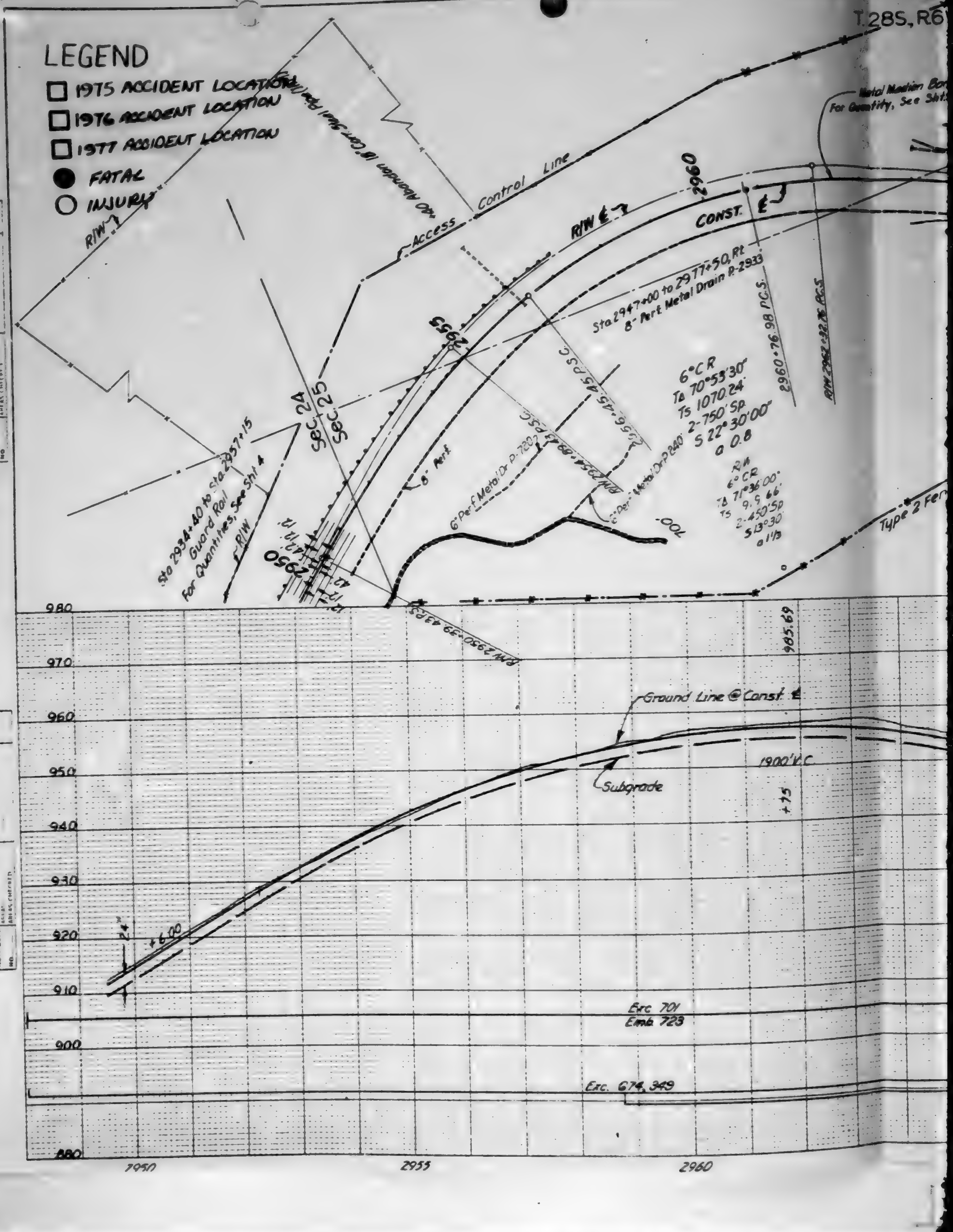
LOCATION

Hwy. No. 1 Rte. No. INT. 5
From M.P. 112.23
To M.P. 117.74
Period Covered:
1-1-75 to 12-31-77

LOCATION	COLLISION TYPE													CLASSIF.					REMARKS	
	Angle	Head-on	Rear-end	Sideswipe Meeting	Sideswipe Overtaking	Turning	Parking	Non-Collision	Fixed-Object	Pedestrian	Backing	Miscellaneous	ALL COLLISIONS	Fatal	Non-Fatal	Prop. Damage	Persons Killed	Persons Injured	ACCIDENT RATE	STATE R E
1975								1	5			1	7			3	1	5	0.30	0.53
1976			4						7				11			6	1	12	0.42	0.42
1977			4					1	12	1			18			8		13	0.65	0.43
TOTAL			8					2	24	1		1	36			17	2	30		

For. E-55 -[illegible]

DENNIS 1-23-79



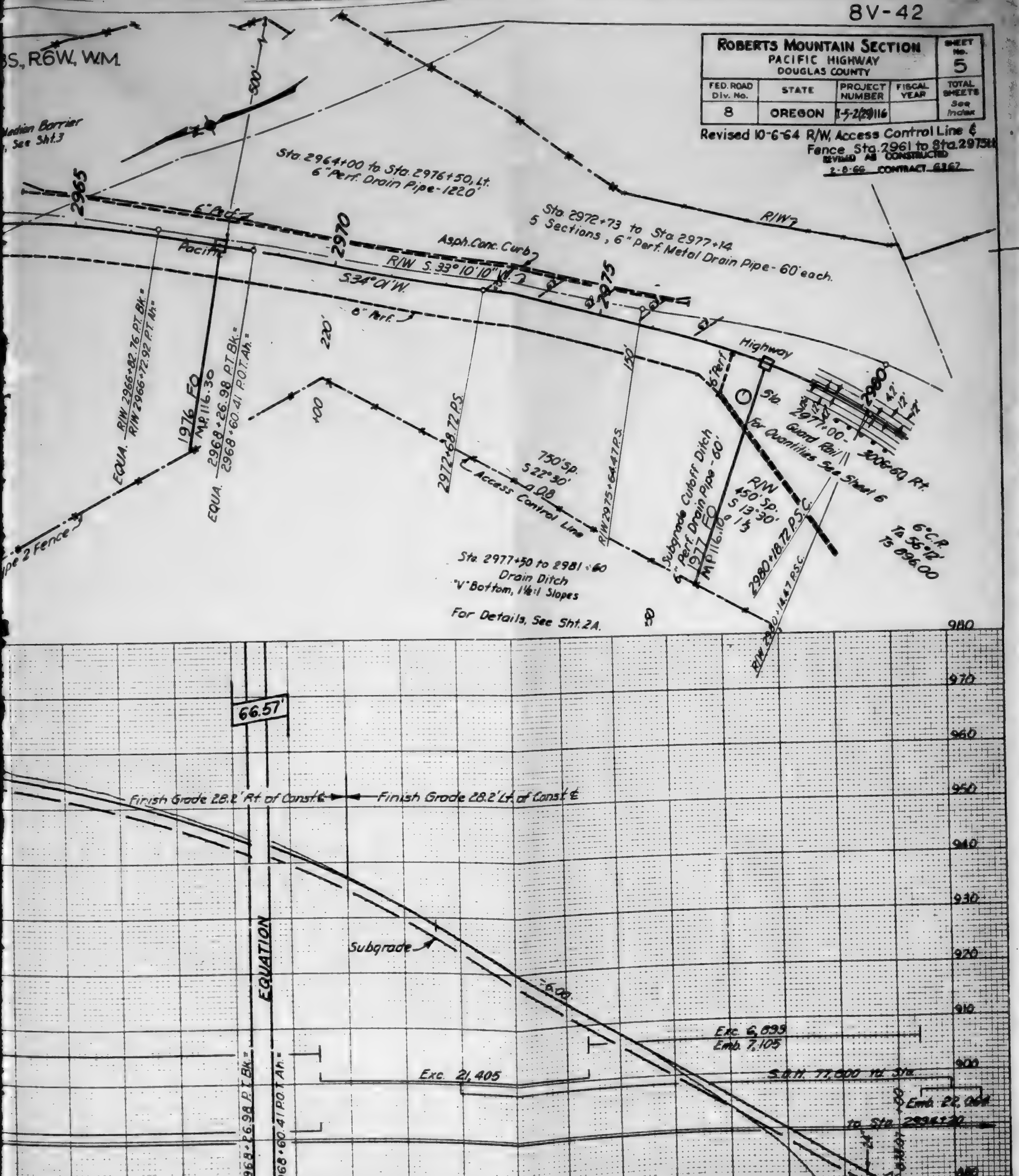
T.28S, R6
LEGEND
☐ 1975 ACCIDENT LOCATION
☐ 1976 ACCIDENT LOCATION
☐ 1977 ACCIDENT LOCATION
● FATAL
○ INJURY
Abandon 18" Corr. Steel Pipe
R/W
Access Control Line
R/W ℄
CONST. ℄
2960
2955
2950
Sec. 24
Sec. 25
Sta 2947+00 to 2977+50, Rt
8" Perf. Metal Drain P-2933
2960+76.98 P.C.S.
R/W 2962+32.76 P.C.S.
2956+45.45 P.S.C.
R/W 2954+69.42 P.S.C.
6° C R
TΔ 70°53'30"
Ts 1070.24'
2-750' Sp.
S 22° 30'00"
a 0.8
R/W
6° C R
TΔ 71°36'00"
Ts 919.66'
2-450' Sp
S 13°30'
a 1 1/3
8" Perf.
6" Perf. Metal Dr. P-2202
6" Perf. Metal Dr. P-2240
700
Sta 2934+40 to Sta 2957+15
Guard Rail
For Quantities, See Sht 4
R/W
R/W 2950+39.43 P.S.
Metal Median Barrier
For Quantity, See Sht
Type 2 Fence
985.69
Ground Line @ Const. ℄
1900' V.C.
Subgrade
+75
+6.00
24"
Exc 701
Emb 723
Exc. 674,349
980
970
960
950
940
930
920
910
900
880
2950
2955
2960
FINAL SURVEY
ORIGINAL SURVEY

8V-42

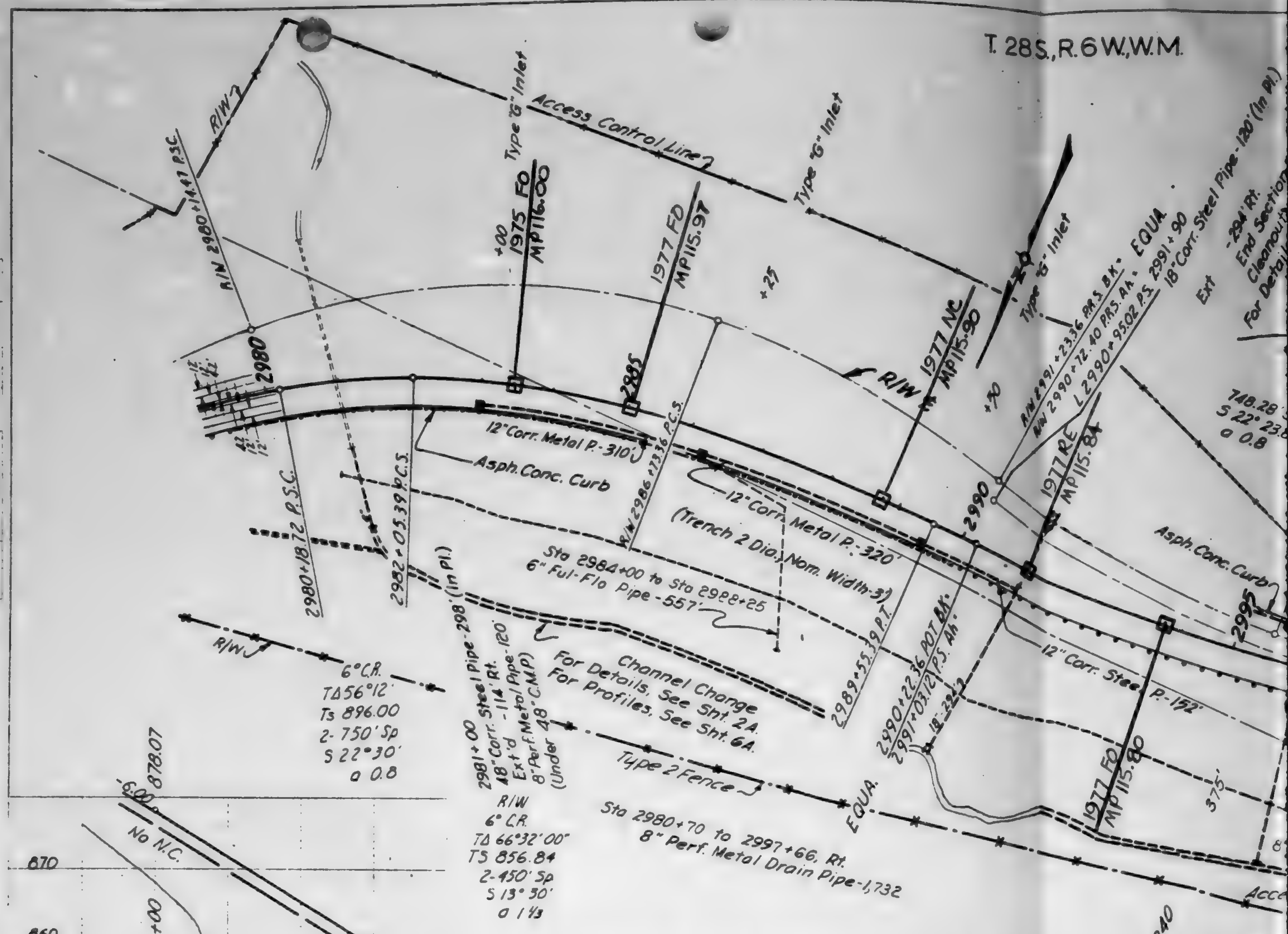
ROBERTS MOUNTAIN SECTION PACIFIC HIGHWAY DOUGLAS COUNTY				SHEET No. 5
FED. ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
8	OREGON	I-5-2(29)116		See Index

Revised 10-6-64 R/W, Access Control Line & Fence Sta. 2961 to Sta. 2975

REVISED AS CONSTRUCTED
2-8-66 CONTRACT 6367



3S., R6W., W.M.
Median Barrier
, See Sht. 3
500'
Sta. 2964+00 to Sta. 2976+50, Lt.
6" Perf. Drain Pipe - 1220'
2965
6" Perf.
2970
Pacific
Sta. 2972+73 to Sta 2977+14
5 Sections, 6" Perf. Metal Drain Pipe - 60' each.
R/W
Asph. Conc. Curb
R/W S. 33°10'10" W.
S34°01'W.
2975
6" Perf.
220'
150'
Highway
6" Perf.
Sta. 2977+00 - 3006+60 Rt.
Guard Rail
For Quantities See Sheet 6
2980
42'
12'
EQUA. R/W 2966+82.76 P.T. Bk. = R/W 2966+72.92 P.T. Ah.
1976 F.O.
M.P. 116.30
EQUA. 2968+26.98 P.T. Bk. = 2968+60.41 P.O.T. Ah.
100
2972+68.72 P.S.
750' Sp.
S 22°30'
a 0.08
Access Control Line
R/W 2975+64.47 P.S.
Subgrade Cutoff Ditch
6" Perf. Drain Pipe - 60'
1977 F.O.
MP 116.10
R/W
450' Sp.
S 13°30'
a 1¼
2980+18.72 P.S.C.
R/W 2980+14.47 P.S.C.
6° C.R.
Ta 56°12'
Ts 896.00
Type 2 Fence
Sta. 2977+50 to 2981+60
Drain Ditch
"V" Bottom, 1½:1 Slopes
For Details, See Sht. 2A.
50
980
970
960
950
940
930
920
910
900
880
66.57'
Finish Grade 28.2' Rt. of Const. ℄
Finish Grade 28.2' Lt. of Const. ℄
EQUATION
2968+26.98 P.T. Bk. =
2968+60.41 P.O.T. Ah. =
Subgrade
6.00
Exc. 6,899
Emb. 7,105
Exc. 21,405
S.O.H. 77,600 Yd. Sta.
Emb. 22,004
to Sta. 2994+30
24'
V.C.
2965
2970
2975

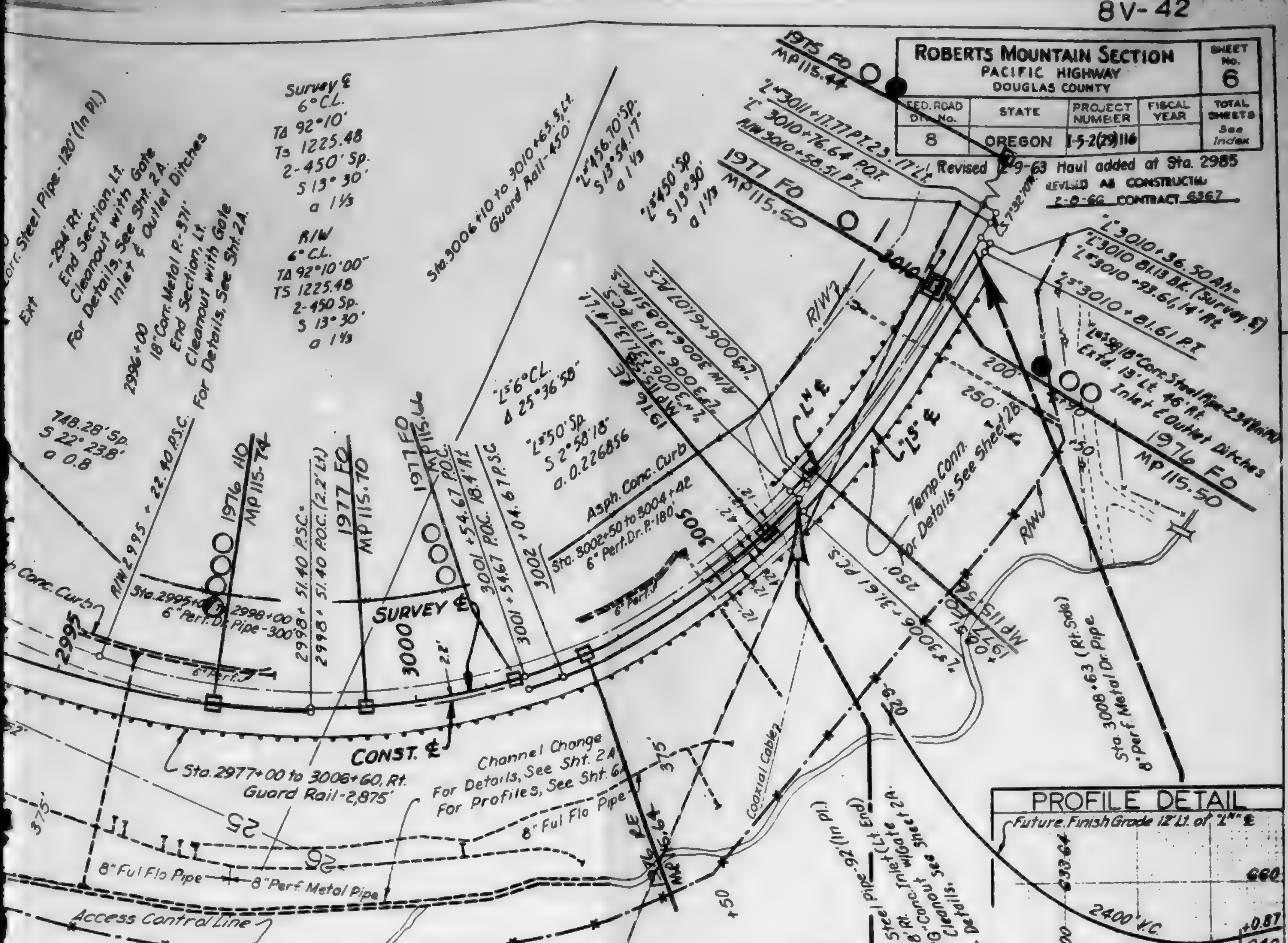

T. 28S., R.6 W.,W.M.
Access Control Line
Type "G" Inlet
Type "G" Inlet
Type "G" Inlet
R/W
R/W 2980+14.41 P.S.C.
+00
1975 FD
MP116.00
1977 FD
MP115.97
+25
1977 NC
MP115.90
+90
R/W 2991+23.36 P.R.S. BK.
R/W 2990+72.40 P.R.S. AH.
EQUA.
L 2990+95.02 P.S. 2991+90
18" Corr. Steel Pipe - 120' (In Pl.)
Ext
-294' Rt.
End Section
Cleanout
For Detail
748.28'
S 22° 23.
a 0.8
2980
2985
R/W
12" Corr. Metal P.-310'
Asph. Conc. Curb
R/W 2986+17.36 P.C.S.
12" Corr. Metal P.-320'
(Trench 2 Dia. Nom. Width-3')
1977 RE
MP115.84
2990
Asph. Conc. Curb
2995
12" Corr. Steel P.-152'
2980+18.72 P.S.C.
2982+05.39 P.C.S.
Sta 2984+00 to Sta 2988+25
6" Ful-Flo Pipe - 557'
2989+55.39 P.T.
2990+22.36 POT. BK.
2991+03.12 P.S. AH.
18"-29
R/W
6° C.R.
TΔ56°12'
Ts 896.00
2-750' Sp
S 22°30'
a 0.8
2981+00
Steel Pipe-298' (In Pl.)
48" Corr. Steel Pipe
Ext'd -114' Rt. -120
8" Perf. Metal Pipe
(Under 48" C.M.P.)
Channel Change
For Details, See Sht. 2A
For Profiles, See Sht. 6A
Type 2 Fence
EQUA.
1977 FD
MP 115.80
375'
R/W
6° C.R.
TΔ 66°32'00"
TS 856.84
2-450' Sp
S 13°30'
a 1 1/3
Sta 2980+70 to 2997+66, Rt.
8" Perf. Metal Drain Pipe-1,732
Acce
-6.00
878.07
No N.C.
+00
870
860
850
840
830
820
810
800
790
Emb. Foundation Exc. 16,894 (Excess)
Selected Granular Backfill 16,894
+2240
-6.32
Finish Grade 28.2' Lt. of Const. ℄
Subgrade
24"
Ground Line at Const. ℄
119.24'
Exc. 98,
Emb. 85,9
Exc. 12252 (Ch. Ch.)
Emb. 12404
From Sta. 2930+65
From Sta. 2958+75
S.O.H. 4,046,094 Yd. Sta.
L.O.H. 121,704 C-Yd. Sta.
From Sta. 2906+00
2990+22.36 POT. BK.
EQUATION
2991+03.12 P.S. AH.
Finish Grade 28.2'
Emb
Emb
-6.32
2980
2985
2990
2995

8V-42

ROBERTS MOUNTAIN SECTION
PACIFIC HIGHWAY
DOUGLAS COUNTY

FED. ROAD DIV. No.	STATE	PROJECT NUMBER	FISCAL YEAR	SHEET No. 6
8	OREGON	I-5-2(29)116		TOTAL SHEETS See Index

Revised 2-9-63 Haul added at Sta. 2985
REVISED AS CONSTRUCTED 2-8-66 CONTRACT 6367



Survey ℄ 6° C.L. TΔ 92°10' Ts 1225.48 2-450' Sp. S 13° 30' a 1⅓
R/W 6° C.L. TΔ 92°10'00" TS 1225.48 2-450 Sp. S 13° 30' a 1⅓
Ext. Corr. Steel Pipe-120' (In Pl.) -234' Rt. End Section, Lt. Cleanout with Gate For Details, See Sht. 2A Inlet & Outlet Ditches
2996+00 18" Corr. Metal P.-371' End Section, Lt. Cleanout with Gate For Details, See Sht. 2A
Sta. 3006+10 to 3010+63.5, Lt. Guard Rail-450'
"L5" 456.70' Sp. S 13° 54.17' a 1⅓
"L5" 450' Sp. S 13° 30' a 1⅓
"L5" 6° C.L. Δ 25° 36' 58"
"L5" 50' Sp. S 2° 58' 18" a 0.226856
1975 FO MP 115.44
1977 FO MP 115.50
1976 FO MP 115.50
1976 FO MP 115.74
1977 FO MP 115.70
1977 FO MP 115.66
"L4" 3011+11.77 P.T. 23.17' Lt.
"L4" 3010+76.64 P.O.T.
R/W 3010+58.51 P.T.
"L5" 3010+36.50 Ah.
"L5" 3010 81.13 Bk. (Survey ℄)
"L5" 3010+93.64, 14' Rt.
"L5" 3010+81.61 P.T.
L5 3010+18" Conc. Steel Pipe-234' (In Pl.) Extd. 13' Lt. 46' Rt. Inlet & Outlet Ditches
S 7°32'10" W
748.28' Sp. S 22° 23.8' a 0.8
R/W 2995+22.40 P.S.C.
2998+51.40 P.S.C.
2998+51.40 P.O.C. (2.2' Lt.)
3001+54.67 P.O.C. 18.4' Rt.
3001+54.67 P.O.C.
3001+54.67 P.S.C.
3002+04.67 P.S.C.
L5 3006+13.13 P.C.S.
L5 3006+31.13 P.T.
L5 3006+10.51 P.C.S.
R/W 3006+61.07 P.C.S.
L5 3006+31.61 P.C.S.
1976 MP 115.56
Asph. Conc. Curb
Sta. 3002+50 to 3004+42 6" Perf. Dr. P.-180'
Sta. 2995+00 to 2998+00 6" Perf. Dr. Pipe-300'
Conc. Curb
SURVEY ℄
CONST. ℄
"L4" ℄
"L5" ℄
R/W
Temp. Conn. For Details See Sheet 2B
Sta. 2977+00 to 3006+60, Rt. Guard Rail-2,875'
Channel Change For Details, See Sht. 2A For Profiles, See Sht. 6A
8" Ful Flo Pipe
8" Perf. Metal Pipe
Access Control Line
Coaxial Cables
1976 MP 116.64
Sta. 3008+63 (Rt. Side) 8" Perf. Metal Dr. Pipe
Ext. 18" Corr. Steel Pipe-92' (In Pl.) +50, 18" Corr. Steel (Lt. End) Inlet & Outlet, Type "G" Cleanout w/Gate For Details See Sheet 2A
2995
3000
3005
3010
200'
250'
375'
PROFILE DETAIL
Future Finish Grade 12' Lt. of "L4" ℄
2400' V.C.
633.64
+0.87
660
640
"L4" 3020 3025 3030
Fin. Gr. 28.2' Lt. of Const. ℄
Fin. Gr. 26' Lt. of Survey ℄
Ground Line at Survey ℄
Subgrade
300' V.C.
-6.32
-5.70
-6.44
-6.69
-6.20
Fin. Gr. 26' Lt. of Survey ℄
Fin. Gr. 12' Lt. of "L5" ℄
Ground Line at "L5" ℄
Ground Line at Survey ℄
Ground Line at L5 ℄
Finish Grade 12' Lt. of "L5" ℄
Finish Grade 12' Lt. of "L4" ℄
"L5" Subgrade
"L4" Subgrade
Ground Line at "L4" ℄
See Profile Detail Above
751.40
759.99
+54.67
737.52
727.86
END OF PROJECT I-5-2(29)116 STA. 3006+31.13
END OF CONTRACT PROJ. STA. 3010+62
Exc. 98,861 (Extg. Emb. Stripping) Emb. 85,966
Exc. 1303 Emb. 1343
Exc. 11 Emb. 11
Exc. 39 Emb. 40
(Ch. Ch.)
S.O.H. 132,864 Yd. Sta. L.O.H. 14,459 C-Yd. Sta.
Emb. 22,826
Grade 28.2' Lt. of Const. ℄
Emb. 691,341 Emb. 3,782 (Random Fill)
S.O.H. 15,180 Yd. Sta. L.O.H. 2353 C-Yd. Sta.
Emb. 2,608
770 760 750 740 730 720 710 700 690
2995 3000 3005 3010

9363 1-5

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION FILE:

INTER-OFFICE CORRESPONDENCE
Salem, Oregon
January 16, 1979

FROM: F. W. Yarbrough
Soils Engineer

TO: J. H. Versteeg
Engineering

SUBJECT: Roberts Creek-Dillard Junction Sec.
Roberts Mountain Slides
Pacific Highway
Douglas County

Ron Chassie and Tom Lowe inspected the Eastside Slide foundation data in F. Yarbrough's office on January 15 and agreed that the FHWA requirements for exploration have been satisfied. Chassie also examined preliminary design and analysis work for a rock buttress and suggested details for completing the work and submitting it for their formal approval. It should be ready to submit to FHWA January 31, two work days after the planned field review by Tom Lowe and Highway designers.

All other items of slide stabilization work on the project have previously been approved by the FHWA.

Frank Terpin
Location Engineer

by

F. W. Yarbrough
Soils Engineer

FWY:af

cc: Duane Christensen
Alfred Shirley

Jn copy
1 Versteeg ✓
Christensen
George
Olson
Terpin
Sullivan
Scott
Anderson

RECEIVED
JAN 17 1979
ENGINEERING SECTION

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Action

9363

1-5

Salem, Oregon
December 19, 1978

ORIGINAL SIGNED BY
J. H. VERSTEEG

J. H. Versteeg
Engineering

Eastside Slide
Roberts Mountain, I-5

Frank Terpin
Location Engineer

Attention: George Wills

Please proceed with the design of the buttress for the Eastside Slide on Roberts Mountain. If additional information is required, please arrange to obtain it from the Region Geologist.

The designs for the Westside Slide correction, Weber Slide and the fill slide should be reviewed and delivered to Final Design. Final Design expects to complete contract plans for this project in the next four to five months.

JHV:jh
cc: Bud Shirley
Elliot Parker
Fred Yarbrough
Duane Christensen
Tom Lowe

9363

2.

ROBERT W. STRAUB
GOVERNOR

Department of Transportation

TRANSPORTATION BUILDING, SALEM, OREGON 97310

December 1, 1978

RECEIVED
TECHNICAL SERVICES
DEC 4 '78
REFER TO
FOR
Info Inves R/D D/R Sign Act File

Glen L. Green
Division Administrator
The Equitable Center, Suite 100
530 Center Street NE
Salem, OR 97301

Dear Mr. Green:

Re: Shady Interchange-Dillard Junction
Pacific Highway (I-5)
Douglas County

Roberts Mountain Slides and
Weber Slides

The four slides have been the subject of much analysis and the information obtained has been reviewed by all concerned. The magnitude and conplexity of the problems have led to differing opinions as to the appropriate method of correction. All the methods are logical and would offer relief in varying amounts to the situation identified.

We can concur with the recommendations as outlined in Ronald G. Chassie's letter of April 19, 1978, (HED-010.8) and supplementary comments by Richard C. Cowdery's letter of July 12, 1978, (HED-010.8) that they address the problems identified in an effective manner. It is therefore the recommendation of the Location Unit that we proceed with design and contract on those recommendations from Mr. Chassie and Mr. Cowdrey. Obviously, these designs should be subject to possible further findings during the construction activities which may reveal additional evidence that would warrant reevaluation of the problem solutions.

The penetration of the piles for the soldier pile-wall at the "fill slide" is proposed to be achieved by driving piles with reinforced tips. This is proposed in the interest of economy. If the noted elevations can not be satisfactorily reached, pre-boring will be resorted to. The alternate anchor system costs could ultimately be determined by traffic staging costs. We propose bidding on an alternate basis and selection of the most cost effective system.

We are also concerned about three other items. The first is the installation of the drain 20 feet deep on the bench of the west side slide at Roberts Mountain. As yet, undetermined soil conditions may preclude a satisfactory installation. This can only be determined during contract construction operations.

Secondly, excavation of buttress foundations may reveal a need for modification of buttress design. Thirdly, these excavations may also reveal water flows which have not been detected by our exploration and consequently may require further evaluation for stabilization and drainage systems. Also, there are other contingencies that may be encountered which are unknown at this time.

As a course of further action, our respective soils and geology organizations should immediately determine whether the recent supplemental exploration has adequately extended our knowledge of the "east side slide". Upon completion of satisfactory exploration, our design should be completed and the details forwarded to you for your review and submittal to Washington for concurrance.

Final design for the "east side slide" as well as the other three slide areas will be reviewed with your office prior to submittal of the project for PS&E.

Very truly yours,

Frank E. Terpin

Frank E. Terpin
Location Engineer

GW:ab
cc: E. S. Hunter
W. J. Hart
Alfred Shirley
J. H. Versteeg
F. W. Yarbrough

9363

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

INTER-OFFICE CORRESPONDENCE
Salem, Oregon
October 11, 1978

FILE:

FROM: F. W. Yarbrough
Soils Engineer

TO: J. H. Versteeg
Technical Engineering

SUBJECT: Roberts Mountain
Eastside Slide: Cost of Inlay
Pacific Highway
Douglas County

The cost of a rock inlay into the Eastside slide at the subject section is in the range of three to $400,000. Two uncertainties are that the north boundary of new movement has not been established and that Chassie will want to approve the details of design. The estimate does take account of deep movement in the last drill holes.

The deep movement (56 feet depth) in hole 5, (40 feet) in hole 6, discovered after the plan of excavation for the Eastside slide was formed does make the plan more risky than with movement limited to about 15 feet as prior explorations indicated. Therefore, Chassie's objection to our plan for only fallout excavation should be respected.

I reiterate my recent recommendation that a project be undertaken in accordance with FHWA requirements. While I disagree with some of Chassie's assumptions and analysis, I hesitate to disagree with his and Washington's conclusion that buttresses should be installed soon. None of us has a way of knowing for sure what those slides are going to do and we'd sure be embarrassed having traffic disruption there soon after refusing their offer. Chassie called me two or three times for explanation while he was analyzing the project so I know he considered it carefully, and since Washington has confirmed his recommendation, I'm ready to defer to their judgement.

FWY:af

cc: Frank Terpin

1 Versteeg ✓
2 Christensen
George
3 Olson
Terpin
Sullivan
Scott
Andersen

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OCT 11 1978
ENGINEERING SECTION

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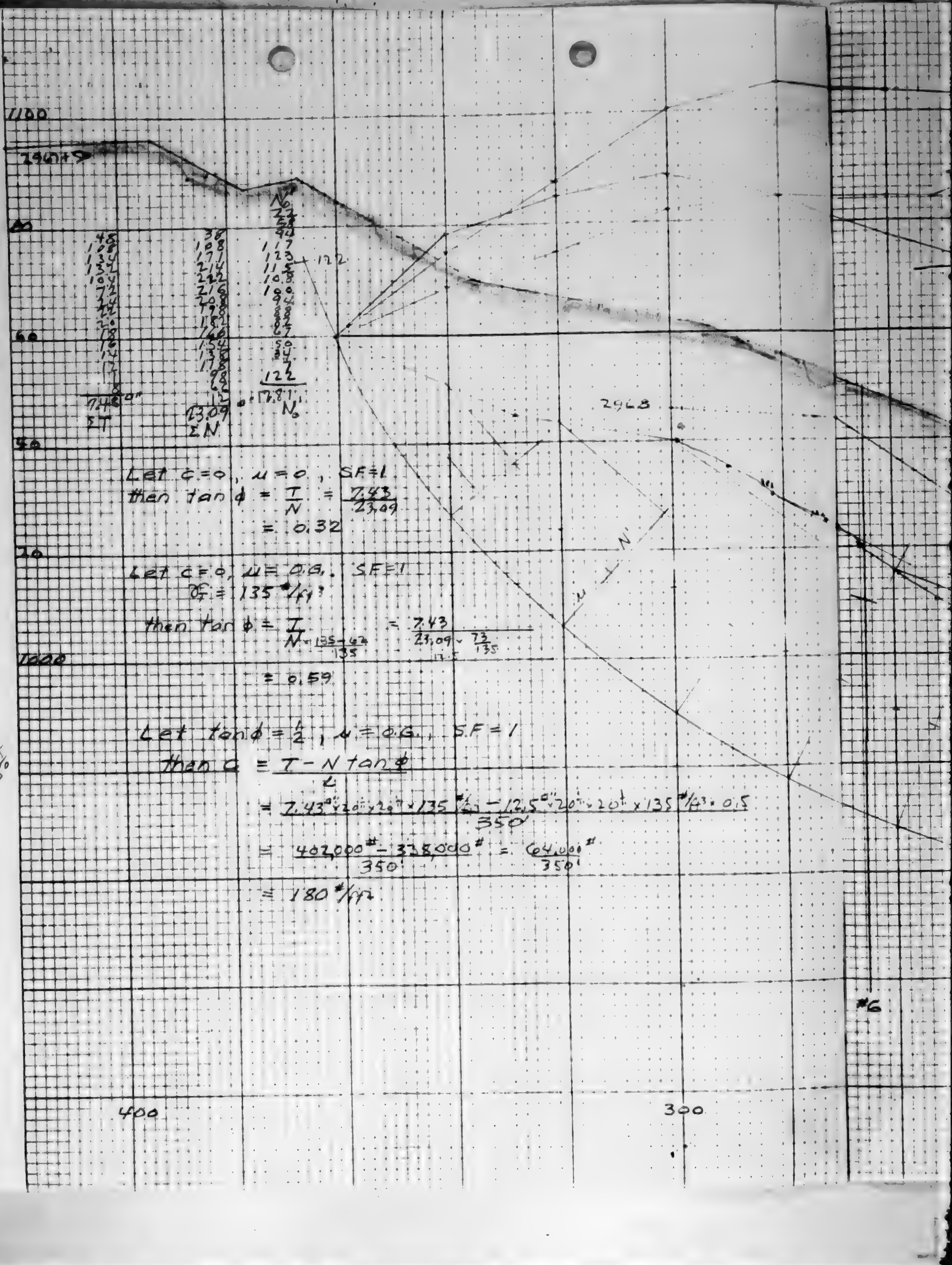


.48
1.08
1.34
1.32
1.04
.72
.74
.22
.20
.18
.16
.14
.12
.8
7.43
ΣT

.38
1.08
1.71
2.14
2.22
2.16
2.08
1.98
1.82
1.66
1.54
1.38
1.18
.98
.62
.12
23.09
ΣN

N_0
.22
.58
.94
1.17
1.23
1.15
1.08
1.00
.94
.88
.82
.67
.50
.34
122
17.81
N_0

Let c = 0, u = 0, SF = 1

then $\tan\phi = \frac{T}{N} = \frac{7.43}{23.09}$

$= 0.32$

Let c = 0, u = O.G., SF = 1

$\gamma_f = 135$ #/ft³

then $\tan\phi = \frac{T}{N \times \frac{135-62}{135}} = \frac{7.43}{23.09 \times \frac{73}{135}}$

17.5

$= 0.59$

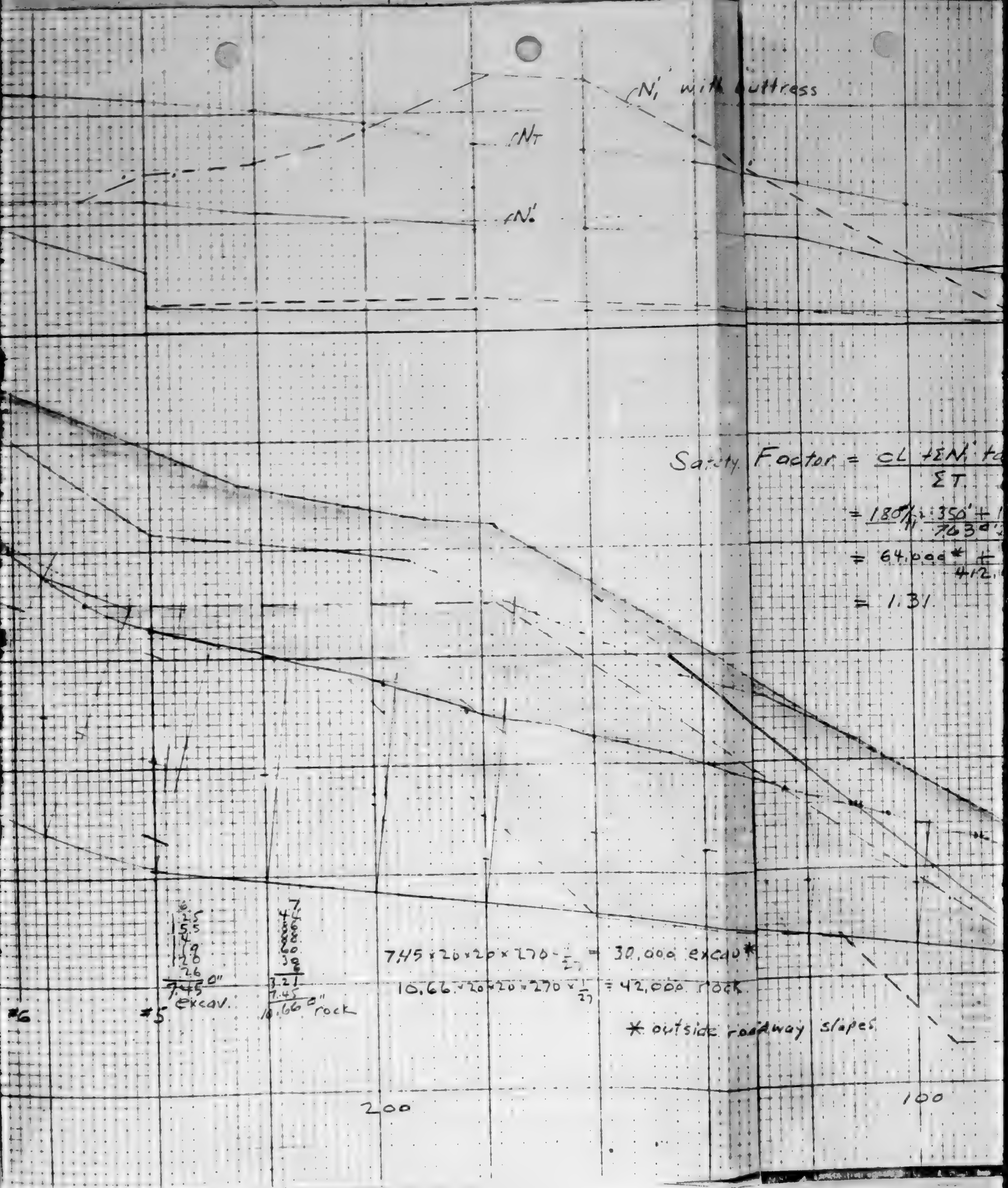
Let $\tan\phi = \frac{1}{2}$, u = O.G., S.F = 1

then $c = \frac{T - N\tan\phi}{L}$

$= \frac{7.43" \times 20" \times 20' \times 135 \text{ \#/ft}^3 - 12.5" \times 20" \times 20' \times 135 \text{ \#/ft}^3 \times 0.5}{350'}$

$= \frac{402{,}000\# - 338{,}000\#}{350'} = \frac{64{,}000\#}{350'}$

$= 180$ #/ft²



Safety Factor = $\frac{cL + \Sigma N' \tan}{\Sigma T}$

$= \frac{180\#/_{\square'} \cdot 350' + 1}{763^{\square'}}$

$= \frac{64{,}000^* +}{412.}$

$= 1.31$

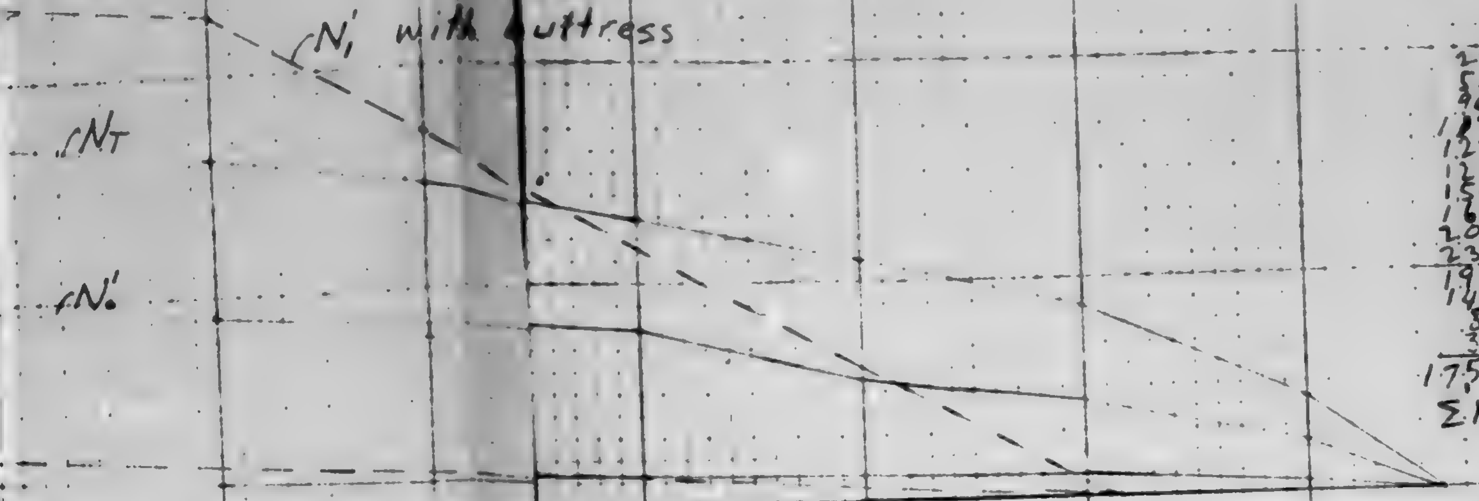
6
2.5
5.5
4
19
20
26
7.45 □" excav.

7
44
86
88
60
38
3.21
7.45
10.66 □" rock

$7.45 \times 20 \times 20 \times 270 \div \frac{}{27}$ = 30,000 excav*

$10.66 \times 20 \times 20 \times 270 \times \frac{1}{27}$ = 42,000 rock

* outside roadway slopes


N₁' with buttress
N_T
N₀'

.22
.58
.94
1.17
1.23
1.26
1.50
1.68
2.06
2.30
1.98
1.45
.58
.34
17.56□"
$\Sigma N_1'$

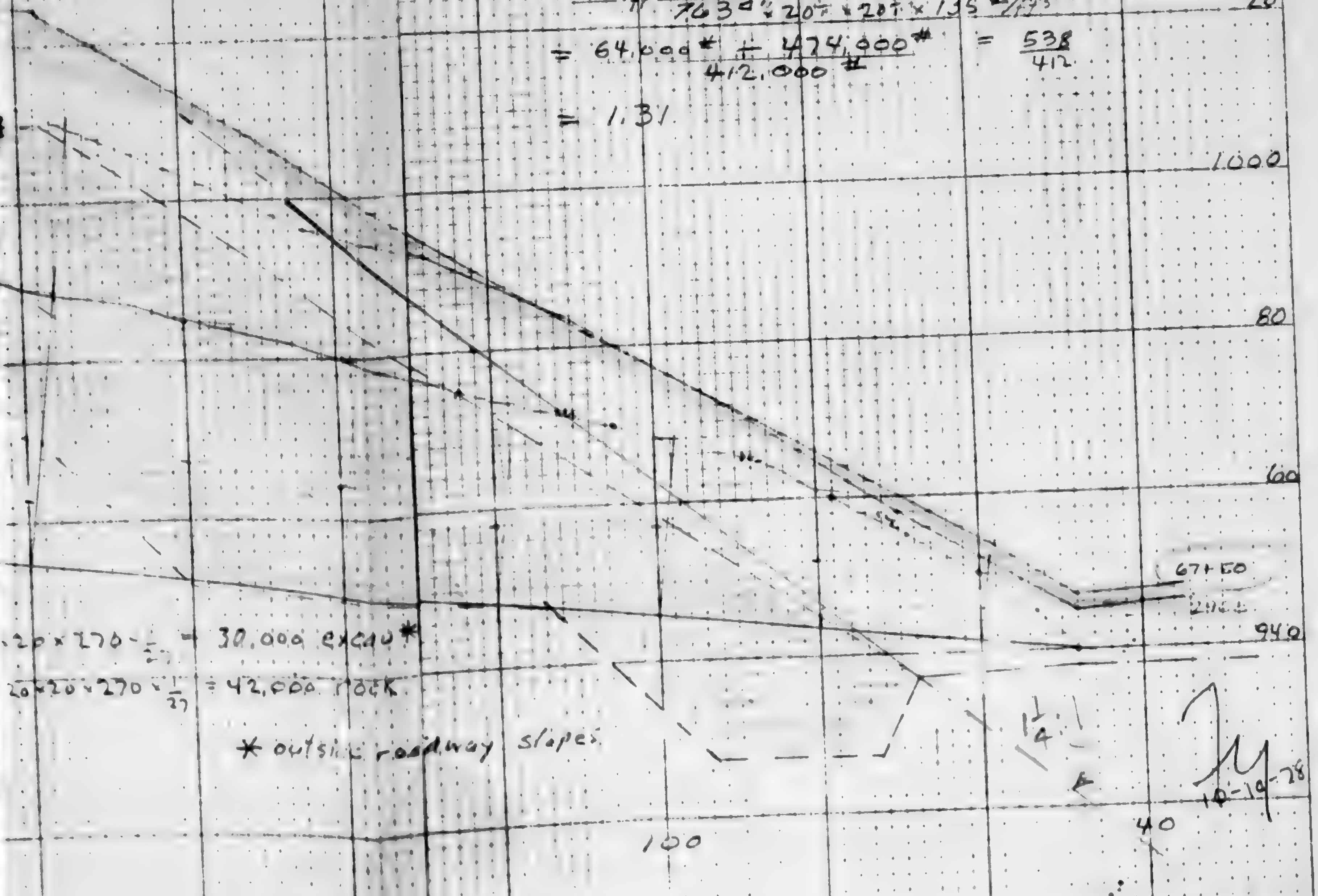
ΣT_0 7.43□"
ΔT_c
4
9
9
10
6
2
−2
−8
−8
−2
+40
−20
20
7.43
7.63□"
ΣT_1

Safety Factor = $\frac{cL + \Sigma N_1' \tan\phi}{\Sigma T}$

$= \frac{180\#/ft^2 \cdot 350' + 17.56^{\square''} \cdot 20' \cdot 20' \times 135\#/ft^3 \times 0.5}{7.63^{\square''} \cdot 20' \cdot 20' \times 135\#/ft^3}$

$= \frac{64,000\# + 474,000\#}{412,000\#} = \frac{538}{412}$

$= 1.31$


20
1000
80
60
67+50
940
1¼
1
40
100

20 × 270 × $\frac{1}{27}$ = 30,000 excav*

20 × 20 × 270 × $\frac{1}{27}$ = 42,000 rock

* outside roadway slopes

10-19-78

9363

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

INTER-OFFICE CORRESPONDENCE

FILE:

Roseburg, Oregon

August 8, 1978

Elliott Parker

FROM: ELLIOTT PARKER
Regional Geologist

SUBJECT: I-5
Robt.'s Mtn. Slide Stabilization
Weber Slide Stabilization

TO: ALFRED SHIRLEY JR.
Regional Engineer

I hereby submit the following remarks concerning Ron Chassis's recommendations for corrections on the named project as per your request on this date.

WESTSIDE SLIDE: Recommendations OK.

REMARKS: The larger inlay with built-in drainage facilities will more than offset loss of horizontal drain system. I do have some reservations about the 15' deep and 3' wide trench in the back of the upper bench - - in this type of material, that may have detrimental effect since we have found that the water leaches the cementing agent ($CaCO_3$) from the in place sediments thereby weakening them further. That could create a zone of reduced cohesion down slope from the bottom of the trench. Our field data shows marked increase in flow of horizontal drains during and immediately following rain storms.

FILL SLIDE: Recommendations OK.

WEBER SLIDE: OK for increase in size of inlay and thickness of rock blanket.

REMARKS: I do not agree on deletion of vertical/horizontal drainage system. Our field data does show a local lowering of water table where drains have been properly installed. The large size and the location of the slide mass makes it imperative that an effective drainage system be part of the correction.

EASTSIDE SLIDE: - - - - -

REMARKS: The data obtained from the two exploration holes at the toe indicates that the material below the surface (o'-22') is no better nor worse than the material exposed in the toe of the slide. Under the circumstances, I felt that we could not safely leave the drill rig sitting over night at the toe of the slide. We were therefore limited to the depth that we could drill in one day. Indications were that soft zones and firm zones in material similar to that exposed on the surface, extends to an unknown depth. I thought that going deeper than twenty feet for a toe trench would create a greater problem than the one we are trying to correct. Slope tubes #5 and #6 are fairly well placed in the "center" of the present slide. They are a little north of center of the older (and much smaller) slide area.

FINDING: I believe that the further substantiating data, requested in the memo has now been furnished (zones of adjustment at tube #5 are indicated at 20' and 56' depths - - a zone of adjustment at 38'-39' in tube #6 is indicated in the July 10, 1978 readings.)

TO NEXT PAGE

NOTE: We can arrange to drill another exploratory hole at the toe with more competent equipment, and work an extended shift in order to penetrate to the specified depth of thirty feet (30'). I have asked Bill Fretwell's crew from Region 2 for assistance and they will probably be available next week (August 14-18, 1978.)

EP/rk

c.c. File

FILL SLIDE

ate's Proposal

e State proposes to stop the ravelling and protect the roadway integrity th a structural wall placed against the scarp. They propose a 150 foot ng ldier pile wall using precast concrete panels for lagging, and ed back with one row of concrete deadmen or grouted soil anchors. They opose including both types of anchors in the contract in order to tain the most favorable bid price. (Based on the specialized uipment to install grouted soil anchors, and difficult access at this te, we doubt that grouted anchors can compete with deadmen; however, see no harm bidding them as alternates.) The estimated cost is 5,000.

Elliot Parker

LL SLIDE: Recommendations OK. (FHWA'S)

Fill Slide: Poindexter

F.H.W.A. recommendations okay.

Conclusions and Recommendations FHWA - Ron C

We recommend approval of the State's scheme.

We also request your opinion on whether or not the ti
i.e. would a cantilever wall be sufficient.

2. "The proposed tieback wall (Fill Slide) located
was evaluated based on observed movements at el
such, our calculations indicate that tiebacks a
proposed soldier pile wall. Furthermore, if mo
at elevation 911, it is essential to obtain pil
elevation 890. Therefore, it may be necessary
through the hard sandstone seams.

FILL SLIDE

avelling and protect the roadway integrity gainst the scarp. They propose a 150 foot ecast concrete panels for lagging, and te deadmen or grouted soil anchors. They anchors in the contract in order to ice. (Based on the specialized l anchors, and difficult access at this ors can compete with deadmen; however, lternates.) The estimated cost is

Parker

. _ (FHWA'S)

ter

okay.

Conclusions and Recommendations FHWA - Ron Chassie

We recommend approval of the State's scheme.

We also request your opinion on whether or not the tiebacks are required, i.e. would a cantilever wall be sufficient.

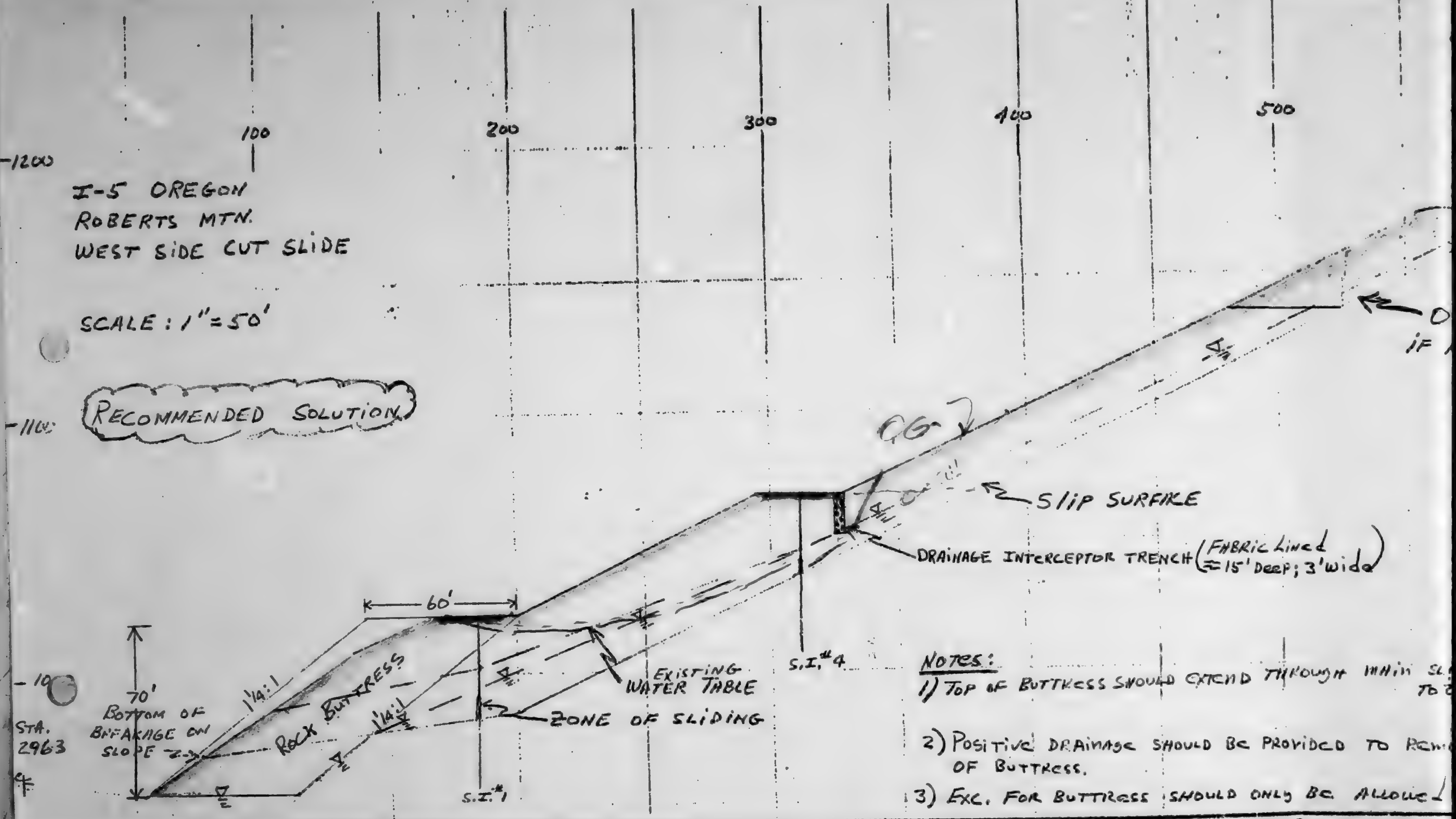
2. "The proposed tieback wall (Fill Slide) located at Station 2953± was evaluated based on observed movements at elevation 911. As such, our calculations indicate that tiebacks are required for the proposed soldier pile wall. Furthermore, if movement is occurring at elevation 911, it is essential to obtain pile embedment to elevation 890. Therefore, it may be necessary to prebore piles through the hard sandstone seams.

contro[illegible] [illegible]

I-5 OREGON
ROBERTS MTN.
WEST SIDE CUT SLIDE

SCALE: 1" = 50'

RECOMMENDED SOLUTION


100
200
300
400
500
1200
1100
1000
STA. 2963
℄
70'
BOTTOM OF BREAKAGE ON SLOPE
1¼:1
ROCK BUTTRESS
1¼:1
60'
S.I. #1
ZONE OF SLIDING
EXISTING WATER TABLE
S.I. #4
DRAINAGE INTERCEPTOR TRENCH (FABRIC LINED ≈15' DEEP; 3' WIDE)
SLIP SURFACE
OG
O
IF

NOTES:

1) TOP OF BUTTRESS SHOULD EXTEND THROUGH MAIN SL
TO

2) POSITIVE DRAINAGE SHOULD BE PROVIDED TO REM
OF BUTTRESS.

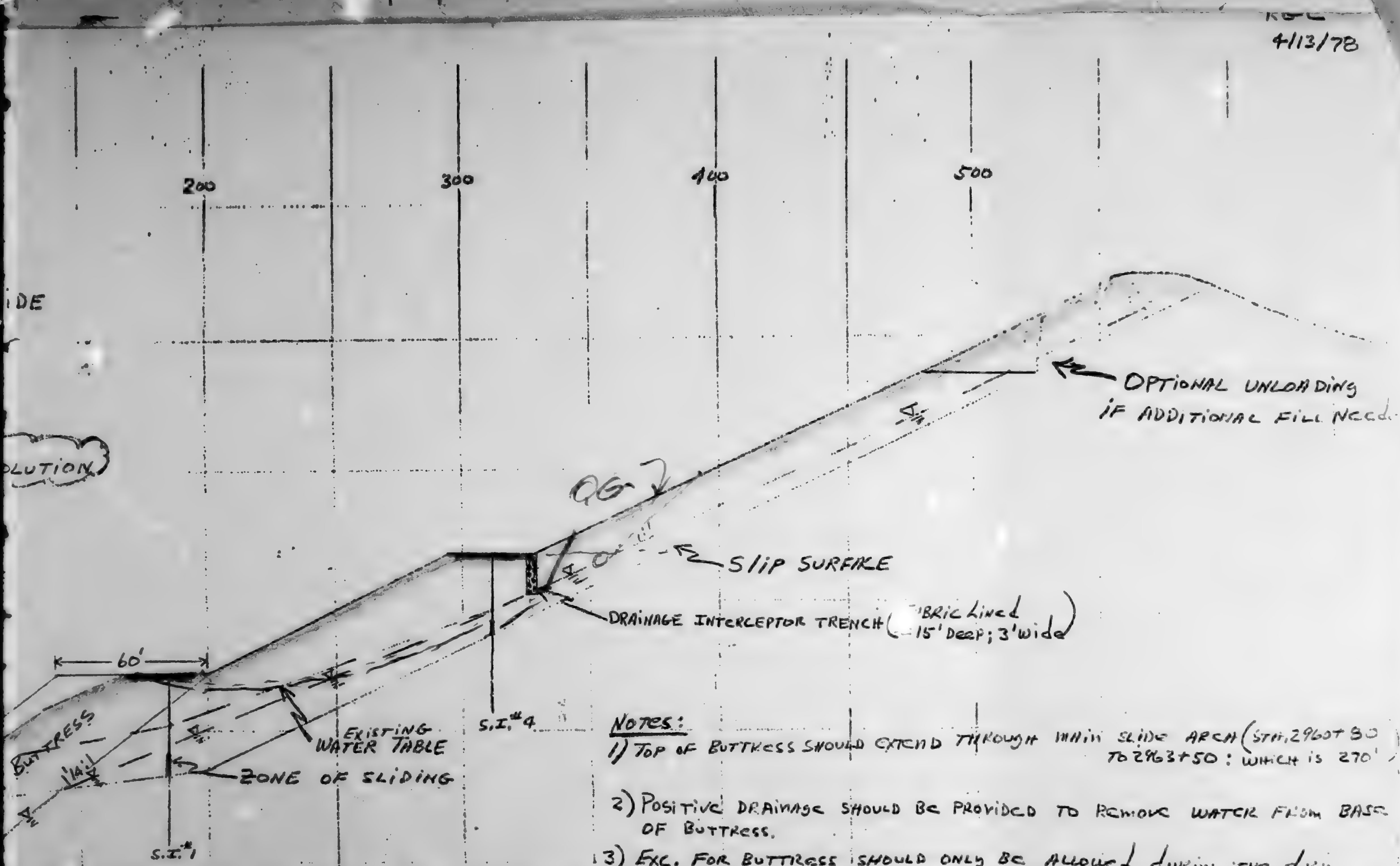
3) EXC. FOR BUTTRESS SHOULD ONLY BE ALLOWED
TIME OF THE YEAR, I.E. THE SUMMER

4) PER STATE'S RECOMMENDATION, EXISTING 2nd B
RESHAPED TO DRAIN.

5) WHERE GRASS WILL GROW ON AREA, SLOPE SHOULD B
TO PROMOTE SURFACE RUNOFF.

6) IF POSSIBLE, THE BUTTRESS SHOULD BE CONSTRUCTED IN
THAT NO MORE THAN APPROXIMATELY 150 FEET IN THE
AREA AT ONE TIME IN ORDER TO MINIMIZE THE [illegible]
BE CREATED BY THE TOP EXCAVATION.

4/13/78


200
300
400
500
IDE
OLUTION
OPTIONAL UNLOADING IF ADDITIONAL FILL Need.
OG
SLIP SURFACE
DRAINAGE INTERCEPTOR TRENCH (FABRIC Lined ~15' Deep; 3' wide)
60'
BUTTRESS
1½:1
EXISTING WATER TABLE
ZONE OF SLIDING
S.I.#4
S.I.#1

NOTES:

1) TOP OF BUTTRESS SHOULD EXTEND THROUGH MAIN SLIDE ARCA (STA. 2960+30 TO 2963+50: WHICH IS 270')
2) POSITIVE DRAINAGE SHOULD BE PROVIDED TO REMOVE WATER FROM BASE OF BUTTRESS.
3) EXC. FOR BUTTRESS SHOULD ONLY BE ALLOWED DURING THE DRY TIME OF THE YEAR, i.e. THE SUMMER MONTHS.
4) PER STATE'S RECOMMENDATION, EXISTING 2nd BENCH SHOULD BE RESHAPED TO DRAIN.
5) WHERE GRASS WILL GROW ON ARCA, SLOPE SHOULD BE SEEDED & MULCHED TO PROMOTE SURFACE RUNOFF.
6) IF POSSIBLE, THE BUTTRESS SHOULD BE CONSTRUCTED IN STAGES. IT IS SUGGESTED THAT NO MORE THAN APPROXIMATELY 150 FEET OF THE EXCAVATION BE ALLOWED OPEN AT ONE TIME IN ORDER TO MINIMIZE THE TEMPORARY LOSS OF SUPPORT THAT WILL BE CREATED BY THE TOE EXCAVATION.

WESTSIDE SLIDE

State's Proposal

The State's proposal for slide stabilization consists primarily of:

1. Unloading the upper part of the slide by constructing a third bench (see sheet 121).
2. Reshaping the existing two benches by lowering them slightly.
3. Installing ten (140 foot long) horizontal drains on 30 foot spacings near the toe of the slide.
4. Placing perforated 6-inch drains on each bench.

The proposed excavation would amount to approximately 100,000 c.y. of material, to be used for fill construction on safety improvements south of the slide. The estimated cost of the proposed excavation and drainage work is $343,000.

Elliot Parker

ESTSIDE SLIDE: Recommendations OK. **(FHWA'S)**

REMARKS: The larger inlay with built-in drainage facilities will more than offset loss of horizontal drain system. I do have some reservations about the 15' deep and 3' wide trench in the back of the upper bench - - in this type of material, that may have detrimental effect since we have found that the water leaches the cementing agent ($CaCO_3$) from the in place sediments thereby weakening them further. That could create a zone of reduced cohesion down slope from the bottom of the trench. Our field data shows marked increase in flow of horizontal drains during and immediately following rain storms.

Westside Slide: **Poindexter**

A rock buttress is probably the most positive solution for stabilizing this slide. It is also the most expensive. We would still probably want to obtain material for the safety project by unloading the upper portion of the slide which would also be beneficial. The effectiveness of the proposed interceptor trench is questionable.

What is cost?

Recommendations

FHWA - Ron Chassi

It is our opinion that positive restraint must be provi
stabilize the slide. Based upon our own stability anal
and sections attached), we recommend the following solu

1. Place a rock buttress at the toe of the slide. (We
60 feet wide and 70 feet high will provide a F.S.=1
rock is used. Some of the existing slide material
removed in order to make room for the buttress. Th
an increase in factor of safety because of two main
buttress rock has higher strength than the material
(2) The buttress will draw down the water table in
of the slide).
2. Place a fabric lined drainage interceptor trench, a
15 feet deep, along the existing upper bench to kee
drawn down in the upper portion of the slide. (The
provides a positive, continuous interceptor. Hori
not.)
3. Positive drainage should be provided to remove wat
of the buttress.
4. Buttress excavation and construction should only b
the dry time of the year.
5. Per the State's recommendation, the area should be
drain, seeded, etc.

Based on a 300 foot buttress length, estimated quantit
buttress dimensions would be approximately 64,000 c.y.
72,000 c.y. of rock fill. Using estimated costs provi
$1.75/c.y. for excavation, and $5.50/c.y. for rock fil
would be approximately $590,000 for the proposed buttr

1. "The proposed corrective work for the West Side
Fill Slide, and Weber Slide is approved for F. A
subject to the recommendations contained in Mr.
memorandum.

Can additional unloading
substituted for the interc

WESTSIDE SLIDE

ide stabilization consists primarily of:

t of the slide by constructing a third

two benches by lowering them slightly.

t long) horizontal drains on 30 foot spacings de.

ch drains on each bench.

amount to approximately 100,000 c.y. of construction on safety improvements south of st of the proposed excavation and drainage

Elliot Parker

ions OK. **(FHWA'S)**

lay with built-in drainage facilities will more oss of horizontal drain system. I do have some about the 15' deep and 3' wide trench in the back bench - - in this type of material, that may have ffect since we have found that the water leaches agent ($CaCO_3$) from the in place sediments thereby m further. That could create a zone of reduced slope from the bottom of the trench. Our field rked increase in flow of horizontal drains during ly following rain storms.

Poindexter

probably the most positive solution for stabi- s also the most expensive. We would still material for the safety project by unloading slide which would also be beneficial. The posed interceptor trench is questionable.

at is cost?

Recommendations

FHWA - Ron Chassie

It is our opinion that positive restraint must be provided in order to stabilize the slide. Based upon our own stability analyses (calculations and sections attached), we recommend the following solution be considered:

1. Place a rock buttress at the toe of the slide. (We estimate a buttress 60 feet wide and 70 feet high will provide a F.S.=1.3, if good quality rock is used. Some of the existing slide material will have to be removed in order to make room for the buttress. The buttress provides an increase in factor of safety because of two main factors. (1) The buttress rock has higher strength than the material it will replace. (2) The buttress will draw down the water table in the lower portion of the slide).

2. Place a fabric lined drainage interceptor trench, approximately 15 feet deep, along the existing upper bench to keep the water table drawn down in the upper portion of the slide. (The drainage trench provides a positive, continuous interceptor. Horizontal drains do not.)

3. Positive drainage should be provided to remove water from the base of the buttress.

4. Buttress excavation and construction should only be allowed during the dry time of the year.

5. Per the State's recommendation, the area should be reshaped, graded to drain, seeded, etc.

Based on a 300 foot buttress length, estimated quantities for the proposed buttress dimensions would be approximately 64,000 c.y. of excavation and 72,000 c.y. of rock fill. Using estimated costs provided by the State of \$1.75/c.y. for excavation, and \$5.50/c.y. for rock fill, a cost estimate would be approximately \$590,000 for the proposed buttress.

1. "The proposed corrective work for the West Side Cut Slide, Fill Slide, and Weber Slide is approved for F. A. I. funding, subject to the recommendations contained in Mr. Chassie's memorandum.

Can additional unloading be substituted for the interceptor trench?

?

Fred Yarbrough

Respect for the FHWA analysis would be greater if it was a little more objective. The bulge at the toe "within the last 1-1/2 years" that Mr. Chassie asserts is so alarming is clearly shown on May, 1974 topography and it probably has existed at least a few years before that. He says that horizontal drains have been shown to be ineffective because they drain so little water; but they do drain some water and he neglects the basic fact, that he should know, that the real effectiveness of them is shown by how much they lower the water table. Finally, he substitutes his judgement for our experience at this specific location when he speculates that our proposed excavation will make the slides worse when we have actually experienced improvement every time it has been done.

I don't agree with some concepts in his buttress design. He has reduced the size of it below what I have proposed by installing an interceptor drain above the top of it. He is utterly certain that the interceptor will positively perform, which is different from our experience with them. And he appears to assume that the foundation under the lower part of the buttress will offer sliding resistance exceeding that on a plane through the buttress. This assumption hardly squares with his description of how the slide formation disintegrates on exposure. Not much is lost if excavation and a few cheap horizontal drains don't work, but it seems like poor judgement to take chances with an expensive buttress structure.

EASTSIDE SLIDE

State's Proposal

The State proposes excavating approximately 26,000 c.y. of the slide material, providing a 40 foot wide fallout area at the toe of the slope, and construction of intermediate benches with filter fabric lined ditches on the benches. The estimated cost is $155,000.

Elliot Parker

EASTSIDE SLIDE: - - - - -

REMARKS: The data obtained from the two exploration holes at the toe indicates that the material below the surface (o'-22') is no better nor worse than the material exposed in the toe of the slide. Under the circumstances, I felt that we could not safely leave the drill rig sitting over night at the toe of the slide. We were therefore limited to the depth that we could drill in one day. Indications were that soft zones and firm zones in material similar to that exposed on the surface, extends to an unknown depth. I thought that going deeper than twenty feet for a toe trench would create a greater problem than the one we are trying to correct. Slope tubes #5 and #6 are fairly well placed in the "center" of the present slide. They are a little north of center of the older (and much smaller) slide area.

FINDING: I believe that the further substantiating data, requested in the memo has now been furnished (zones of adjustment at tube #5 are indicated at 20' and 56' depths - - a zone of adjustment at 38'-39' in tube #6 is indicated in the July 10, 1978 readings.)

TO NEXT PAGE

Poindexter

Eastside Slide:

Excavation for the safety project will remove a most of the slide mass. A rock buttress with drainage should contain this slide.

Recommendations

FHWA - Ron Ch

We recommend that the State's proposed excavation
It is our opinion that positive restraint should b
the slope with a rock buttress. Further analysis
slope indicator data will be required to size the
agree with the State's Regional Geologist's evalu
near the toe of the slope would not be competent
rock buttress. The material is competent enough
to sample. Movement to date has not affected the
indicating more competent unweathered material be
feel a buttress would be suitable if keyed well
roadway grade. A buttress would also provide pos

If you concur in the buttress concept, we recomme
for that concept contingent on agreement between
and the State on a satisfactory buttress design.

Peter

Variations of material distribution as encoun
indicates the heterogenous nature or mixture as p
distinct bedding continuity. Getting sufficient
in material of this nature is highly unlikely. T
satisfactorily coreable or responsive to conventi
are apparently confined and dry in place at depth.

Water level fluctuations and air are believe
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Can this be substituted for
suggested by Ron Ch

EASTSIDE SLIDE

g approximately 26,000 c.y. of the slide
t wide fallout area at the toe of the slope,
iate benches with filter fabric lined ditches
e cost is $155,000.

Elliot Parker

ed from the two exploration holes at the toe
he material below the surface (0'-22') is no
e than the material exposed in the toe of the slide.
stances, I felt that we could not safely leave
itting over night at the toe of the slide. We were
d to the depth that we could drill in one day.
e that soft zones and firm zones in material sim-
posed on the surface, extends to an unknown depth.
oing deeper than twenty feet for a toe trench
greater problem than the one we are trying to correct.
and #6 are fairly well placed in the "center" of
le. They are a little north of center of the older
r) slide area.

further substantiating data, requested in the memo
ed (zones of adjustment at tube #5 are indicated
ns - - a zone of adjustment at 38'-39' in tube #6
July 10, 1978 readings.)

TO NEXT PAGE

Poindexter

afety project will remove a most of the
ess with drainage should contain this slide.

Recommendations

FHWA - Ron Chassie

We recommend that the State's proposed excavation solution not be approved It is our opinion that positive restraint should be placed at the toe of the slope with a rock buttress. Further analysis using the State's slope indicator data will be required to size the buttress. We do not agree with the State's Regional Geologist's evaluation that the material near the toe of the slope would not be competent enough to support a rock buttress. The material is competent enough that it has to be cored to sample. Movement to date has not affected the roadway grade, therefore indicating more competent unweathered material below roadway grade. We feel a buttress would be suitable if keyed well below (say ten feet) roadway grade. A buttress would also provide positive drainage.

If you concur in the buttress concept, we recommend you give approval for that concept contingent on agreement between this office, the Division and the State on a satisfactory buttress design.

Peter Bowers

Variations of material distribution as encountered in the holes further indicates the heterogenous nature or mixture as previously noted with no distinct bedding continuity. Getting sufficient reliable blow count data in material of this nature is highly unlikely. The shales, even though not satisfactorily coreable or responsive to conventional exploratory techniques are apparently confined and dry in place at depth.

Water level fluctuations and air are believed to be the main causes of deterioration in this overall type material. This coupled with the lateral release furnished by the original cut, time, and gravity sets the stage for a probable accelerated rate of adjustment.

Can this be substituted for "blow count" suggested by Ron Chassie?

WEBER SLIDE

State's Proposal

The State proposes the following stabilization measures:

1. Installation of four 24-inch diameter vertical wells, on 25 foot centers, 60 feet deep, along the N.B. outside shoulder.
2. Another series of eight vertical wells 40 feet deep on 10 foot centers along the S.B. inside shoulder.
3. A system of horizontal ~~wells~~ drains to tap those wells.
4. A small (9,000 c.y.) rock buttress on the toe area just right of the S.B. lanes.
5. A 3 foot thick rock blanket on the median slope involving approximately 4,000 c.y.

The estimated cost for the proposed work is $198,000.

Elliot Parker

WEBER SLIDE: OK for increase in size of inlay and thickness of rock blanket.

REMARKS: I do not agree on deletion of vertical/horizontal drainage system. Our field data does show a local lowering of water table where drains have been properly installed. The large size and the location of the slide mass makes it imperative that an effective drainage system be part of the correction.

Weber Slide: Poindexter

Field data indicates the excessive high water table is part of the problem at this location so it does not seem appropriate to ignore drainage. Increasing the sizes of the buttressing would be okay.

Conclusions and Recommendations

FHWA-R

You will note from the State's support data that t
eight horizontal drains have been installed to date
feasibility of slide correction by drainage. Only
drains are flowing, each about ½ gpm, which is neg
own evaluation of the drainage installed indicates
change since the vertical wells and horizontal dra
installed. It appears obvious that the clay soil
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and horizontal drains is not sufficient to intercep

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drainage when the drainage installed to date has ha
success. Further, the State's stability analysis
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drainage were ineffective (which we feel would be
factor of safety provided would only be 1.07. Eit
is too low in our opinion.

The State's estimated cost for the proposed work i
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estimate would be approximately $225,000. Note tha
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Therefore, we do not recommend approval of the pro
We do recommend approval of the buttressing, with
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WEBER SLIDE

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Elliot Parker

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Conclusions and Recommendations FHWA - Ron Chassie

You will note from the State's support data that ten vertical drains an eight horizontal drains have been installed to date to evaluate the feasibility of slide correction by drainage. Only two of the horizonta drains are flowing, each about ½ gpm, which is negligible. The State's own evaluation of the drainage installed indicates no significant change since the vertical wells and horizontal drains have been installed. It appears obvious that the clay soil present does not give up water easily, and the area of influence of small diameter wells and horizontal drains is not sufficient to intercept much water.

Again, we are puzzled why the State recommends more of the same type of drainage when the drainage installed to date has had little to no success. Further, the State's stability analysis shows an estimated factor of safety of only 1.12 for the proposed work. If the proposed drainage were ineffective (which we feel would be the case), then the factor of safety provided would only be 1.07. Either factor of safety is too low in our opinion.

The State's estimated cost for the proposed work is $198,000. Of this cost, $75,000 is for rock and $123,000 for drainage.

We conclude from the past history of the slide that the excavation made during the 1964 construction removed enough weight off the toe to cause the sliding. Weight put back during the 1964 corrective attempt has not been sufficient to completely stop the sliding. It is our opinion that positive restraint in the form of additional weight on the toe is the most cost-effective way to stabilize the slide. Therefore, we concur with the State's proposal to buttress the toe; however, the buttress sizes should be increased. Placement of three times the amount of rock presently proposed (13,000 c.y.) would involve 39,000 c.y. of rock. The factor of safety provided would be greater than 1.2, which we consider acceptable. Using the State's estimate of $5.75/c.y. of rock, a cost estimate would be approximately $225,000. Note that this approach provides a larger factor of safety for about the same cost as the buttress plus drainage work proposed by the State, and offers better chance of success.

Therefore, we do not recommend approval of the proposed drainage work. We do recommend approval of the buttressing, with the provision that th amount of rock placed be approximately three times the amount present

9363

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

INTER-OFFICE CORRESPONDENCE

FILE:

Salem, Oregon
August 8, 1978

FROM: F. W. Yarbrough
Soils Engineer

TO: J. H. Versteeg
Engineering

SUBJECT: Roberts Mountain Slide
Remedial Construction
I-5 Douglas County
FHWA Response to ODOT
Funding Request

I recommend that the FHWA offer of funding for the Roberts Mountain Slides remedial construction be accepted, along with their proposed modifications to the design. If we do, they will continue to share the cost of slide reconstruction in that section; and if we do anything else, they may not. In effect, we would give them that option.

Neither I nor Chassie nor Washington, D.C. know absolutely what those slides are going to do under our plan more than what they have done in the past. Therefore, we would be remiss in not accepting their offer of funds subject to their conditions.

Respect for the FHWA analysis would be greater if it was a little more objective. The bulge at the toe "within the last 1-1/2 years" that Mr. Chassie asserts is so alarming is clearly shown on May, 1974 topography and it probably has existed at least a few years before that. He says that horizontal drains have been shown to be ineffective because they drain so little water; but they do drain some water and he neglects the basic fact, that he should know, that the real effectiveness of them is shown by how much they lower the water table. Finally, he substitutes his judgement for our experience at this specific location when he speculates that our proposed excavation will make the slides worse when we have actually experienced improvement every time it has been done.

I don't agree with some concepts in his buttress design. He has reduced the size of it below what I have proposed by installing an interceptor drain above the top of it. He is utterly certain that the interceptor will positively perform, which is different from our experience with them. And he appears to assume that the foundation under the lower part of the buttress will offer sliding resistance exceeding that on a plane through the buttress. This assumption hardly squares with his description of how the slide formation disintegrates on exposure. Not much is lost if excavation and a few cheap horizontal drains don't work, but it seems like poor judgement to take chances with an expensive buttress structure.

Nevertheless, let's take their money and suggestions and build it.

FWY:af

cc: Frank Terpin

/ Versteeg ✓
Christensen
George
Olson
Terpin
Sullivan
Scott
Savage

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ENGINEERING SECTION

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93603

L.

August 7, 1978

Mr. Glen L. Green
Division Administrator
Federal Highway Administration
The Equitable Center, Suite 100
530 Center Street, N.E.
Salem, OR 97301

Dear Sir:

I-5 Slide Stabilization
Robaerts Mountain
I-5-3(-)
Your File HFO-7-OR

The Federal Highway Administration's recommendation for the Roberts Mountain Slide project is being reviewed by our geotechnical and engineering staff.

When their analysis is complete, a report will be submitted to your office.

Very truly yours,

E. S. Hunter
Technical Services Engineer

bc F. B. Klaboe
J. H. Versteeg

JHV:jh ja

Form FHWA 121 (Rev. 5-73)

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
The Equitable Center, Suite 100
530 Center NE. - Salem OR 97301

DATE: July 31, 1978

In reply refer to: HFO.7-OR

SUBJECT: I-5 Slide Stabilization
Roberts Mountain
I-5-3(-)

FROM : G. L. Green, Division Administrator

TO : Mr. E. S. Hunter, Manager, Technical Services
Oregon Department of Transportation
Salem, Oregon

Our Regional and Washington Office Geotechnical Engineers have reviewed the proposed slide stabilization measures submitted for F.A.I. funding, and have forwarded their recommendations (copy attached) for evaluation.

In general, funding is approved for the West Side Cut Slide, Fill Slide, and Weber Slide subject to the recommendations in Mr. Chassie's 4-19-78 memorandum.

The East Side Slide is not approved. Additional soils tests and movement data are requested for mutual analysis, after which corrective measures may be re-evaluated and resubmitted (see letter of 7-12-78 attached). The East Slide mitigation would again be forwarded to Washington, D.C. if you request Interstate funding for its correction.

G.K.
for G. L. Green

NOTED
E. S. HUNTER

Attachments

cc:
ODOT (Mr. F. Yarbrough, Soils Engr.)
ODOT (Mr. E. Parker, Reg. 3 Geologist)

✓ Versteeg
Christensen
George
Olson
Terpin
Sullivan
Scott
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Form FHWA 121 (Rev. 5-73)

UNITED STATES GOVERNMENT
Memorandum

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
222 S. W. Morrison Street
Portland, Oregon 97204

DATE: July 12, 1978

In reply refer to: HED-010.8

SUBJECT: I-5 Oregon
Roberts Mountain Slide Stabilization
Weber Slide Stabilization

FROM: Director, Office of Environment and Design
Region 10

TO: Mr. G. L. Green
Division Administrator
HDA-OR Salem, Oregon

The Washington Headquarters Construction and Maintenance Division has recently advised us that they have completed their review of the report and supplemental data prepared by the State for the subject slide problems. In addition, they have evaluated Mr. Chassie's recommendations outlined in his April 19, 1978 memorandum (copy attached). They have indicated the following as a result of their review:

1. "The proposed corrective work for the West Side Cut Slide, Fill Slide, and Weber Slide is approved for F. A. I. funding, subject to the recommendations contained in Mr. Chassie's memorandum.

2. "The proposed tieback wall (Fill Slide) located at Station 2953± was evaluated based on observed movements at elevation 911. As such, our calculations indicate that tiebacks are required for the proposed soldier pile wall. Furthermore, if movement is occurring at elevation 911, it is essential to obtain pile embedment to elevation 890. Therefore, it may be necessary to prebore piles through the hard sandstone seams.

3. "As pointed out in Mr. Chassie's memorandum, review of the available data at the East Side Cut Slide indicates that the information is inconclusive. The available data does not delineate the failure plane throughout the distressed area. Approval of F. A. I. funding for corrective measures at this site is being withheld until additional data can be obtained. We suggest that additional movement data be obtained from the existing slope indicators. In addition, data should be obtained in the center and toe areas of the slide to verify the assumed failure plane and locate adequate foundation material for proposed corrective alternates."

Specifically, Mr. Chassie suggests that the State perform the following minimum additional investigative work for the East Side Cut Slide:

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JUL 18 1978
OREGON DIVISION

1. Install at least one slope indicator in the center of the slide to accurately locate the failure plane.

2. Drill one additional boring at the toe of the slide to a minimum depth of 30 feet and conduct Standard Penetration Tests every 5 feet of depth to confirm if the material has sufficient strength to support a rock buttress.

You will recall that these same suggestions were given to the State during a field inspection of the slide area in July 1976; however, the work was not performed for some reason.

Once the additional data is obtained, the State will have to resubmit their correction proposal. The submission will again have to be forwarded to the Washington Office for review if the State requests F. A. I. funding. If you desire, we are available to provide assistance to the State in developing a repair scheme.

We also offer an additional recommendation for buttress construction for the West Side Cut Slide. Consideration should be given to constructing the buttress in stages. It is suggested that no more than approximately 150 feet of the excavation be allowed open at one time in order to minimize the temporary loss of support that will be created by the toe excavation.

Please advise if there are questions on any of the above or if we can be of further assistance.

Richard C. Cowdery

Richard C. Cowdery

cc: Mr. R. Goughnour (HHO-35)

Memorandum

FEDERAL HIGHWAY ADMINISTRATION
222 S. W. Morrison St.
Portland, Oregon 97204

DATE: April 19, 1978

In reply refer to: HED-010.8

SUBJECT: I-5 Oregon
Roberts Mountain Slide Stabilization
Weber Slide Stabilization

FROM : Regional Geotechnical Engineer
Office of Environment and Design - Region 10

TO : Mr. W. S. Mendenhall, Director
Office of Highway Operations
HHO-35 Washington, D. C.

Our memorandum dated December 16, 1977, forwarded the State's submission requesting approval of FAI funds for correction of the subject slide problems. Our early review showed the State's submission to be incomplete and additional support data was requested. The additional support data was forwarded with Mr. G. L. Green's March 16, 1978 memorandum and is attached.

We have completed our review of the State's request. Outlined below are our conclusions and recommendations which we offer for your consideration:

West Side Cut Slide (Roberts Mountain)

Three slide problems exist in the vicinity of the Roberts Mountain summit. The west side cut slide is the major problem of the three. I-5 traverses a through cut at this location. The west cut is approximately 250 feet high on an existing 2½:1 slope with two intermediate benches.

Soil conditions and slide data are presented in the State's report. Briefly, the soil profile consists of an irregular series and mixture of sandstone, siltstone and shale of varied thickness and competency. There is no distinct stratification due to extensive deformation which has occurred in the past. The shale is susceptible to slaking and disintegration, particularly when exposed and wetted.

You will note from the State's data that the cut was originally made in 1954. Sliding developed and the slope was flattened in 1957. The slope was flattened further during Interstate construction in 1964.

Slow progressive movement is occurring through about a 300 foot length. The sliding is due to the following factors. Stress relief occurring when the lateral support is removed by excavation. This causes cracks and fissures in the shale and sandstone to open, allowing water to enter. The shale, in particular, begins to disintegrate because of alternate wetting and drying. This slow deterioration causes loss of strength and thus the slow, progressive movement.

Past experience in similar materials has shown that such slow, progressive movement could continue for many years. There is also a possibility that a massive failure could occur. For this slide, it appears that the probability of a massive movement is increasing. Cracking of a slightly more competent rib of material has begun to occur on the slope near the toe of the slide. This cracking and movement at the toe has only begun to occur in approximately the last 1½ years. Since I-5 is the major north-south route in Oregon, and results of a massive slide at this location could be catastrophic, it is obvious that positive stabilization should be undertaken.

State's Proposal

The State's proposal for slide stabilization consists primarily of:

1. Unloading the upper part of the slide by constructing a third bench (see sheet 121).
2. Reshaping the existing two benches by lowering them slightly.
3. Installing ten (140 foot long) horizontal drains on 30 foot spacings near the toe of the slide.
4. Placing perforated 6-inch drains on each bench.

The proposed excavation would amount to approximately 100,000 c.y. of material, to be used for fill construction on safety improvements south of the slide. The estimated cost of the proposed excavation and drainage work is $343,000.

Conclusions and Recommendations

Based upon review of the State's analyses and performance of our own stability analyses, we draw the following conclusions relating to the State's proposal:

1. It is puzzling to us why the State recommends the unloading scheme, when their own stability analysis shows it would only increase stability by about 5%. Our analysis shows the same.
2. Slope flattening through the slide area has been undertaken two different times, yet the slide problem remains. The proposed excavation would remove the weakened, weathered material in the upper portion of the slide; however, it is likely that deterioration of the newly exposed soil would occur, and further likely that over a period of years, conditions would revert to what they are now, if not worse.

3. The State has installed eight horizontal drains in the slide area. These eight drains have only shown a combined total flow of approximately 1 gpm, which is negligible. Therefore, we see little benefit to be obtained from adding additional horizontal drains.

Recommendations

It is our opinion that positive restraint must be provided in order to stabilize the slide. Based upon our own stability analyses (calculations and sections attached), we recommend the following solution be considered:

1. Place a rock buttress at the toe of the slide. (We estimate a buttress 60 feet wide and 70 feet high will provide a F.S.=1.3, if good quality rock is used. Some of the existing slide material will have to be removed in order to make room for the buttress. The buttress provides an increase in factor of safety because of two main factors. (1) The buttress rock has higher strength than the material it will replace. (2) The buttress will draw down the water table in the lower portion of the slide).

2. Place a fabric lined drainage interceptor trench, approximately 15 feet deep, along the existing upper bench to keep the water table drawn down in the upper portion of the slide. (The drainage trench provides a positive, continuous interceptor. Horizontal drains do not.)

3. Positive drainage should be provided to remove water from the base of the buttress.

4. Buttress excavation and construction should only be allowed during the dry time of the year.

5. Per the State's recommendation, the area should be reshaped, graded to drain, seeded, etc.

Based on a 300 foot buttress length, estimated quantities for the proposed buttress dimensions would be approximately 64,000 c.y. of excavation and 72,000 c.y. of rock fill. Using estimated costs provided by the State of $1.75/c.y. for excavation, and $5.50/c.y. for rock fill, a cost estimate would be approximately $590,000 for the proposed buttress.

Note that if additional fill is needed for the adjacent safety improvements, it could still be obtained off the upper portions of the slide.

Note also that the State's submission contains an analysis for a buttress, although this solution was not recommended due to its high estimated cost ($1.1 million). The buttress they show is about twice the size of what we propose. Their detailed calculations are not included; however, it appears the size difference is due to three main factors. (1) It does not appear that they assessed much drainage benefit to the buttress. (2) Our solution includes the interceptor trench which will keep the water table drawn down in the upper portion of the slide. (3) A large portion of the upper part of the State's proposed buttress would only be replacing excavated material of about the same weight, and since it would only be placed over the failure plane, rather than keyed through it, it provides little benefit.

East Side Cut Slide (Roberts Mountain)

This slide is on the opposite side of the highway from the west cut slide. The east cut is approximately 150 feet high. The soil materials in the east cut slide are less competent, and have deteriorated to essentially a soft clay. The clay becomes a mudflow during wet periods of the year, flows onto the roadway shoulder, and has to be removed by maintenance forces. The slide area is approximately 200 feet long measured along the roadway. Both sides of the slide seem to be bounded by more competent material, thus confining the mudflow to a gut down the slope.

State's Proposal

The State proposes excavating approximately 26,000 c.y. of the slide material, providing a 40 foot wide fallout area at the toe of the slope, and construction of intermediate benches with filter fabric lined ditches on the benches. The estimated cost is $155,000.

Conclusions and Recommendations

The State originally submitted a request for FAI funding of the east side slide in June, 1976 (a copy of their submission was furnished to your office). Review of that submission revealed that no borings had been made during the State's slide investigation. Subsurface data was obtained using hand probes and seismic data. A failure planelocation was assumed based on this data. No subsurface information had been obtained above the scarp or to the sides of the present slide mass.

Mr. Tom Lowe, area engineer, and I met with State representatives in July, 1976. It was agreed that a number of borings should be made within and adjacent to the slide, and slope indicators placed within the slide in order to:

1. Verify the assumed failure plane location.
2. Provide the soils information necessary to evaluate both the backslope stability for the excavation alternate and the foundation for a buttress alternate.

Some of
The additional exploration was undertaken. However, the State inadvertently did not include this information with their recent submission. The boring logs and slope indicator information were forwarded separately to the Division in January, 1978 (these have been furnished to you).

Our review of the recent exploration data indicates that, in our opinion, the State should reconsider their excavation proposal. Based on the seismic and hand probe data, the State had originally estimated the failure plane to be approximately 20 feet deep, essentially paralleling the ground surface. Two of the slope indicators located near the upper left portion of the slide show movement at depths of 40 and 56 feet. With the weaker material being this deep, we doubt that the excavated backslopes would remain stable. Also, the proposed excavation could, in our opinion, cause the slide area to enlarge.

Recommendations

We recommend that the State's proposed excavation solution not be approved. It is our opinion that positive restraint should be placed at the toe of the slope with a rock buttress. Further analysis using the State's slope indicator data will be required to size the buttress. We do not agree with the State's Regional Geologist's evaluation that the material near the toe of the slope would not be competent enough to support a rock buttress. The material is competent enough that it has to be cored to sample. Movement to date has not affected the roadway grade, therefore indicating more competent unweathered material below roadway grade. We feel a buttress would be suitable if keyed well below (say ten feet) roadway grade. A buttress would also provide positive drainage.

If you concur in the buttress concept, we recommend you give approval for that concept contingent on agreement between this office, the Division, and the State on a satisfactory buttress design.

Fill Slide (Roberts Mountain)

The fill slide is located immediately north of the through cut. It also has a long history as outlined in the State's report. The original embankment slope was placed as a sidehill fill at this location. Several attempts were made to stabilize the slide, the final one being an alignment shift into the hillside in 1969.

The head scarp of the old slide has progressed toward the roadway a couple of feet since 1969, and is presently located just outside the guardrail. Several attempts to support the near vertical scarp with fill have failed because the weight causes the slide to subside. The scarp has been relatively stable for several years except for ravelling.

State's Proposal

The State proposes to stop the ravelling and protect the roadway integrity with a structural wall placed against the scarp. They propose a 150 foot long soldier pile wall using precast concrete panels for lagging, and tied back with one row of concrete deadmen or grouted soil anchors. They propose including both types of anchors in the contract in order to obtain the most favorable bid price. (Based on the specialized equipment to install grouted soil anchors, and difficult access at this site, we doubt that grouted anchors can compete with deadmen; however, we see no harm bidding them as alternates.) The estimated cost is $55,000.

Conclusions and Recommendations

We recommend approval of the State's scheme.

We also request your opinion on whether or not the tiebacks are required, i.e. would a cantilever wall be sufficient.

Weber Slide

The Weber slide is located a few miles south of the Roberts Mountain slide area. The slide is approximately 400 feet in length. This is another slide problem that has a long past history. The State's data indicates the present southbound (S.B.) lanes were constructed in 1954-1955. The S.B. lanes were placed in cut and indications are that no slope instability resulted from this construction. This section was brought up to freeway standards with construction of the northbound (N.B.) lanes during 1964-1965. A large slide developed. Corrective measures included a rock buttress in the N.B. cut slope (estimated to be approximately 15 feet wide and 25 feet high), drainage of the ponds above the cut area, and raising of the grade over a hump in the S.B. lanes in order to add weight on the toe.

The slide area is continuing to move. Slope indicators installed in the slide have defined the slip plane. Movement is slow. The S.B. lanes have been heaved about a foot through the slide area. The median slope also exhibits bulging. We concur that the problem poses a potential instability that should be corrected. We also feel that a correction should be a permanent fix.

State's Proposal

The State proposes the following stabilization measures:

1. Installation of four 24-inch diameter vertical wells, on 25 foot centers, 60 feet deep, along the N.B. outside shoulder.

2. Another series of eight vertical wells 40 feet deep on 10 foot centers along the S.B. inside shoulder.

3. A system of horizontal ~~wells~~ drains to tap those wells.

4. A small (9,000 c.y.) rock buttress on the toe area just right of the S.B. lanes.

5. A 3 foot thick rock blanket on the median slope involving approximately 4,000 c.y.

The estimated cost for the proposed work is $198,000.

Conclusions and Recommendations

You will note from the State's support data that ten vertical drains and eight horizontal drains have been installed to date to evaluate the feasibility of slide correction by drainage. Only two of the horizontal drains are flowing, each about ½ gpm, which is negligible. The State's own evaluation of the drainage installed indicates no significant change since the vertical wells and horizontal drains have been installed. It appears obvious that the clay soil present does not give up water easily, and the area of influence of small diameter wells and horizontal drains is not sufficient to intercept much water.

Again, we are puzzled why the State recommends more of the same type of drainage when the drainage installed to date has had little to no success. Further, the State's stability analysis shows an estimated factor of safety of only 1.12 for the proposed work. If the proposed drainage were ineffective (which we feel would be the case), then the factor of safety provided would only be 1.07. Either factor of safety is too low in our opinion.

The State's estimated cost for the proposed work is $198,000. Of this cost, $75,000 is for rock and $123,000 for drainage.

We conclude from the past history of the slide that the excavation made during the 1964 construction removed enough weight off the toe to cause the sliding. Weight put back during the 1964 corrective attempt has not been sufficient to completely stop the sliding. It is our opinion that positive restraint in the form of additional weight on the toe is the most cost-effective way to stabilize the slide. Therefore, we concur with the State's proposal to buttress the toe; however, the buttress sizes should be increased. Placement of three times the amount of rock presently proposed (13,000 c.y.) would involve 39,000 c.y. of rock. The factor of safety provided would be greater than 1.2, which we consider acceptable. Using the State's estimate of $5.75/c.y. of rock, a cost estimate would be approximately $225,000. Note that this approach provides a larger factor of safety for about the same cost as the buttress plus drainage work proposed by the State, and offers better chance of success.

Therefore, we do not recommend approval of the proposed drainage work. We do recommend approval of the buttressing, with the provision that the amount of rock placed be approximately three times the amount presently proposed.

Mr. Suedkamp of your office has inspected these slide problems in the field. If you have any questions during your review, please do not hesitate to contact us.

Ronald G. Chassie

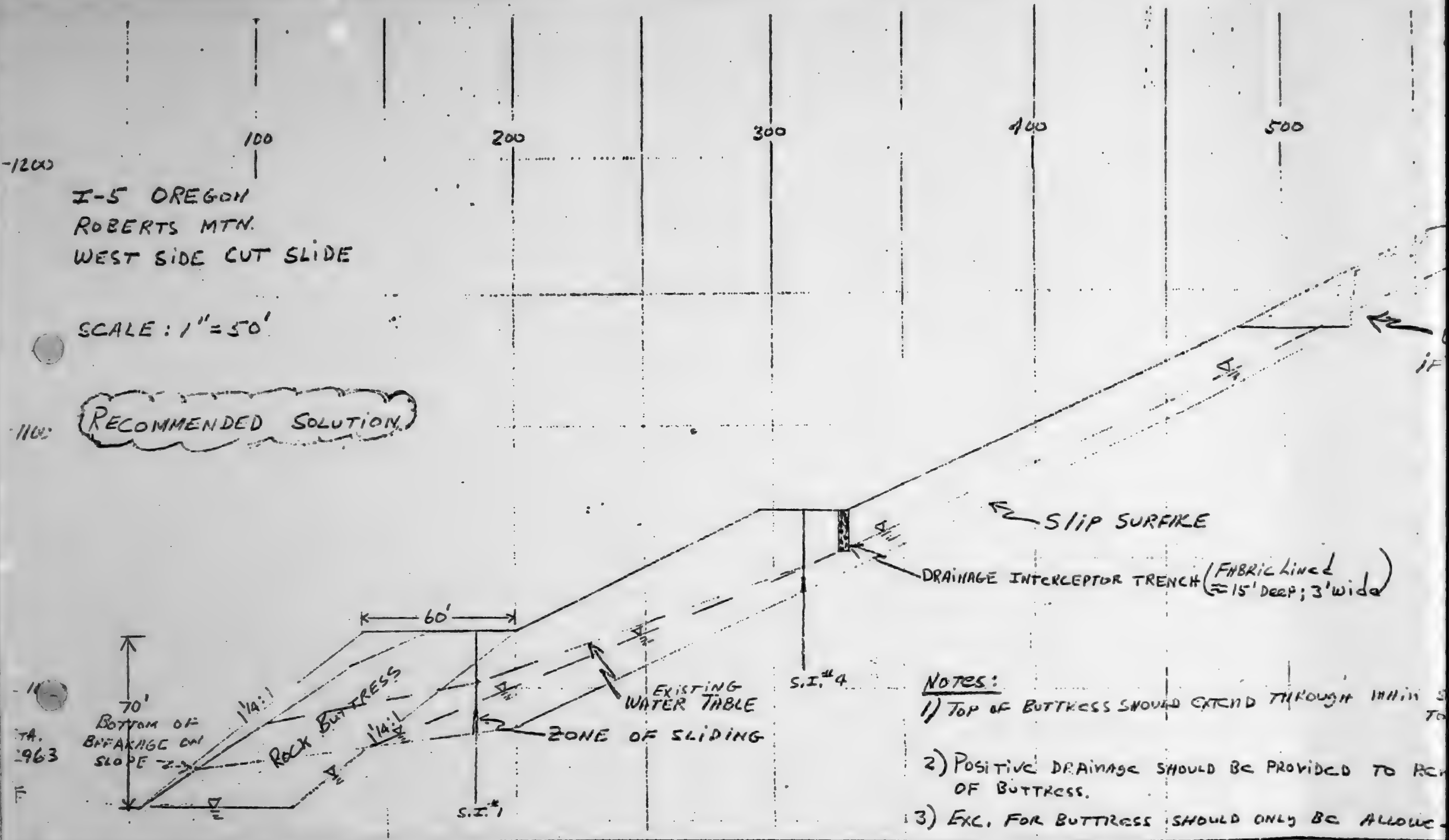
Attachments

cc: Oregon Division

I-5 OREGON
ROBERTS MTN.
WEST SIDE CUT SLIDE

SCALE : 1" = 50'

RECOMMENDED SOLUTION


100
200
300
400
500
-1200
-1100
-1000
STA.
963
70'
60'
BOTTOM OF
BREAKAGE ON
SLOPE
1¼:1
ROCK BUTTRESS
1¼:1
S.I.#1
ZONE OF SLIDING
EXISTING
WATER TABLE
S.I.#4
SLIP SURFACE
DRAINAGE INTERCEPTOR TRENCH (FABRIC LINED ≈15' DEEP; 3' WIDE)
IF

NOTES:

1) TOP OF BUTTRESS SHOULD EXTEND THROUGH WITHIN
TO

2) POSITIVE DRAINAGE SHOULD BE PROVIDED TO RE
OF BUTTRESS.

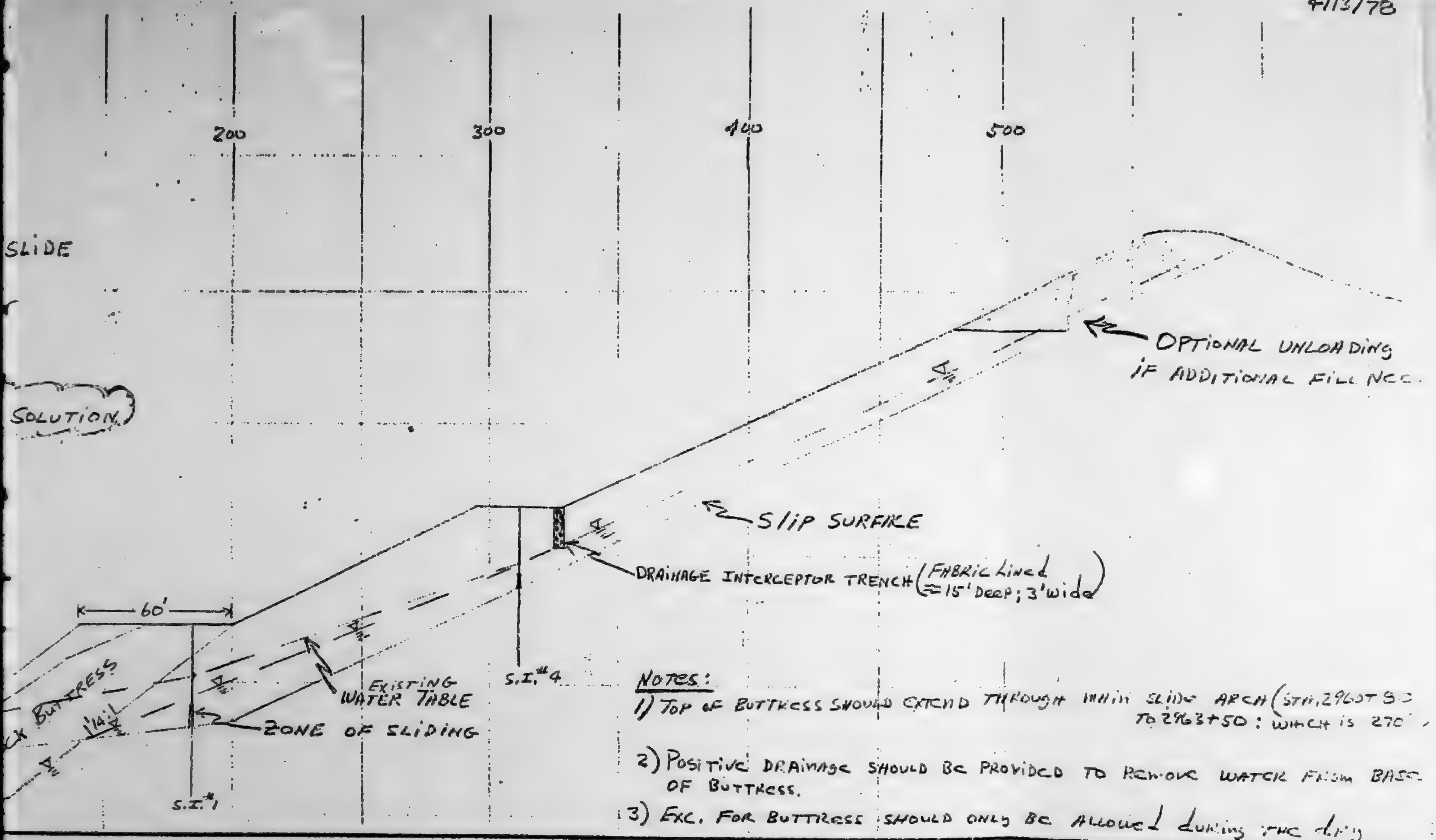
3) EXC. FOR BUTTRESS SHOULD ONLY BE ALLOWE
TIME OF THE YEAR, I.E. THE SUMMER

4) PER STATE'S RECOMMENDATION, EXISTING 2nd
RESHAPED TO DRAIN.

5) WHERE GRASS WILL GROW ON ARCH, SLOPE SHOULD
TO PROMOTE SURFACE RUNOFF.

6) IF POSSIBLE, THE BUTTRESS SHOULD BE CONSTRUCTED
THAT NO MORE THAN APPROXIMATELY 150 FEET IN
OPEN AT ONE TIME IN ORDER TO MINIMIZE THE

4/13/78


SLIDE
SOLUTION
200
300
400
500
60'
CK BUTTRESS
1½:1
S.I.#1
S.I.#4
EXISTING WATER TABLE
ZONE OF SLIDING
SLIP SURFACE
DRAINAGE INTERCEPTOR TRENCH (FABRIC Lined ≈15' DEEP; 3' wide)
OPTIONAL UNLOADING IF ADDITIONAL FILL NEC.

NOTES:

1) TOP OF BUTTRESS SHOULD EXTEND THROUGH MAIN SLIDE ARCH (STA. 2960+ 50 TO 2963+50 : WHICH IS 270' ,

2) POSITIVE DRAINAGE SHOULD BE PROVIDED TO REMOVE WATER FROM BASE OF BUTTRESS.

3) EXC. FOR BUTTRESS SHOULD ONLY BE ALLOWED DURING THE DRY TIME OF THE YEAR, I.E. THE SUMMER MONTHS.

4) PER STATE'S RECOMMENDATION, EXISTING 2nd BENCH SHOULD BE [illegible] TO DRAIN.

5) WHEN GRASS WILL GROW ON ARCH, SLOPE SHOULD BE SEEDED & MULCHED TO PROMOTE SURFACE RUNOFF.

6) IF POSSIBLE, THE BUTTRESS SHOULD BE CONSTRUCTED IN STAGES. IT IS SUGGESTED THAT NO MORE THAN APPROXIMATELY 150 FEET OF THE EXCAVATION BE ALLOWED OPEN AT ONE TIME IN ORDER TO MINIMIZE THE [illegible]

9363 L.

OREGON STATE HIGHWAY DIVISION

ROBERT W. STRAUB
GOVERNOR

F. B. KLABOE
Administrator and
State Highway Engineer

March 6, 1978

Mr. Glen L. Green
Division Administrator
Federal Highway Administration
The Equitable Center, Suite 100
530 Center Street, N.E.
Salem, OR 97301

NOTED
E. S. HUNTER

Dear Mr. Green:

Re: Roberts Mountain Unit Safety
Project and Slide
Stabilization
McLain Ave.-Dillard Jct. Section
Pacific Highway
Douglas County
Your File: HB.3-OR

This is in reply to your request of January 20 for additional items of information, which are transmitted herewith, as follows:

Weber Slide

1. Design analysis for the proposed corrective scheme with calculated safety factor.
2. Evaluation of the effectiveness of the drainage measures that have been installed in the slide area to date.

Roberts Mountain Fill Slide

1. Description of the problem including past history.
2. Preliminary tieback wall design calculations including lateral earth pressure computations and tieback/deadman design.

We have recently reviewed the latest slope indicator information and inspected the present condition of the slides and have concluded that the proposed project is probably the most appropriate to control the slides indefinitely into the future.

RECEIVED
TECHNICAL SERVICES
MAR 6 '78
REFER TO
FOR

Info	Invest	R/D	D/R	Sign	Act	File

Very truly yours,

J H Versteeg

J. H. Versteeg
Engineering

FWY:jh
cc: E. S. Hunter

Form 81-734-3122

Weber Slide
Shady Intrchg.-Dillard Junction Section
Pacific Highway
Douglas County

Effectiveness of Existing Drainage

Ten vertical drains and eight horizontal drains have been installed to date to evaluate the feasibility of slide correction by horizontal drilled drain holes.

Only two of the drains are now flowing, each about 1/2 gallon per minute. All but two had some initial flow, but flows were never large.

About 47 piezometer wells are installed. Most show no significant change since the horizontal drains were installed. Two, SI 1 and SI 2, show an increase in water table height. Possibly because both are located near the outlet of drains, although the outlet at SI 1 is dry. Two, SI 3 and Auger Hole 8, show a drop in water table height, perhaps because they are located near horizontal drains which are low enough to draw the water table down. Two other piezometers, Auger Hole 1 and Slope Indicator 8, show a small drop in the water level over a period of time, but these are not located in the vicinity likely to be affected by the horizontal drains. The data is inconclusive.

The design concept for the proposed additional drainage construction was developed around these facts:

1. The mass threatening to slide is very large, which would require costly construction for positive stabilization.

2. Little maintenance has been needed since the present grade was constructed about 12 years ago, when severe sliding occurred. Since then, the southbound grade has been heaved about a foot through less than 100 feet.

3. The water table is near ground surface at the southbound grade, showing much potential to increase stability by drainage.

4. A number of horizontal drains can be drilled for a small fraction of the cost of usual positive stabilization.

Stability Analysis

Sliding block analysis gives a factor of safety of 1.12 for the stability of Weber Slide after the proposed construction.

Shear strength was obtained by backfiguring from the present slide conditions. All strength is assumed frictional giving c 0, tan Ø o.334. Water table at ground surface. Boundary of the slide taken as that portion shown active in recent years. It was assumed that the additional drains might lower the water table by 3-feet in an over-all drain length of 360-feet through the area where they will be installed.

① includes soil and water

Existing Sliding Force = P_A + W slo

$P_A = \frac{1}{2}\gamma H^2 = \frac{1}{2}\ \overset{①}{180}\ \#/\text{ft}^3 \times 44.60 = 180,000\#$

$W \text{ slope} = 180 \times 35 \times 120\ \#/\text{ft}^3 \times 0.27 = 204,000\#$

$90 \times 53 \times 120 \times 0.03 = 17,200\#$

$140 \times 28 \times 120 \times 0.077 = 36,000\#$

$92 \times 32 \times 120 \times 0.023 = 8,100$

$140 \times 25 \times 120 \times 0.05 = 21,000$

Sliding Force, T = 457,800#

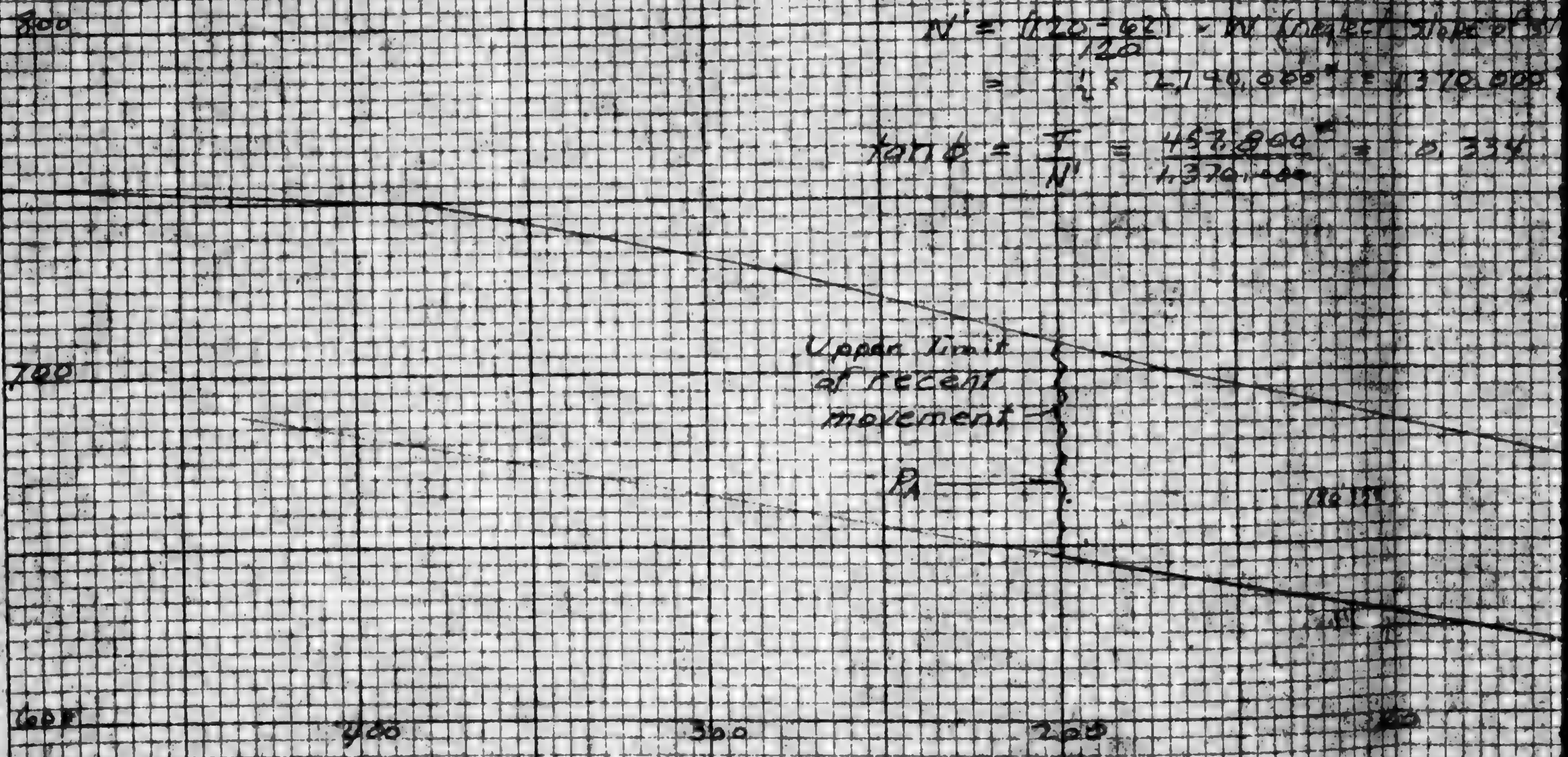
Shear stress $= \frac{T}{L} = \frac{457,800\#}{600'} = 760$

Tan φ reqd if c = 0, W.T. at ground

$N' = \frac{(120-62)}{120} \times W$ (neglect slope of sl

$= \frac{1}{2} \times 2,740,000\# = 1,370,000$

$\tan\phi = \frac{T}{N'} = \frac{457,800\#}{1,370,000} = 0.334$



Legend

— — Proposed Horiz

.... Proposed Rock

= W · Slope of slip surface

= 180,000 #

= 200,000 #

12,200 #

36,000 #

8,100

1,400

= 437,800 #

W

1,180,000 #

234,000

720,000

162,000

420,000

2,736,000 #

= 760 #/ft²

at ground surface

(Slope of slip)

= 1,370,000 #

= 0.334

Estimated Increase in Factor of S
After Proposed Inlays and Horizo

Added weight of rock
120' × 3' × 140 #/ft³ = 50400 #
50' × 10' × 140 = 70,000 #
120,400 #

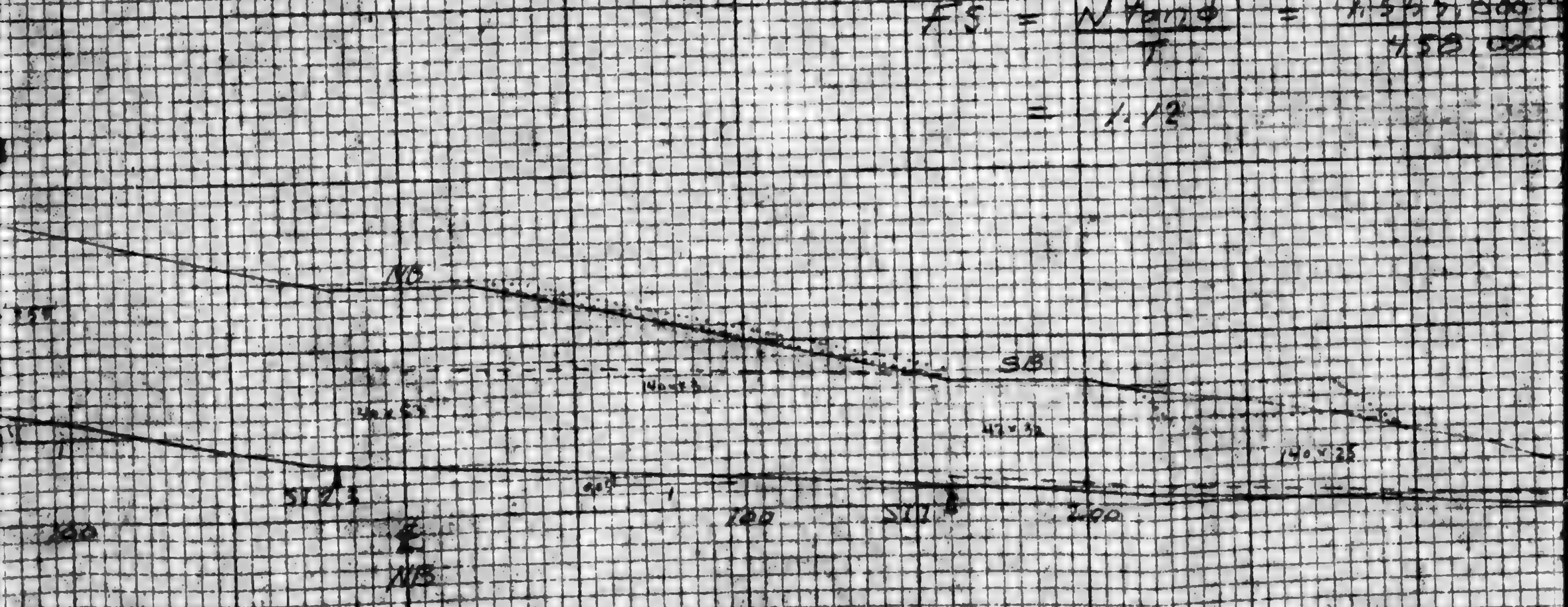
Assume drains lower WT 3' in

Added weight of soil
360' × 3' × 62 #/ft³ =

N' added = 120,400 + 64,80

Total N' = N' original + N' added
= 1,370,000 # + 185,000 #

$$F.S. = \frac{N' \tan\phi}{T} = \frac{1,555,000}{458,000}$$
$$= 1.12$$



Proposed Horizontal Drains
Proposed Rock Inlay

McClain Ave - D
WEBER SLID
1" = 50 ft

Estimated Increase in Factor of Safety Against Sliding After Proposed Inlays and Horizontal Drains are Installed

Added weight of rock

120' × 3' × 140 #/ft³ = 50400#

50' × 10' × 140 = 70,000#

120,400#

Assume drains lower WT 3' in area above them

Added weight of soil

360' × 3' × 62 #/ft³ = 64,800#

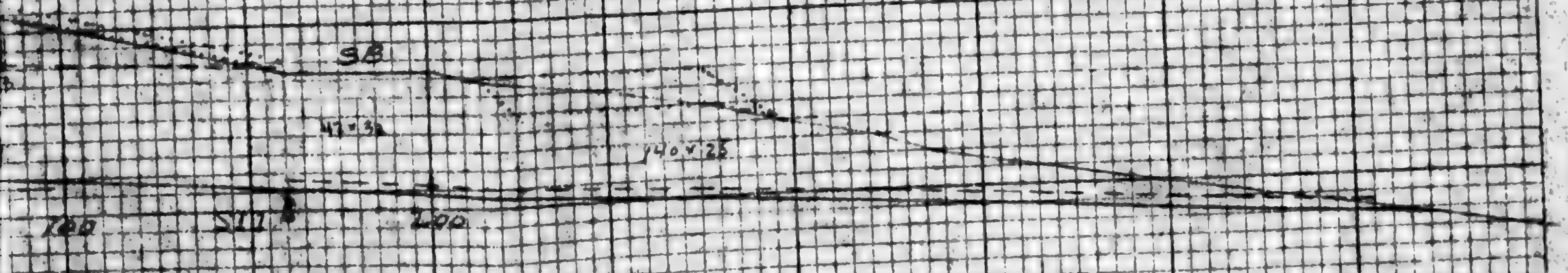
N' added = 120,400 + 64,800 = 185,000#

Total N' = N' original + N' added

= 1,370,000# + 185,000# = 1,555,000#

$$F.S. = \frac{N' \tan\phi}{T} = \frac{1,555,000\# \times 0.334}{458,000\# + \underset{T \text{ due to rock added}}{6000\#}}$$

= 1.12



McClain Ave - Dillard Jctn Section

WEBER SLIDE STABILITY ANALYSIS

1" = 50 ft

2/23/78

"PERFECT" CROSS SECTION
10 X 10 = ONE INCH

Form E-49

OREGON STATE HIGHWAY
DIVISION

TABULATION SHEET
SHEET .... OF .... SHEETS

Form E-49

Weber S

Water Level

S.I.-1				S.I.-2				S.I.-3				S.I.-4				S.I.-5			
Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.
6-73	22^{0}	3-28-77	14^{9}	6-73	32^{0}	1-21-77	12^{0}	5-22-73	7^{0}	2-17-77	18^{5}	6-74	43^{0}			6-74	15^{0}		
7-73	22^{0}	4-12-77	12^{5}	7-73	34^{0}	2-17-77	18^{0}	6-73	8^{0}	3-9-77	15^{8}	7-74	54^{0}			7-74	16^{5}		
8-73	23^{0}	5-2-77	15^{5}	8-73	35^{0}	3-9-77	8^{5}	7-73	9^{0}	3-10-77	16^{6}	8-74	55^{0}			8-74	17^{5}		
11-73	25^{0}	5-23-77	16^{0}	11-73	35^{0}	3-10-77	9^{7}	8-73	9^{0}	3-14-77	16^{8}	10-3-74	56^{0}			10-74	16^{0}		
2-73	20^{0}	7-5-77	20^{6}	12-73	30^{0}	3-14-77	10^{6}	11-73	7^{0}	3-28-77	16^{6}	12-74	56^{0}			12-74	18^{0}		
2-74	22^{0}	12-20-77	19^{0}	1-74	30^{0}	3-28-77	11^{7}	12-73	7^{0}	4-12-77	16^{5}	2-75	54^{0}			2-75	11^{0}		
3-74	20^{0}			2-74	28^{0}	4-12-77	11^{9}	2-74	7^{0}	4-22-77	16^{4}	3-21-75	53^{0}			3-21-75	11^{0}		
4-74	20^{0}			3-74	27^{0}	5-2-77	6^{1}	3-74	8^{0}	5-2-77	16^{4}	5-75	45^{0}			5-75	13^{5}		
5-74	24^{0}			4-74	30^{5}	5-23-77	6^{0}	4-74	8^{0}	5-23-77	15^{2}	6-75	46^{0}			6-75	14^{0}		
7-74	25^{0}			5-74	34^{0}	7-5-77	14^{4}	5-74	8^{0}	7-5-77	16^{9}	8-1-75	50^{0}			8-1-75	17^{2}		
3-6-74	25^{8}			7-74	36^{0}	1-5-78	8^{0}	7-74	11^{0}	12-13-77	17^{5}	2-6-76	41^{0}			1-5-76	13^{0}		
-22-74	25^{8}			8-6-74	35^{5}			8-6-74	11^{2}			3-5-76	42^{0}			2-5-76	14^{0}		
0-74	26^{0}			8-22-74	36^{0}			8-22-74	11^{0}			4-5-76	42^{0}			3-5-76	14^{0}		
2-74	2^{0}			10-74	37^{0}			10-74	9^{5}			5-11-76	44^{0}			4-15-76	14^{0}		
-75	21^{0}			12-74	34^{0}			12-74	9^{0}			1-6-77	50^{0}			5-11-76	16^{0}		
-19-75	19^{3}			2-75	33^{0}			2-75	11^{0}			5-23-77	57^{3}			12-17-76	18^{0}		
-16-7	21^{2}			3-19-75	32^{2}			3-19-75	8^{6}			12-21-77	48^{0}			5-23-77	17^{7}		
-16-75	25^{0}			5-75	31^{0}			5-16-75	8^{5}							12-21-77	13^{0}		
-1-75	25^{9}			6-16-75	28^{0}			6-75	10^{0}										
-5-76	24^{0}			8-1-75	36^{0}			8-1-75	11^{8}										
-5-76	24^{0}			1-5-76	34^{0}			1-5-76	11^{0}										
-9-76	24^{0}			2-6-76	24^{0}			2-6-76	11^{0}										
-12-76	24^{0}			3-8-76	27^{0}			3-8-76	11^{0}										
-4-76	20^{0}			4-9-76	17^{0}			4-9-76	10^{0}										
-21-77	20^{0}			5-11-76	19^{0}			5-11-76	12^{0}										
-17-77	22^{0}			8-16-76	9^{1}			11-15-76	17^{5}										
-14-77	13			11-4-76	[illegible]			1-21-77	5										

Form E-49

OREGON STATE HIGHWAY
DIVISION

TABULATION SHEE
SHEET ...... OF ...... SHEET

Slide

Level Readings)

S.I.-5		S.I.-6				S.I.-7				S.I.-8				S.I.-9			
Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.
		6-27-74	15.0			7-23-74	58.0			7-23-74	11.0			7-23-74	3.0		
		7-2-74	15.2			8-6-74	67.8			8-6-74	11.0			8-6-74	3.0		
		7-23-74	17.0			8-22-74	74.0			8-22-74	6.8			8-22-74	3.2		
		8-6-74	18.2			12-74	73.0			10-3-74	8.2			10-3-74	9.3		
		8-22-74	22.0			2-75	49.0			12-74	6.0			12-74	3.0		
		9-74	44.0			3-21-75	55.0			2-75	9.0			2-75	3.0		
		2-75	9.0			5-75	62.0			3-19-75	3.9			3-19-75	0.5		
		3-21-75	9.0			6-75	66.0			5-16-75	4.0			5-16-75	1.0		
		5-75	13.0			8-1-75	66.0			6-75	2.0			6-75	3.0		
		6-75	14.0			2-6-76	46.0			8-1-75	6.6			8-1-75	3.8		
		8-1-75	31.6			3-5-76	60.0			12-24-75	15.0			12-24-75	4.0		
		2-6-76	18.0			4-15-76	52.0			2-5-76	16.0			2-5-76	3.0		
		3-5-76	16.0			5-12-76	65.0			3-5-76	15.0			3-5-76	5.0		
		4-15-76	18.0			1-6-77	75.0			4-9-76	15.0			4-9-76	3.0		
		5-12-76	18.0			5-23-77	71.2			5-12-76	15.0			5-12-76	3.0		
		1-6-77	42.0			12-21-77	62.0			12-17-76	14.0			12-17-76	2.5		
		5-23-77	41.2			1-26-78	42.8			2-17-77	13.0			2-17-77	3.0		
		12-21-77	13.0							5-2-77	10.0			5-2-77	1.0		
		1-26-78	12.2							5-23-77	8.8			5-23-77	0.5		
										12-20-77	13.0			7-5-77	3.8		
														12-20-77	2.0		

Form E-40

OREGON STATE HIGHWAY
DIVISION

TABULATION SHEET

SHEET .... OF .... SHEETS

Weber Sl

(Water Level Rea

S.I.-10				S.I.-11				S.I.-12				S.I.-13				S.I.-15		
Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date
7-23-74	36^{0}			8-22-74	80^{0}			8-22-74	52^{6}			8-22-74	13^{5}			12-74	17^{0}	
8-6-74	4^{6}			12-74	78^{0}			12-74	55^{0}			12-74	15^{0}			2-75	11^{0}	
8-22-74	5^{6}			2-75	74^{0}			2-75	55^{0}			2-75	9^{0}			5-16-75	13^{6}	
12-74	21^{0}			5-75	72^{5}			5-75	54^{5}			5-75	11^{0}			6-75	14^{0}	
2-75	4^{0}			6-75	74^{0}			6-75	56^{0}			6-75	12^{0}			8-1-75	15^{0}	
5-75	3^{0}			8-1-75	77^{0}			8-1-75	57^{5}			8-1-75	13^{0}			1-5-76	12^{0}	
6-75	4^{0}			1-5-76	76^{0}			1-5-76	56^{0}			1-5-76	12^{0}			2-5-76	14^{0}	
8-1-75	5^{4}			2-5-76	75^{0}			2-5-76	57^{0}			2-5-76	12^{0}			3-5-76	14^{0}	
1-5-76	4^{0}			3-5-76	76^{0}			3-5-76	56^{0}			3-5-76	12^{0}			4-9-76	14^{0}	
3-5-76	4^{0}			4-15-76	75^{0}			4-15-76	56^{0}			4-9-76	11^{0}			5-12-76	15^{0}	
4-15-76	4^{0}			5-11-76	75^{0}			5-11-76	56^{0}			5-12-76	12^{0}			12-17-76	15^{0}	
5-12-76	4^{0}			1-6-77	77^{0}			1-6-77	56^{0}			12-17-76	14^{0}			12-20-77	13^{0}	
12-17-76	19^{0}			5-23-77	76^{0}			5-24-77	56^{0}			5-23-77	12^{0}					
12-20-77	5^{0}			12-21-77	79^{0}			12-21-77	56^{0}			1-6-78	10^{0}					
1-26-78	4^{6}			1-26-78	75^{7}			1-26-78	56^{5}									

N SHEET

... SHEETS

ber

Level

Form E-40

OREGON STATE HIGHWAY
DIVISION

TA

SHEET ....

Slide

Readings)

S.I.-15		S.I.-16		S.I.-17		S.I.-18		
Date W.L.	Date W.L.	Date W.L.	Date W.L.	Date W.L.	Date W.L.	Date W.L.	Date W.L.	Da
2-74 $17^{\underline{0}}$		6-8-77 $15^{\underline{5}}$		6-1-77 $6^{\underline{0}}$		7-5-77 $33^{\underline{1}}$		
2-75 $11^{\underline{0}}$		7-5-77 $8^{\underline{2}}$		6-8-77 $7^{\underline{0}}$		12-20-77 $23^{\underline{0}}$		
-16-75 $13^{\underline{1}}$		12-21-77 $6^{\underline{0}}$		7-5-77 $8^{\underline{2}}$				
-75 $14^{\underline{0}}$				12-21-77 $4^{\underline{0}}$				
-1-75 $15^{\underline{0}}$								
-5-76 $12^{\underline{0}}$								
-5-76 $14^{\underline{0}}$								
-5-76 $14^{\underline{0}}$								
-9-76 $14^{\underline{0}}$								
-12-76 $15^{\underline{0}}$								
-17-76 $15^{\underline{0}}$								
2-20-77 $13^{\underline{0}}$								

Form E-49

OREGON STATE HIGHWAY
DIVISION

TABULATION SHEET
SHEET .... OF .... SHEETS

Weber Slide

(Water Level Readin

P.S. 1-77				PS 2-77				PS 3-77				A-1				A 2		
Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date
3-7-77	15^{3}			3-9-77	3^{8}			3-14-77	31^{6}			5-31-74	9^{5}			6-74	Dry	
3-9-77	14^{0}			3-14-77	4^{9}			3-28-77	34^{9}			6-3-74	9^{0}			7-74	0^{6}	
3-14-77	15^{1}			3-28-77	5^{1}			4-12-77	33^{0}			6-12-74	13^{0}			8-74	20^{8}	
3-28-77	15^{1}			4-12-77	4^{8}			4-22-77	33^{2}			6-20-74	13^{0}			12-74	17^{0}	
4-12-77	14^{8}			5-2-77	5^{0}			5-2-77	33^{3}			7-23-74	13^{4}			2-75	13^{9}	
4-12-77	14^{9}			7-5-77	5^{2}			7-5-77	33^{3}			8-6-74	13^{5}			3-75	12^{5}	
5-2-77	14^{9}			1-9-78	7^{6}			1-9-78	34^{0}			8-22-74	13^{8}			5-75	15	
7-5-77	14^{8}											12-74	13^{5}			6-75	13	
1-9-78	15^{0}											2-75	10^{0}			8-75	17	
												3-75	8^{5}			Covered over		
												5-75	13^{0}					
												6-75	15^{5}					
												8-1-75	13^{5}					
												1-76	14^{7}					
												2-76	12^{5}					
												3-76	13^{0}					
												4-76	12^{5}					
												5-76	12^{5}					
												12-21-76	13^{2}					
												5-24-77	Covered over.					

ET Form E-48

TS

OREGON STATE HIGHWAY
DIVISION

TABULATION SHEE

SHEET .... OF .... SHEET

Slide

eadings) - Piezometers

. 2	A-3		A-4		A-5		A-6	
Date W.L.	Date W.L.	Date W.L.	Date W.L.	Date W.L.	Date W.L.	Date W.L.	Date W.L.	Date W.L.
	6-74 14^{0}		6-26-74 14^{5}		7-2-74 2^{0}		7-2-74 Dry	
	7-23-74 15^{5}		7-2-74 14^{2}		7-23-74 48^{0}		8-6-74 Dry	
	8-22-74 16^{2}		7-23-74 14^{0}		8-6-74 44^{0}		12-74 Dry	
	12-74 18^{0}		8-6-74 14^{8}		8-22-74 Dry		3-75 7^{0}	
	2-75 10^{7}		8-22-74 28^{0}		9-74 48^{0}		5-75 Dry	
	3-75 9^{0}		12-9-74 15^{0}		2-75 48^{0}		6-75 Dry	
	5-75 13^{0}		2-75 12^{0}		3-75 40^{0}		8-75 Dry	
	6-75 14^{0}		3-75 7^{5}		5-75 42^{5}		1-12-76 27^{1}	
	8-75 16^{5}		5-75 13^{5}		6-75 38^{0}		2-76 Dry	
	1-12-76 9^{7}		6-75 15^{0}		8-75 44^{5}		3-76 Dry	
	2-76 13^{5}		8-75 15^{5}		1-12-76 38^{0}		4-76 Dry	
	3-76 12^{5}		1-12-76 7^{0}		2-76 42^{0}		5-76 Dry	
	4-76 13^{5}		2-76 14^{0}		3-76 43^{0}		12-76 Dry	
	5-76 14^{0}		3-76 13^{5}		4-76 43^{0}		5-77 Dry	
	12-21-76 20^{0}		4-1-76 13^{5}		5-76 43^{0}		1-26-78 39^{7}	
	5-24-77 17^{3}		5-76 14^{5}		12-21-76 48^{0}			
	1-26-78 11^{3}		12-21-76 plugged @ 5^{0}		5-24-77 48^{6}			
			5-24-77 15^{0}					
			1-26-78 11^{6}					

Form E-46

OREGON STATE HIGHWAY
DIVISION

TABULATION SHEET

SHEET .... OF .... SHEETS

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(Water Level Readi

	A-7				A-8				A-9				A-10				A11		
Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W
7-2-74	35^{2}			7-23-74	3^{6}			7-23-74	20^{0}			7-23-74	15^{0}			7-23-74	4^{9}		
7-23-74	41^{0}			8-6-74	4^{1}			8-22-74	24^{0}			8-6-74	15^{0}			8-6-74	9^{9}		
8-22-74	43^{0}			8-22-74	4^{0}			2-75	9^{6}			8-22-74	66^{0}			8-22-74	4^{5}		
12-9-74	38^{5}			2-75	4^{0}			3-19-75	6^{9}			2-75	10^{5}			10-3-74	4^{3}		
3-75	31^{2}			3-20-75	3^{6}			5-16-75	11^{5}			3-75	11^{5}			2-75	4^{9}		
5-75	25^{0}			5-75	3^{0}			6-75	18^{5}			5-16-75	13^{5}			3-19-75	1^{9}		
6-75	37^{0}			6-75	3^{5}			8-75	19^{6}			6-75	14^{5}			5-16-75	2^{5}		
8-75	43^{5}			8-75	3^{5}			1-76	1^{0}			8-75	15			6-75	3^{9}		
1-76	28^{7}			1-76	3^{0}			2-76	16^{5}			1-76	7^{3}			8-75	4^{0}		
2-76	34^{5}			2-76	3^{5}			3-76	12^{0}			2-76	12^{0}			1-76	1^{8}		
3-76	34^{5}			3-76	3^{2}			4-76	16^{5}			3-76	12^{8}			2-76	2^{3}		
4-76	44^{0}			4-76	3^{0}			5-76	18^{0}			4-76	12^{0}			3-76	2^{3}		
5-76	35^{0}			5-76	3^{0}			8-16-76	18^{0}			5-76	14^{0}			4-76	2^{2}		
5-24-77	37^{6}			12-21-76	4^{8}			12-21-76	22^{5}			8-16-76	15^{0}			5-26	2^{2}		
1-26-78	Dry (30^{3})			5-24-77	11^{8}			3-28-77	20^{0}			12-21-76	17^{0}			12-21-76	4^{5}		
				1-26-78	5^{3}			5-2-77	17^{8}			3-28-77	17^{0}			5-2-77	2^{3}		
								5-24-77	17^{1}			5-2-77	16^{8}			5-24-77	2^{9}		
												5-24-77	16^{9}			1-9-78	4^{6}		

Form E-4

ON SHEET Form E-40

SHEETS

OREGON STATE HIGHWAY
DIVISION

TA

SHEET ....

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r Leve Readings) – Piezometers

A11				A-12				A-13							
Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.	Date	W.L.
7-23-74	$4^{\underline{0}}$			7-23-74	$4^{\underline{2}}$			7-23-74	$48^{\underline{0}}$						
8-6-74	$9^{\underline{0}}$			8-6-74	$4^{\underline{2}}$			8-6-74	$48^{\underline{0}}$						
7-22-74	$4^{\underline{5}}$			8-22-74	$4^{\underline{4}}$			8-23-74	$50^{\underline{0}}$						
10-3-74	$4^{\underline{3}}$			10-3-74	$4^{\underline{5}}$			10-74	$24^{\underline{0}}$						
2-75	$4^{\underline{0}}$			2-75	$3^{\underline{5}}$			12-9-74	$23^{\underline{4}}$						
3-19-75	$1^{\underline{9}}$			3-19-75	$2^{\underline{1}}$			2-75	$1^{\underline{5}}$						
5-16-75	$2^{\underline{9}}$			5-16-75	$2^{\underline{3}}$			3-75	$19^{\underline{5}}$						
6-75	$3^{\underline{9}}$			6-75	$2^{\underline{5}}$			5-16-75	$20^{\underline{5}}$						
8-75	$4^{\underline{0}}$			8-75	$4^{\underline{2}}$			6-75	$22^{\underline{5}}$						
1-76	$1^{\underline{8}}$			1-76	$1^{\underline{5}}$			8-75	$21^{\underline{8}}$						
2-76	$2^{\underline{3}}$			2-76	$2^{\underline{2}}$			1-76	$11^{\underline{0}}$						
3-76	$2^{\underline{2}}$			3-76	$2^{\underline{3}}$			2-76	$20^{\underline{0}}$						
4-76	$2^{\underline{2}}$			4-76	$2^{\underline{1}}$			3-76	$20^{\underline{4}}$						
5-76	$2^{\underline{2}}$			5-76	$2^{\underline{3}}$			4-76	$14^{\underline{9}}$						
12-21-76	$4^{\underline{5}}$			12-21-76	$4^{\underline{8}}$			5-76	$20^{\underline{5}}$						
5-2-77	$2^{\underline{3}}$			5-2-77	$2^{\underline{5}}$			12-21-76	$24^{\underline{5}}$						
5-24-77	$2^{\underline{9}}$			5-24-77	$2^{\underline{5}}$			5-2-77	$0^{\underline{0}}$						
1-9-78	$4^{\underline{6}}$			1-9-78	$3^{\underline{6}}$			5-24-77	$14^{\underline{0}}$						
								1-9-78	$21^{\underline{6}}$						

Form E-

OREGON STATE HIGHWAY
DIVISION

TABULATION SHEET

SHEET .... OF .... SHEETS

Weber Slid

(Water Level Readin

*See Rpt. dtd.
for closer spaced
readings

(6") V.N. 1-75NB	(6") V.W. 2-75NB	* (6") V.W. 3-75NB	* (18") V.W. 3-75NB	(6") V.W. 4-75NB	(18") V.W. 4-75NB		(6") V.W. 1-75SB	(6 V.W. 2-
Date W.L.	Date W.L.	Date W.L.	Date W.L.	Date W.L.	Date W.L.	Date W.L.	Date W.L.	Date W
3-6-75 14^{0}	3-14-75 9^{3}	3-6-75 9^{5}	5-16-75 16^{5}	3-14-75 13^{1}	5-16-75 15^{2}		2-21-75 25^{6}	2-25-
3-19-75 35^{7}	3-19-75 10^{0}	3-19-75 6^{0}	2-6-76 4^{1}	3-19-75 3^{2}	3-8-76 15^{0}		3-19-75 16^{6}	3-19-
5-16-75 32^{5}	5-16-75 10^{0}	5-16-75 15^{0}	3-8-76 3^{0}	5-16-75 15^{0}	4-76 14^{0}		5-16-75 26^{8}	5-16-7
6-16-75 31^{1}	6-16-75 10^{1}	6-16-75 20^{0}	4-28-76 3^{1}	6-6-75 16^{5}	5-13-76 16^{0}		6-13-75 28^{9}	6-13-7
8-1-75 31^{5}	8-1-75 10^{2}	8-1-75 20^{0}	4-29-76 6^{0}	8-1-75 17^{0}	8-16-76 [illegible] 17^{5}		8-1-75 28^{5}	8-1-75
1-12-76 26^{2}	1-12-76 2^{1}	1-12-76 1^{0}	5-30-76 15^{4}	1-12-76 2^{7}	3-28-77 [illegible] 17^{5}		1-12-76 14^{7}	1-12-7
2-6-76 30^{6}	2-6-76 9^{2}	2-6-76 11^{0}	6-1-76 4^{1}	2-6-76 13^{9}	5-2-77 17^{9}		2-6-76 20^{5}	2-6-7
3-8-76 30^{0}	3-8-76 9^{2}	3-8-76 8^{6}	7-6-76 19^{0}	3-8-76 14^{5}	5-24-77 17^{1}		3-8-76 26^{7}	3-8-7
4-76 29^{9}	4-76 9^{6}	4-76 8^{0}	7-12-76 3^{2}	4-76 14^{0}	1-9-78 14^{6}		4-76 27^{8}	4-76
5-12-76 30^{5}	5-12-76 10^{0}	5-12-76 16^{0}	8-3-76 18^{8}	5-12-76 15^{8}			5-12-76 27^{5}	5-12-
12-21-76 33^{9}	12-21-76 10^{2}	5-17-76 17^{5}	8-16-76 2^{2}	8-16-76 15^{0}			12-21-76 30^{8}	12-21-
3-28-77 32^{8}	3-28-77 10^{0}	5-28-76 18^{7}	9-3-76 14^{6}	12-21-76 18^{5}			3-28-77 30^{5}	3-28-
5-2-77 30^{0}	4-12-77 10^{0}	6-1-76 11^{7}	9-15-76 5^{9}	3-25-77 17^{9}			5-2-77 30^{8}	4-12-
5-24-77 32^{3}	5-2-77 4^{9}	6-8-76 17^{8}	10-8-76 12^{0}	5-2-77 16^{3}			5-24-77 30^{3}	5-2-
1-9-78 32^{0}	5-24-77 10^{0}	6-16-76 19^{3}	11-1-76 2^{5}	5-24-77 18^{4}			1-9-78 28^{0}	5-25
	7-5-77 9^{8}	7-6-76 21^{3}	11-8-76 8^{8}	1-9-78 12^{6}				7-5-
	1-9-78 5^{0}	8-3-76 21^{9}	11-19-76 5^{9}					1-9-
		8-16-76 7^{8}	1-19-77 16^{3}					
		9-12-76 10^{3}	3-29-77 5^{2}					
		10-8-76 20^{3}	4-22-77 6^{0}					
		11-8-76 16^{2}	5-2-77 2^{6}					
		12-21-76 17^{2}	5-24-77 3^{3}					
		1-19-77 13^{2}	7-5-77 (50 ft muddy) 18^{8}					
		3-28-77 11^{9}	1-9-78 2^{6}					
		5-24-77 9^{1}						
		7-5-77 22^{1}						
		[illegible]-78 6						

ON SHEET

...... SHEETS

Form E-40

OREGON STATE HIGHWAY
DIVISION

SHEET ....

T.

ber Slide

Level Readings) – Vertical Wells

(6") V.W. 1-75 SB Date	W.L.	(6") V.W. 2-75 SB Date	W.L.	(6") V.W. 3-75 SB Date	W.L.	(6") V.W. 4-75 SB Date	W.L.	(18") V.W. 4-75 SB Date	W.L.	(6") V.W. 5-75 SB Date	W.L.	(18") V.W. 5-75 SB Date	W.L.	(6") V.W. 6-7?-SB Date	W.L.	D...
2-21-75	25.6	2-25-75	8.0	2-25-75	0.5	2-27-75	4.5	5-16-75	2.6	3-3-75	0.6	5-16-75	2.5	3-3-75	13.0	
3-19-75	16.6	3-19-75	5.9	3-19-75	2.1	3-19-75	2.9	2-6-76	2.5	3-19-75	0.5	2-6-76	2.0	3-19-75	0.5	
5-16-75	26.8	5-16-75	5.9	5-16-75	2.4	5-16-75	2.6	3-8-76	2.5	5-16-75	2.0	3-8-76	2.5	5-16-75	0.5	
6-13-75	28.9	6-13-75	6.0	6-13-75	3.0	6-13-75	3.0	4-76	2.3	6-13-75	3.0	4-76	2.7	6-13-75	1.5	
8-1-75	28.5	8-1-75	5.1	8-1-75	2.6	8-1-75	2.7	5-12-76	2.4	8-1-75	2.7	5-12-76	2.5	8-1-75	2.5	
1-12-76	14.7	1-12-76	5.0	1-12-76	1.6	1-12-76	2.5	4-12-77	2.3	1-12-76	2.5	4-12-77	2.2	1-12-76	0.0	
2-6-76	20.5	2-6-76	5.5	2-6-76	2.2	2-6-76	2.7	5-2-77	2.6	2-6-76	1.2	5-2-77	2.8	2-6-76	0.6	
3-8-76	26.7	3-8-76	5.9	3-8-76	2.3	3-8-76	2.7	5-24-77	2.6	3-8-76	1.1	5-24-77	2.6	3-8-76	0.3	
4-76	27.9	4-76	5.3	4-76	2.1	4-76	2.7	7-5-77	3.5	4-76	1.1	7-5-77	3.9	4-76	0.0	
5-12-76	27.5	5-12-76	5.9	5-12-76	2.9	5-12-76	2.7	1-9-78	3.6	5-12-76	1.3	1-9-78	4.0	5-12-76	0.3	
12-21-76	30.8	12-21-76	6.0	12-21-76	3.0	12-21-76	3.5			12-21-76	3.0			12-21-76	2.0	
3-28-77	30.5	3-28-77	5.8	4-12-77	2.8	4-12-77	3.2			4-12-77	2.5			4-12-77	0.8	
5-2-77	30.8	4-12-77	5.8	5-2-77	2.6	5-2-77	2.7			5-2-77	1.3			5-2-77	0.5	
5-24-77	30.3	5-2-77	5.8	5-24-77	2.7	5-24-77	2.9			5-24-77	1.4			5-24-77	0.5	
1-9-78	28.9	5-24-77	5.1	7-5-77	2.8	7-5-77	3.2			1-9-78	1.2			7-5-77	2.5	
		7-5-77	5.7	1-9-78	3.6	1-9-78	4.0							1-9-78	0.2	
		1-9-78	7.6													

Roberts Mtn. North Side Fill Failure
Shady Int.-Dillard Jct. Section
Pacific Highway
Douglas County

History

The initial failure occurred in April, 1955, after the embankment was brought up to grade during original freeway construction. Corrective measures involved installation of rock toe trenches and drainage. Construction on this contract was completed in November, 1955.

The 1955 corrective measures were not successful, and slide problems continued. As part of a slope stabilization contract, a counterbalance was constructed at the toe of the embankment and the embankment slope was reshaped, typical section attached. This contract was completed in September, 1957.

The embankment slope bulged and failed midway between the roadbed and counterbalance, and slide problems continued. During the 1964-65 reconstruction of the freeway, the alignment was moved about 30' into the hill to get away from the slide area. Shortly after completion of the new construction, the slide broke back three feet into the shoulder of the new alignment. Subsequent temporary repairs involved bridging the sunken shoulder area with steel H-beams placed longitudinally to support the guard rail and shoulder area. Borrow material was brought in periodically to keep the sunken area built up.

In 1969, a slide correction contract was let to shift the alignment over 10-11' to get away from the sunken shoulder area. The centerline established during that contract is what is currently being utilized. The temporary repairs completed in 1965 were left in place, and maintenance forces continued to periodically bring in borrow material to keep the sunken shoulder area built up.

Since 1969, the situation has essentially been status quo. Available evidence indicates that the rear scarp of the slide area has not progressed rearward more than 1-2' since 1965. Active movement of the main slide mass has continued, with continual settlement of borrow material placed on the sunken old shoulder area.

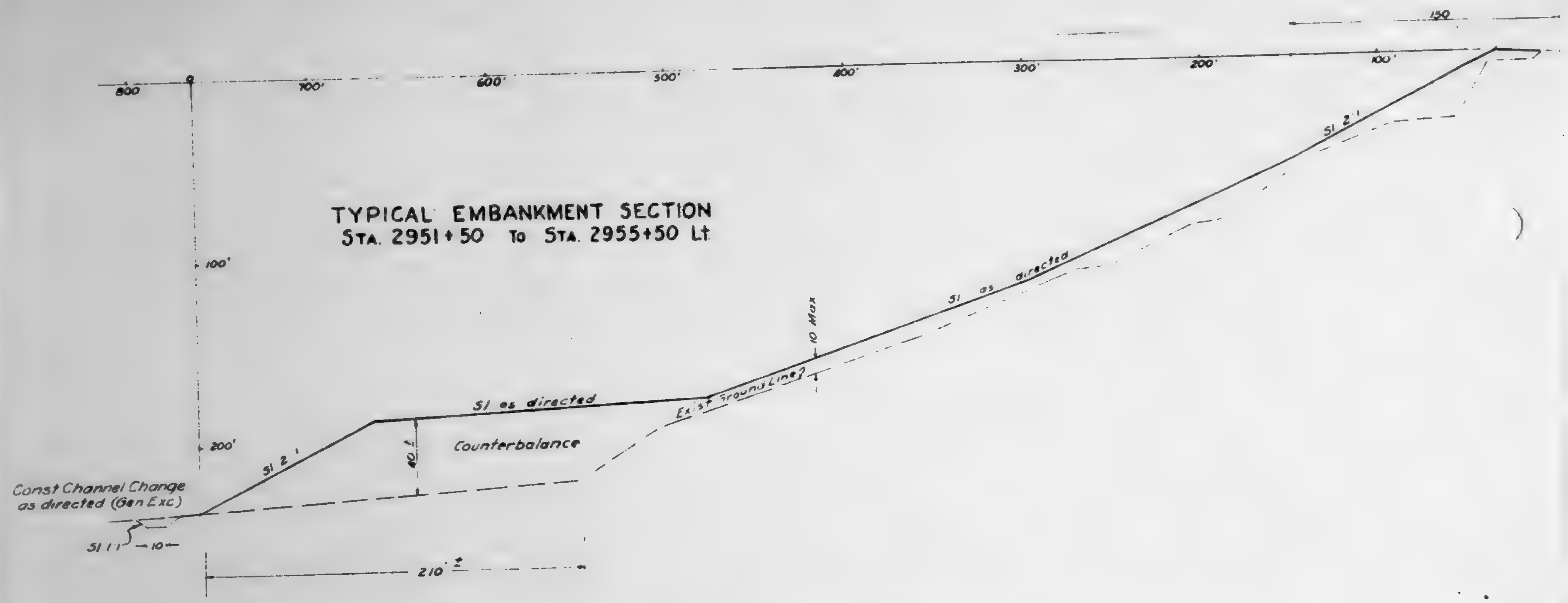
Current Problem

Currently, there exists a near vertical scarp with upper terminus in the pavement rock slope just outside the guard rail for a length of about 70-feet at station 2954. Numerous attempts to support this scarp with fill have failed because the weight causes the slide to subside. The scarp has been stable for several years except for ravelling. Therefore, it is now proposed to stop the ravelling with a structural wall placed against the scarp.

RC [illegible]TS MTN. SUMMIT SECTION PACIFIC HWY. DOUGLAS COUNTY				I.o. 2
FED. ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
8	OREGON	I-78(34)		See Index

REVISED AS CONSTRUCTED
12 57 CONTRACT 4892
12-57 4892

TYPICAL EMBANKMENT SECTION
Sta. 2951+50 To Sta. 2955+50 Lt.


150
800
700'
600'
500'
400'
300'
200'
100'
100'
200'
Sl 2:1
Sl as directed
10 Max
Exist Ground Line?
Sl as directed
40'±
Counterbalance
Sl 2:1
Const Channel Change
as directed (Gen Exc.)
Sl 1:1
10
210'±

Northside Fill Slide
1957 Work

SUMMARY

Length of FAI Project 0.331 Mile

ITEM	UNIT	NET QUANTITY	ALLOWANCE	TOTAL
General Excavation, Unclassified	Cu Yd	114,350	11,650	126,000
Type 2 Fence	Rod	130	10	140

TYPICAL EXCA

Form 81-734-3136

Oregon State Highway Division
BRIDGE DESIGN UNIT

Sheet 3

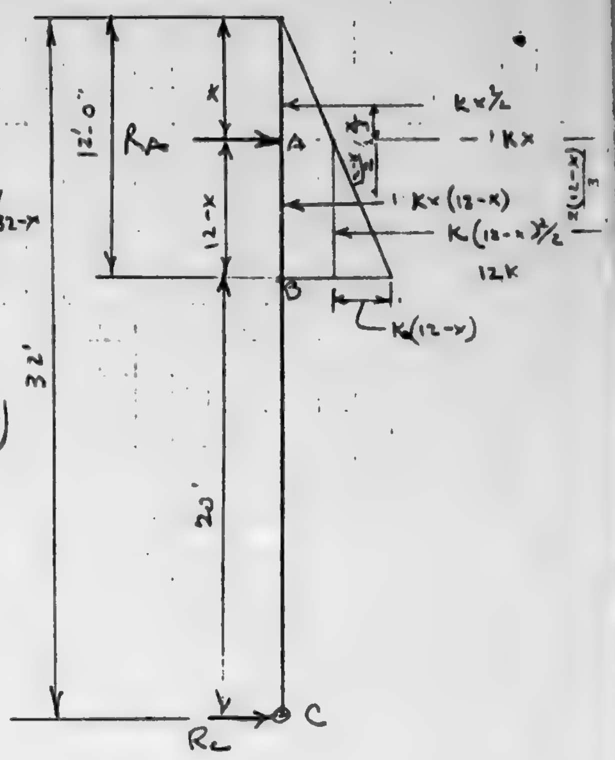
Bridge Robert Mountain
County Doug
Calculations by TE
Date 10-7-77
Bridge No. 16285

SP*67746-734

Assume Active Earth pressure w/o surcharge. (8' behind face of guard rail)

Calculate x so that $M_A = M_B$

let $K_A \gamma = K$



Cantilever $M_A = Kx^2/2 \cdot x/3 = Kx^3/6$

$V_{AC} = \left[Kx(12-x)\left(20+\frac{12-x}{2}\right) + \frac{K}{2}(12-x)^2\left(20+\frac{12-x}{3}\right) + Kx^3/6\right] / 32-x$

$M_B = V_{AC}(12-x) - Kx(12-x)\left(\frac{12-x}{2}\right) - \frac{K}{2}(12-x)^2\left(\frac{12-x}{3}\right)$

$- M_A(20) / (32-x)$

$= \frac{1}{(32-x)}\Big[(12-x)\Big(Kx(12-x)\overset{(26-\frac{x}{2})}{\left(20+\frac{(12-x)}{2}\right)} + (12-x)\Big(\frac{K}{2}(12-x)^2\overset{(24-x/3)}{\left(20+\frac{(12-x)}{3}\right)}$

$+ (12-x)(Kx^3/6)$

$- (32-x)\left(\frac{Kx}{2}\right)(12-x)^2 - (32-x)\left(\frac{K}{6}\right)(12-x)^3$

$- (20)(Kx^3/6)\Big]$

see sheet 4

$M_B = \frac{K}{(32-x)}\left[11520 - 1440x + 2x^3 - x^4/6\right] = Kx^3/6$

then $6\left[11520 - 1440x + 2x^3 - x^4/6\right] = 32x^3 - x^4$

$69120 - 8640x + 12x^3 - x^4 = 32x^3 - x^4$

$69120 - 8640x - 20x^3 = 0$

If $x = 7$ $69120 - 60480 - 6860 = 1720$

$x = 7.3$ $69120 - 63072 - 7780 = -1732$

$x = 7.15$ $69120 - 61776 - 7310 = 33$

$R_A = Kx^2/2 + \frac{K}{(32-x)}\left[x(12-x)\left(26-\frac{x}{2}\right) + \frac{1}{2}(12-x)^2\left(24-\frac{x}{3}\right) + \frac{x^3}{6}\right)$

$= Kx^2/2 + \frac{K}{(32-x)}\left(1728 - 16x^2 + x^3/2\right)$

if $x = 7$ $R_A = K\left(24.5 + \frac{1}{25}\left(1728 - 784 + 171.5\right)\right) = 69.12K$ $\overset{44.62}{}$

total earth Load $= K(12)^2/2 = 72K$ $V_{BC} = 72 - 69.12 = 2.88$

$M_A = Kx^3/6 = K(7)^3/6 = 57.16K$ kft/ft $M_B = K(72 - 69.12)20 = 57.6K$

Form 81-734-3136

For tie-backs see Powell Blvd. contract 7741

Oregon State Highway Division
BRIDGE DESIGN UNIT

Sheet 4

Bridge Roberts Mtn. Slide

County Doug

Calculations by AB

Date 10-7-77

Bridge No. 16285

SP*07746-734

Calculations for sheet 3.

$$
\begin{aligned}
(12-x)^2 &= 144 - 24x + x^2 \\
&\quad\ \underline{(26 - x/2)} \\
&\quad 3744 - 624x + 26x^2 \\
&\quad\quad\ \underline{- 72x + 12x^2 - .5x^3} \\
&\quad 3744 - 696x + 38x^2 - .5x^3 \quad \cdot kx = \underline{3744kx - 696kx^2 + 38kx^3 - .5k}
\end{aligned}
$$

$$
\begin{aligned}
& 144 - 24x + x^2 \\
& \underline{(12 - x)} \\
& 1728 - 288x + 12x^2 \\
& \quad\ \underline{- 144x + 24x^2 - x^3} \\
(12-x)^3 = \ & 1728 - 432x + 36x^2 - x^3 \\
& \quad\ \underline{(24 - x/3)} \\
& 41472 - 10368x + 864x^2 - 24x^3 \\
& \quad\ \underline{- 576x + 144x^2 - 12x^3 + x^4/3} \\
& 41472 - 10944x + 1008x^2 - 36x^3 + x^4/3 \quad \cdot \frac{k}{2} = 20736k - \underline{5472kx} + 504kx^2 - 18kx^3 + kx
\end{aligned}
$$

$$
\begin{aligned}
& 144 - 24x + x^2 \\
& \underline{-32 + x} \\
& -4608 + 768x - 32x^2 \\
& \quad\ \underline{+ 144x - 24x^2 + x^3} \\
& -4608 + 912x - 56x^2 + x^3 \quad \cdot \frac{kx}{2} \quad = \quad -\underline{2304}kx + 456kx^2 - \underline{28}kx^3 + .5kx
\end{aligned}
$$

$$
\begin{aligned}
& 1728 - 432x + 36x^2 - x^3 \\
& \quad\ \underline{(-32 + x)} \\
& -55296 + 13824x - 1152x^2 + 32x^3 \\
& \quad\ \underline{+ 1728x - 432x^2 + 36x^3 - x^4} \\
& -55296 + 15552x - 1584x^2 + 68x^3 - x^4 \quad \cdot \frac{k}{6} \quad = -9216k + \underline{2592kx} - 264kx^2 + 11.33kx^3 - kx^4/6 \\
& + (12 - x)(kx^3/6) \qquad\qquad\qquad\qquad\qquad\qquad\qquad + 2kx^3 - kx^4/6 \\
& - (20)(kx^3/6) \qquad\qquad\qquad = \qquad\qquad\qquad\qquad -3.33kx^3
\end{aligned}
$$

$$
M_B = \frac{k}{(32-x)}\left[11520 - 1440x + 0.0x^2 + 2.0x^3 - kx^4/6\right]
$$

$$
\begin{aligned}
& 12x - x^2 \\
& \underline{26 - x/2} \\
& 312x - 26x^2 \\
& \quad\ \underline{- 6x^2 + x^3/2} \\
& 312x - 32x^2 + x^3/2 \longrightarrow
\end{aligned}
\qquad
\begin{aligned}
& 144 - 24x + x^2 \\
& \underline{12 - x/6} \\
& 1728 - 288x + 12x^2 \\
& \quad\ \underline{- 24x + 4x^2 - x^3/6} \\
& 1728 - 312x + 16x^2 - x^3/6 \\
& \quad\ \underline{312x - 32x^2 + x^3/2} \\
& 1728 - 0.0x - 16x^2 + x^3/3 \\
& \qquad\qquad\qquad\qquad\ \underline{+ x^3/6} \\
& 1728 - 16x^2 + x^3/2
\end{aligned}
$$

Form 81-734-3136

Oregon State Highway Division
BRIDGE DESIGN UNIT

Sheet 5

Bridge Roberts Mtn County Doug

Calculations by AB Date 10-10-77 Bridge No. 16285

SP*67746-734 (cont. from sheet 3)

If $\phi = 30°$ $K_A = .33$

$\gamma = 110$

$K = K_A\gamma = .33 \times .11 = .0363$

bending/ft = 57.6 · .0363 = 2.09 K'/ft

Reaction/ft = 69.12 · .0363 = 2.51 K/ft.

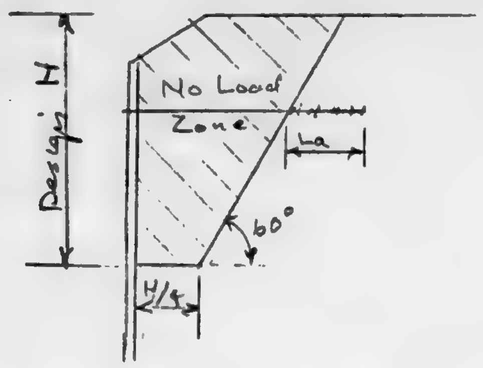
Allowable bending moment in HP 10×42 = 43.4 × 20 k/in²/12"/ft = 72.3 K ft $\frac{72.3}{2.09} = 34.6$

Max sp. of HP 8×36 = 29×20/(12×2.09) = 23.1' BP 10×21 = 21.5×20/(12×2.09) = 17.14

8WF31 = 27×20/(12×2.09) = 21.5

Anchor Assumptions

(following Mahoney & Webster design for 17th & Powell)



La = anchorage length (outside no-load zone)

Assume 1'-0" ϕ concrete plug

with friction force of 1.5 KSF

Friction force/ft = $1.5\pi = 4.71$ K/ft

capacity of 3/4" ϕ stress rod = 39 K working load.

Length of wall for 1 rod = 39/2.51 = 15.5'

Required embedment for 1 rod = 39/4.71 = 8.28'

check out lagging

design for pressure = $.8K_A\gamma H$ = .8 × .33 × .11 × 12 = .348 ksf. = 2.417 psi

if span = 15' = 180" M = 2.417(180)²/8 = 9787 in. lbs/in

Required S/inch for timber @ 1500 psi = 9787/1500 = 6.52 in³

$S = bh^2/6$ if $b = 1$ $h^2 = 65$ $h = \sqrt{65}$ if S = 6.5 h = 6.25

S for 4" = 4²/6 = 2.667 M@1500 psi = 2.667×1500 = 4000 = 2.417 L²/8

$L = \sqrt{4000 \times 8/2.417}$ = 115" = 9.58' pay 8'

for 4" lagging timber

Form 81-734-3136

Oregon State Highway Division
BRIDGE DESIGN UNIT

Sheet 6

Bridge Roberts Mtn
County Doug

Calculations by TB
Date 10-10-77
Bridge No. 16285

SP*67746-734

(cont. from sheet 5)

Try 4" concrete lagging

if d = 2" ρ = .013. j = .867

As = .013 × 2 × 1 = .026 ☐"/' M = .026 × 20 × 2 × .867 = .90 k"/'

{ balanced reinforcement (WSD)

No Good.

Called Dick Imper at Morse Bros.

He suggested 8 or 10" voided floor slabs (4' wide)

he will send brochure.

Walers

Try 2 C8 × 13.75

IF total reaction @ anchor is 39 k

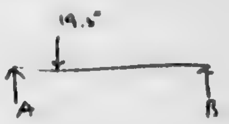
shear per [= 19.5 k. nom stress on web = 19.5 / (8 × .303) = 8.04 ksi

Allowable w/o stiffening = .75 × 12 = 9.0 ksi.

check for bending.

If jacking point is 2' from support & supports are 12 c-c

$R_a = \frac{19.5 \times 10}{12} = 16.25\text{K}$



M = 2 × 16.25 = 32.5 K'

Stress in [8 × 13.75 in bending = 32.5 × 12 / 9.03 = 43 ksi. NG

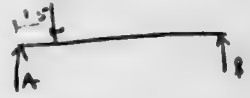
Try 2 C 10 × 15.3

shear stress = 19.5 / (10 × .24) = 8.125 OK

Bending stress = 32.5 × 12 / 13.4 = 29. ksi

IF jacking point is 1.5' from support & supports are 12' c-c

$R_A = \frac{19.5 \times 10.5}{12} = 17.06$ M = 17.06 × 1.5 = 25.6



Bending stress = 25.6 × 12 / 13.4 = 22.9 ksi

Better use 12 C 20.7

Form FHWA 121 (Rev. 5-73)

9363

1-5

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

The Equitable Center, Suite 100
530 Center NE. - Salem, OR 97301

DATE: January 20, 1978

In reply refer to: HB.3-OR

SUBJECT: I-5 Roberts Mountain Slide Stabilization & Weber Slide

FROM : G. L. Green, Division Administrator

TO : Mr. E. S. Hunter, Mgr, Technical Services Branch ✓
Oregon Department of Transportation
Salem, Oregon

Attn : F. W. Yarbrough, Engr

[illegible] ✓
copy Christensen
George
Olson
copy Terpin
Sullivan
Scott
Savage

RECEIVED
JAN 24 1978
ENGINEERING SECTION

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Our Region office is reviewing your request for FAI funding on the subject slide projects. They conclude that support data for the Roberts Mountain fill slide and the Weber slide are incomplete. The following additional information is requested for their analysis:

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WEBER SLIDE

1. Design analysis for the proposed corrective scheme with calculated safety factor.
2. Evaluation of the effectiveness of the drainage measures that have been installed in the slide area to date.

ROBERTS MOUNTAIN FILL SLIDE

1. Description of the problem including past history.
2. Preliminary tieback wall design calculations including lateral earth pressure computations and tieback/deadman design.

I refer you to the FHWA Region 10 Position Statement on Landslide Corrections which has been previously furnished and outlines the specific support data which should accompany your request.

Material submitted to FHWA by Yarbrough

G. K. [illegible]
for G. L. Green

copies to F. Yarbrough & Bob Poindexter

7363

1-5

FORM E-30

OREGON STATE HIGHWAY DIVISION

INTER-DEPARTMENT CORRESPONDENCE

Salem, Oregon
December 7, 1977

SUBJECT: West Side Slide
Roberts Mountain Section
Pacific Highway
Douglas County

To: J. H. Versteeg
Head of Engineering

Following our conversation this morning about new movement of the West Side Slide on the subject section, I telephoned the Region Geologist who said he was not aware of it.

However, both he and Jim Gix, whom I called afterward, described considerable disturbance and maintenance excavation required on the East Side.

Jim Gix agreed that there were new cracks in the West Side Slide, but that considering the amount of rain and number of other slides recently around the Region, he didn't think it was unusual movement.

I gave Mr. Gix your thinking that if the threat of sliding on the West Side increases during the next 60 days, that the present plan for remedial construction may be modified to suitably respond to such threat. I suggested to Jim that it would be helpful to install some survey points in the slide and to monitor movement of them during this period to help evaluate increased threat of major sliding if it occurs. I made this suggestion because of the uncertainty of operation of the slope indicator instrument. Also, more points can be observed by this means.

F. W. Yarbrough
Soils Engineer

FWY:af

cc: Frank Terpin
Jim Gix
Elliott Parker

1 Versteeg ✓
4 Christensen
Georgs
2 Olson
Terpin
Sullivan
Scott
Savage

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DEC 07 1977
ENGINEERING SECTION

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BY FINAL DESIGN ENGINEER

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cc: E. S. Hunter
Alfred Shirley
Walt Hart
Frank Terpin
Fred Yarbrough
Elliott Parker
Jack McCormick
Bob Poindexter

1859

**OREGON STATE
HIGHWAY DIVISION**

ROBERT W. STRAUB
GOVERNOR

F. B. KLABOE
Administrator and
State Highway Engineer

December 1, 1977

Mr. Glen L. Green
Division Administrator
Federal Highway Administration
P. O. Box 300
Salem, OR 97308

NOTED
E. S. HUNTER

Attention: Glenn Hossner
Tom Lowe

Gentlemen:

Re: Roberts Mountain Unit Safety Project
and Slide Stabilization
McLain Ave.-Dillard Jct. Section
Pacific Highway
Douglas County

Transmitted is a detailed report entitled "ROBERTS MOUNTAIN UNIT SAFETY PROJECT AND SLIDE STABILIZATION, McLain Ave.-Dillard Jct. Section, Pacific Highway, Douglas County". This report covers a proposal for safety improvements and slide stabilization on the Roberts Mountain Unit of the McLain Avenue-Dillard Junction Section between Sta. 2948+00 and Sta. 3032+00 and for stabilization of "Weber Slide" between Sta. 3053+00 and Sta. 3063+00. The estimated cost of the safety work as outlined in this report is $3,000,000 and of the slide work is $751,000 for a combined total of $3,751,000.

All of the proposed work, the safety proposal, the fill slide correction, the Roberts Mountain cut slide stabilization and the Weber Slide recommendations have been reviewed at length and in detail. This proposal can be recommended as a reasonable solution to the identified problems within the limits of funding, anticipated benefits, state-of-the-art and the expertise of all participants, including the FHWA, in the investigation, analysis and conclusions reached.

We would appreciate your concurrence in this proposal so that the contract plans for the Roberts Creek-Dillard Junction Section of I-5 can be completed for the scheduled project.

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FOR

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Very truly yours,

J H Versteeg

J. H. Versteeg
Engineering

JHV:jh

Form 81-734-3122

ROBERTS MOUNTAIN UNIT SAFETY PROJECT
AND SLIDE STABILIZATION
McLain Ave.-Dillard Jct. Section
Pacific Highway
Douglas County

This report covers a proposal for safety improvements and slide stabilization on the Roberts Mountain Unit of the McLain Avenue-Dillard Junction Section between Sta. 2948+00 and Sta. 3032+00 and for stabilization of "Weber Slide" between Sta. 3053+00 and Sta. 3063+00. The estimated cost of the safety work as outlined in this report is $3,000,000 and of the slide work is $751,000 for a combined total of $3,751,000.

SAFETY PROJECT:

The section of the Pacific Highway over Roberts Mountain is a high accident section particularly the southbound lanes on the south side. Between M.P. 115 and M.P. 116 on the south side of the mountain, the accident rate in accidents per million vehicle miles was 1.35 for the period from 1971 through 1975 and between M.P. 116 and M.P. 117 (M.P. 116.42 is the summit) it was 0.85. The statewide average for this type of highway is 0.69. From September 6, 1969, to July 31, 1976, 28 accidents (four of which were fatals) occurred in the southbound lanes and 14 in the northbound lanes all on the south side. (See pp 1 through 5.)

Most of these accidents were the result of the operator failing to maintain control of the vehicle. There are several factors which probably contribute to this control problem.

1. Of the three 6° curves on Roberts Mountain, two have substandard spirals. The existing 6° curve at the summit was established as

an offset from the original 6° curve in order to shift away from the fill slide near Sta. 2953 resulting in a spiral length at the south end of the curve of only 650 feet. The super as developed for the original curve was generally retained resulting in some distortion of the super runoff of the new curve and also of the vertical alignment over the summit. The most southerly 6° curve at the base of the mountain has a substandard spiral 450 feet in length through the transition from a four-lane to a four-lane divided highway. (See p. 6.)

2. Some distortion of the roadway has developed since construction in 1964.

3. Superelevation was developed across the total roadway width in such a manner that the downgrade in the super runoff areas is increased approximately 2%, from -6% to nearly -8%.

4. The most southerly curve has been restriped to maintain an 8.4 foot median at the expense of shoulder width resulting in a narrow shoulder 7.8 feet wide and irregular traffic lanes.

5. Some drivers lose control because they fail to maintain the safe speed as posted for these 6° curves. This is especially applicable to those with another vehicle or trailer in tow.

The work proposed under this safety project is as follows:

1. Establish a new highway alignment with standard spirals and super. The present alignment is retained from Sta. 2948+00 through the

6° curve at the summit to the P.C.S. From this point ahead, the existing 650 foot spiral is replaced with a 750 foot spiral and centerline begins to shift left. The following two 6° curves are flattened to 5°30' curves with 700 foot spirals. From Sta. L^n3013+27.51 ahead existing alignment is used. (See p. 6.)

2. Ease profile grade from the summit south and carry profile grade at centerline. The work north of the summit is limited to pavement overlay, drainage repair and improvement and corrections to super rates as required to meet design standards. From the summit south, the grade is raised allowing profile grade to be flattened to 5.8% from the existing 6.0%. Carrying profile grade at centerline minimizes the effect of super runoff at the edge of travel lane and results in a maximum uphill gradient of 6.2025% and a maximum downhill gradient of 6.1571%. The existing maximum gradient occurs in the southbound lanes and is approximately 8%. (See p. 7.)

   Shifting the centerline to the left confines the required widening to the cut side of the roadbed and keeps to a minimum any fill widening throughout the marginally stable fill areas. Except through the cut at the summit from Sta. 2964 to Sta. 2977, which encompasses the "East Side" slide, raising the grade allows the line shift without excessive cut slope excavation. Fill widening is required from Sta. 3003 to Sta. 3018. A gabion wall is used to contain the fill and avoid additional right-of-way purchase. The only structure work required is the extension 24 feet left and 34 feet right of the 13 x 13 equipment pass at Sta. 3013+41.

A 48 inch pipe under the roadbed fill at Sta. 2980+60 is badly damaged and allows water to escape into the surrounding fill threatening the stability of it. It is impractical to remove the existing pipe to replace it so the pipe is to be abandoned and a random fill constructed. The replacement pipe will then be installed at a higher elevation farther downgrade. Random filling the area will require approximately 70,000 c.y. which, coupled with the roadbed fill deficit of 60,000 c.y., makes a total deficit of 130,000 c.y. This material will come from the West Side Slide Area (100,000 c.y.) and the East Side Slide Area (30,000 c.y.).

3. Install Type GM concrete median and shoulder barrier. On at least three occasions, the existing guardrail has failed to contain out of control vehicles.

SLOPE STABILIZATION:

1. Fill Slide (See Section E, pp. 115-120)

   Install a tieback wall on the northerly side of the highway between Sta. 2952+50 and Sta. 2954+00 in the area where a near vertical face has developed. The preliminary design sheets included in this report show alternate types of tieback anchors. It is proposed that both types be included in the contract in order to obtain the most favorable bid price. Construction cost is estimated to be $40,000. Temporary protection and direction of traffic is estimated to be an additional $15,000.

2. East Side Cut Slide (See Section B)

The slide on the east side of the highway from Sta. 2967+00 to Sta. 2971+00 is largely landslide requiring a considerable quantity of water to activate it. A large lateral force does not appear to exist and foundation drilling has indicated a relatively incompetent foundation for heavy loads so the installation of a rock toe is not deemed appropriate. It is proposed to improve drainage with filter fabric lined ditches, piping the water out to suitable disposal points and to excavate the slide mass. A 40 foot fallout area is also provided. (See Plan, p. 121) Excavation as the result of the alignment shift and fallout area removes part of the slide mass so that removal of the remainder involves an additional 26,000 c.y. which will be used in constructing the random fill in the vicinity left of Sta. 2980. The estimated cost of the work at this slide location is $155,000.

3. West Side Cut Slide (See Section C)

At the north end of the summit cut on the west side of the highway, the existing benches require only minor reshaping along with repair and improvement of drainage. At the main slide location, from Sta. 2960+80 to Sta. 2963+50, there exists eight horizontal drains five of which are at the first bench level and three at roadway level. An additional ten drains on 30 foot spacing placed 5 feet above the roadbed are proposed to lower the water table and reduce buildup of hydrostatic pressure. It is also proposed to unload the upper part of the slide by constructing a third bench. (See Plan, p. 121.) This, along with some reshaping of the existing two benches, will result in the removal of approximately 100,000 c.y. of material. Approximately 60,000 c.y. is to be placed in the roadbed embankment and 40,000 c.y. in random fill. New 6 inch perforated drain pipe is to be installed on each bench and the collected water piped out to suitable disposal points. The estimated cost of the required excavation and drainage work is $343,000.

4. Weber Slide (See Section D)

Included in this report is stabilization work at a slide area referred to as "Weber Slide". The active portion of this slide, involving both the northbound and southbound lanes of a divided section of freeway, is an area affected by an excessive high water table with water slowly coursing through the problem area in irregular flow channels. The slide mass is also highly silty so the area does not lend itself to the use of horizontal drains unless used in conjunction with vertical wells. Movement is slow, progressive and segmental involving upper, middle and lower segments and it is upon the lower segment, involving the freeway, that stabilization work is to be performed.

It is proposed to install four vertical wells on 25 foot centers, 24 inches in diameter, 60 feet deep and backfilled with gravel along the northbound outside shoulder at Sta. 3055+70 to Sta. 3056+70 and another series of eight vertical wells 40 feet deep on 10 foot centers along the southbound inside shoulder from Sta. 3056+80 to Sta. 3057+80. These wells are of sufficient depth to cut the slip plane. A system of horizontal drains is used to tap these wells and carry the collected water away from the slide area. (See p. 106 and p. 114.)

In addition to lowering the water table there is an indicated need for a weighted toe. A rock inlay involving approximately 9,000 c.y. of rock is proposed for the toe area right of the southbound lanes from Sta. 3058+00 to Sta. 3062+00 and a 3 foot thick rock blanket in the median from Sta. 3056 to Sta. 3059+50 involving approximately 4,000 c.y. The northbound cut slope in the area of the existing rock inlay is to be redressed and the inlay repaired. The estimated cost of Weber Slide Stabilization is $198,000.

BP:ab

11-30-1977

1981 Roberts Creek-Dillard 9363
Int. Sec. Pac. Hwy.
(gr, pav, bar, str, & sign) #2

9363

11-77

ROBERTS MOUNTAIN UNIT SAFETY PROJECT AND SLIDE STABILIZATION

McLain Ave.-Dillard Jct. Section
Pacific Highway
Douglas County

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At the north end of the summit cut on the west side of the highway, the existing benches require only minor reshaping along with repair and improvement of drainage. At the main slide location, from Sta. 2960+80 to Sta. 2963+50, there exists eight horizontal drains five of which are at the first bench level and three at roadway level. An additional ten drains on 30 foot spacing placed 5 feet above the roadbed are proposed to lower the water table and reduce buildup of hydrostatic pressure. It is also proposed to unload the upper part of the slide by constructing a third bench. (See Plan, p. 121.) This, along with some reshaping of the existing two benches, will result in the removal of approximately 100,000 c.y. of material. Approximately 60,000 c.y. is to be placed in the roadbed embankment and 40,000 c.y. in random fill. New 6 inch perforated drain pipe is to be installed on each bench and the collected water piped out to suitable disposal points. The estimated cost of the required excavation and drainage work is $343,000.

4. Weber Slide (See Section D)

Included in this report is stabilization work at a slide area referred to as "Weber Slide". The active portion of this slide, involving both the northbound and southbound lanes of a divided section of freeway, is an area affected by an excessive high water table with water slowly coursing through the problem area in irregular flow channels. The slide mass is also highly silty so the area does not lend itself to the use of horizontal drains unless used in conjunction with vertical wells. Movement is slow, progressive and segmental involving upper, middle and lower segments and it is upon the lower segment, involving the freeway, that stabilization work is to be performed.

It is proposed to install four vertical wells on 25 foot centers, 24 inches in diameter, 60 feet deep and backfilled with gravel along the northbound outside shoulder at Sta. 3055+70 to Sta. 3056+70 and another series of eight vertical wells 40 feet deep on 10 foot centers along the southbound inside shoulder from Sta. 3056+80 to Sta. 3057+80. These wells are of sufficient depth to cut the slip plane. A system of horizontal drains is used to tap these wells and carry the collected water away from the slide area. (See p. 106 and p. 114.)

In addition to lowering the water table there is an indicated need for a weighted toe. A rock inlay involving approximately 9,000 c.y. of rock is proposed for the toe area right of the southbound lanes from Sta. 3058+00 to Sta. 3062+00 and a 3 foot thick rock blanket in the median from Sta. 3056 to Sta. 3059+50 involving approximately 4,000 c.y. The northbound cut slope in the area of the existing rock inlay is to be redressed and the inlay repaired. The estimated cost of Weber Slide Stabilization is $198,000.

BP:ab

SAFETY PROJECT

Accident Summary............................1
Accident Analysis...........................2
Traffic Engineering Report..................3
Accident Diagram............................5
Alignment Map...............................6
Proposed Profile............................7

State wide average for this type Hwy. — CUML = 0.69
'75 = 0.59 '74 = 0.42 '73 = 0.50 '72 = 0.90 '71 = 1.05

H I G H W A Y   0 1

Accidents per million vehicle miles.

North

PFX	LOCATION M.P.	LNG	YEAR	ADT	ACCIDENTS INT	NON	TOT	CSLTY F	I	RATE	PRIORITY REGN	STATE	TYPE OF ACCIDENTS
	113.00	1.00	1971	10068		3	3	1	2	.81			NC-- 1 FO-- 1 MIS- 1
			1972	10887		1	1			.25			RE-- 1
			1973	10859		4	4		4	1.00			RE-- 1 FO-- 3
			CUML	10826		8	8	1	6	.40	-3	-R	RE-- 2 NC-- 1 FO-- 4 MIS- 1
	114.00	1.00	1971	9600		3	3		2	.85			FO-- 2 MIS- 1
			1972	10500		5	5	1	3	1.30			RE-- 1 SSO- 1 FO-- 2 MIS- 1
			1973	10300		1	1	1	1	.26			NC-- 1
			1974	9600		1	1		2	.28			FO-- 1
			1975	10400		1	1			.26			FO-- 1
			CUML	10088		11	11	2	8	.59	-3	-R	RE-- 1 SSO- 1 NC-- 1 FO-- 6 MIS
	115.00	1.00	1971	9600		7	7		11	1.99			NC-- 2 FO-- 5
			1972	10500		8	8		6	2.08			SSO- 2 NC-- 2 FO-- 4
			1973	10300		7	7	1	5	1.86			NC-- 3 FO-- 4
			1974	9600		2	2		1	.57			FO-- 2
			1975	10400		1	1	1	1	.26			FO-- 1
			CUML	10088		25	25	2	24	1.35	-3	-R	SSO- 2 NC-- 7 FO--16
	116.00	1.00	1971	9600		5	5		3	1.42			RE-- 1 NC-- 1 FO-- 3
			1972	10500		5	5		1	1.30			RE-- 1 NC-- 1 FO-- 3
			1974	9600		2	2	1	1	.57			FO-- 2
			1975	10400		4	4		2	1.05			NC-- 1 FO-- 2 MIS- 1
	(SUMMIT 116.43)		CUML	10088		16	16	1	7	.86	-3	-R	RE-- 2 NC-- 3 FO--10 MIS- 1
	117.00	1.00	1971	9600		5	5		2	1.42			RE-- 1 NC-- 1 FO-- 3
			1972	10500		1	1		2	.26			RE-- 1
			1973	10300		3	3		4	.79			NC-- 1 FO-- 2
			1974	9600		1	1			.28			FO-- 1
			1975	10400		1	1		2	.26			FO-- 1
			CUML	10088		11	11		10	.59	-3	-R	RE-- 2 NC-- 2 FO-- 7
	118.00	1.00	1975	10400		2	2		3	.52			RE-- 1 NC-- 1
			CUML	10088		2	2		3	.10	-3	-R	RE-- 1 NC-- 1
	119.00	1.00	1971	9600	2	2	4			1.14			TRN- 1 FO-- 3
			1972	10775		4	4		6	1.01			HO-- 1 NC-- 3
			1973	10615		3	3		3	.77			RE-- 1 NC-- 1 MIS- 1
			CUML	10132	2	9	11		9	.59	-3	-R	HO-- 1 RE-- 1 TRN- 1 NC-- 4 F

Accidents per million vehicle miles.

YEAR	ADT	ACCIDENTS INT	NON	TOT	CSLTY F	I	RATE	PRIORITY REGN	STATE	TYPE OF ACCIDENTS
1971	10068		3	3	1	2	.81			NC-- 1 FO-- 1 MIS- 1
1972	10887		1	1			.25			RE-- 1
1973	10859		4	4		4	1.00			RE-- 1 FO-- 3
CUML	10826		8	8	1	6	.40	-3	-R	RE-- 2 NC-- 1 FO-- 4 MIS- 1
1971	9600		3	3		2	.85			FO-- 2 MIS- 1
1972	10500		5	5	1	3	1.30			RE-- 1 SSO- 1 FO-- 2 MIS- 1
1973	10300		1	1	1	1	.26			NC-- 1
1974	9600		1	1		2	.28			FO-- 1
1975	10400		1	1			.26			FO-- 1
CUML	10088		11	11	2	8	.59	-3	-R	RE-- 1 SSO- 1 NC-- 1 FO-- 6 MIS- 2
1971	9600		7	7		11	1.99			NC-- 2 FO-- 5
1972	10500		8	8		6	2.08			SSO- 2 NC-- 2 FO-- 4
1973	10300		7	7	1	5	1.86			NC-- 3 FO-- 4
1974	9600		2	2		1	.57			FO-- 2
1975	10400		1	1	1	1	.26			FO-- 1
CUML	10088		25	25	2	24	1.35	-3	-R	SSO- 2 NC-- 7 FO--16
1971	9600		5	5		3	1.42			RE-- 1 NC-- 1 FO-- 3
1972	10500		5	5		1	1.30			RE-- 1 NC-- 1 FO-- 3
1974	9600		2	2	1	1	.57			FO-- 2
1975	10400		4	4		2	1.05			NC-- 1 FO-- 2 MIS- 1
CUML	10088		16	16	1	7	.86	-3	-R	RE-- 2 NC-- 3 FO--10 MIS- 1
1971	9600		5	5		2	1.42			RE-- 1 NC-- 1 FO-- 3
1972	10500		1	1		2	.26			RE-- 1
1973	10300		3	3		4	.79			NC-- 1 FO-- 2
1974	9600		1	1			.28			FO-- 1
1975	10400		1	1		2	.26			FO-- 1
CUML	10088		11	11		10	.59	-3	-R	RE-- 2 NC-- 2 FO-- 7
1975	10400		2	2		3	.52			RE-- 1 NC-- 1
CUML	10088		2	2		3	.10	-3	-R	RE-- 1 NC-- 1
1971	9600	2	2	4			1.14			TRN- 1 FO-- 3
1972	10775		4	4		6	1.01			HO-- 1 NC-- 3
1973	10615		3	3		3	.77			RE-- 1 NC-- 1 MIS- 1
CUML	10132	2	9	11		9	.59	-3	-R	HO-- 1 RE-- 1 TRN- 1 NC-- 4 FO-- 3 MIS- 1

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION
ACCIDENT ANALYSIS
COLLISION DIAGRAM

City of ______ County Douglas
Intersection of Pacific Hwy and Roberts Mtn.
Highway Number 1 (I 5) MP.114.85-MP.116.69
Period Covered 1-1-73 . 7-31-76
Compiled by TR Drawn by ______ Date 10-15-76

LEGEND

- ● Person Killed
- ←----- Pedestrian Killed
- ○ Person Injured
- ◁----- Pedestrian Injured
- ←—— Property Damage Only
- Collision – Rear-end
- Collision – Head-on
- Collision – Sideswipe

Fatal: MP 115.69
Clr 3-18-73
Dry 10:15 AM
Day 1-K 2-Inj.
Sbd. car struck median

Fatal: MP. 116.02
Clr 7-27-74
Dry 2:35 PM
Day 1-K 1-Inj.
Sbd. Pickup & trailer
struck median

Fatal: MP. 115.44
Rain 10-25-75
Wet 4:15-PM
Day 1-K 1 Inj.
Sbd. car struck Guard Rail

Fatal: MP. 115.50
Clr 6-29-76
Dry 11:35 AM
Day 1-K 2-Inj.
Sbd. car & trailer
struck Guard Rail

- ◁----- Path of Pedestrian
- ←—— Path of Vehicle
- ←----- Path of Animal
- Vehicle Moving
- Vehicle Stopped
- Vehicle Backing
- ☐ Properly Parked
- Improperly Parked
- Vehicle Overturned
- Vehicle Skidded

Day - 13
Nite - 7
Total - 20

Collision Type	1973				1974				1975				7-Mos. 1976				Total			
	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total
Angle																				
Head-on														1		1		1		1
Rear-end															1	1			1	1
Sideswipe																				
Turning Movement																				
Parking																				
Non-collision		1	2	3														1	2	3
Fixed Object	1	1	2	4	1	1	2	4	1	1	1	3	1		2	3	4	3	7	14
Pedestrian																				
Backing																				
Misc.											1	1							1	1
TOTAL	1	2	4	7	1	1	2	4	1	1	2	4	1	1	3	5	4	5	11	20

Form E-261-6-70

ACCIDENTS

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION FILE: CON 5

INTER-OFFICE CORRESPONDENCE

Roseburg, Oregon

December 6, 1976

FROM: J.X. Wilson
J.X. WILSON
Regional Construction Engineer

TO: J.H. Versteeg
Road Design Engineer

SUBJECT: Traffic Engineering Report
Proposed Safety Project
Roberts Mountain
Pacific Highway (I-5)

As per your request, a traffic engineering investigation has been made at the subject location. A collision diagram was obtained from the base of the north side of the mountain at the Roberts Cr. Rd. overcrossing (M.P. 117.74) to the base of the south side of the mountain (M.P. 115.47) for the period September 6, 1969 through July 31, 1976. The completion date of the last major project in this area was September 6, 1969.

There were 57 reported accidents during this period. There were 40 accidents which occurred during daylight hours and 17 occurred during the hours of darkness. There were four fatalities all of which occurred in the southbound lanes southerly of the summit. Fifty percent (28) of all the accidents in the section studied also occurred in the southbound lanes southerly of the summit. Accident reports were available for 21 of the 28 accidents occurring in this portion of the section.

A review of these reports revealed there were two head-on collisions - one of which resulted in a fatality. There were two rear-end accidents - one resulting from a brake failure and the other occurring during a construction period when one of the lanes was out of service. There were four non-collision type accidents - two of which resulted from mechanical failures and the other two lost control during wet conditions.

There were 19 fixed object type accidents occurring in this southbound portion of the section; however, accident reports were available for only 13 of the accidents. The reports indicated that three accidents were a result of mechanical failures and one of these accidents resulted in a fatality. Two went out of control due to the operator falling asleep. Four went out of control as a result of towing a trailer or another vehicle which began to whip or sway. Two of these accidents resulted in a fatality. The reports indicate that four vehicles went out of control for no specific reason.

(continued)

1 Versteeg
2 Olsen
3 [illegible]
Scott
Swenson
Sayers

RECEIVED
DEC 09 1976
ROAD
DESIGN
SECTION

Requires Reply
Requires Approval
Receiver Keep
Do not File
Return To
Bring Up / /
Other

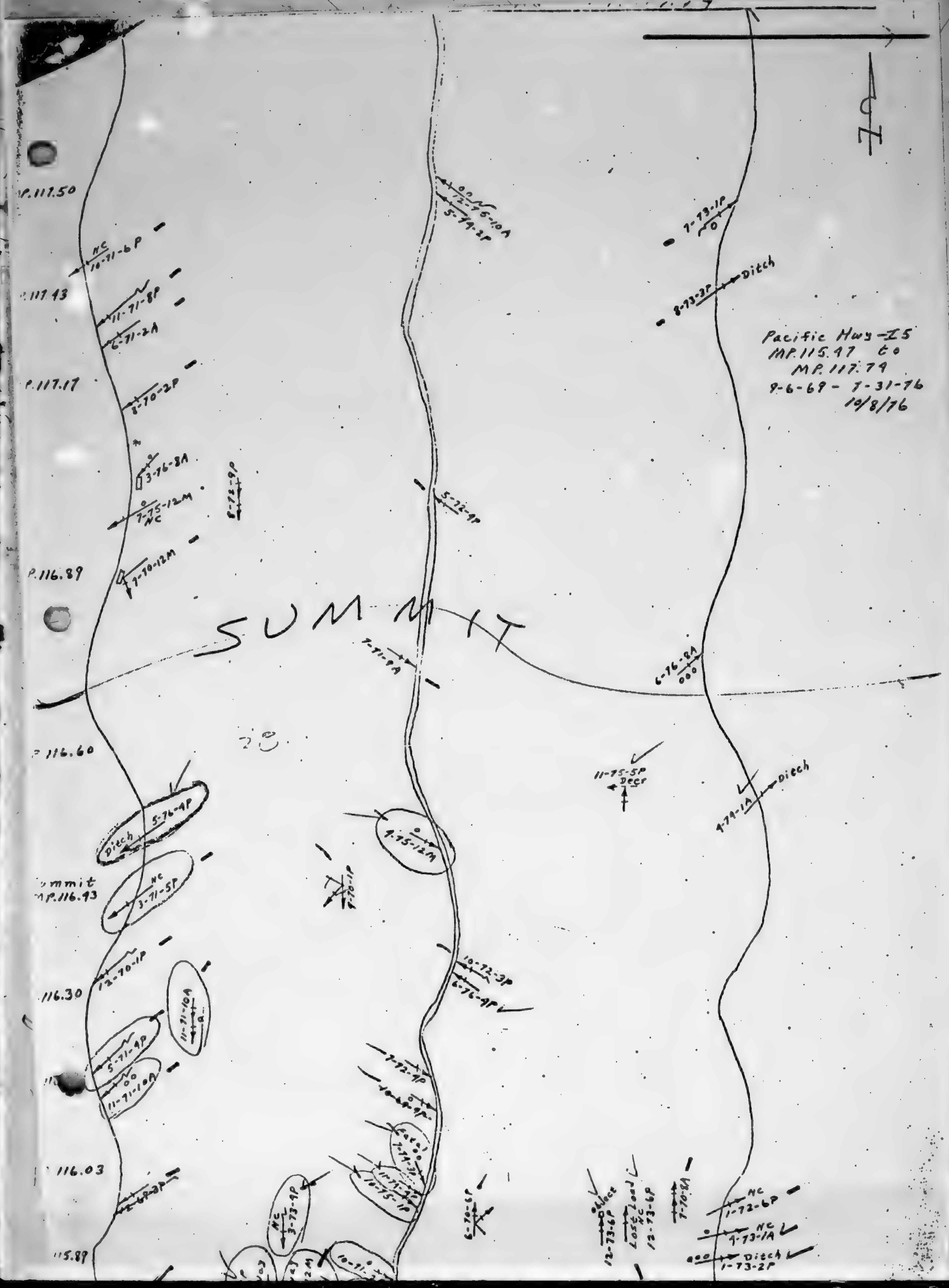
The only other accident occurring in this southbound portion of the section southerly of the summit was a sideswipe type accident for which a report was not available.

The safe speed of all the curves on the mountain is 55 MPH and all are properly posted.

As a result of this investigation, it is recommended that consideration be given to increasing the safe speed of the curves southbound southerly of the summit if future reconstruction materializes. This could be accomplished by either decreasing the degree of curve or increasing the super elevation. Decreasing the degree of curve would probably be the preferred method as an increased super elevation would present more problems during icy or slippery conditions.

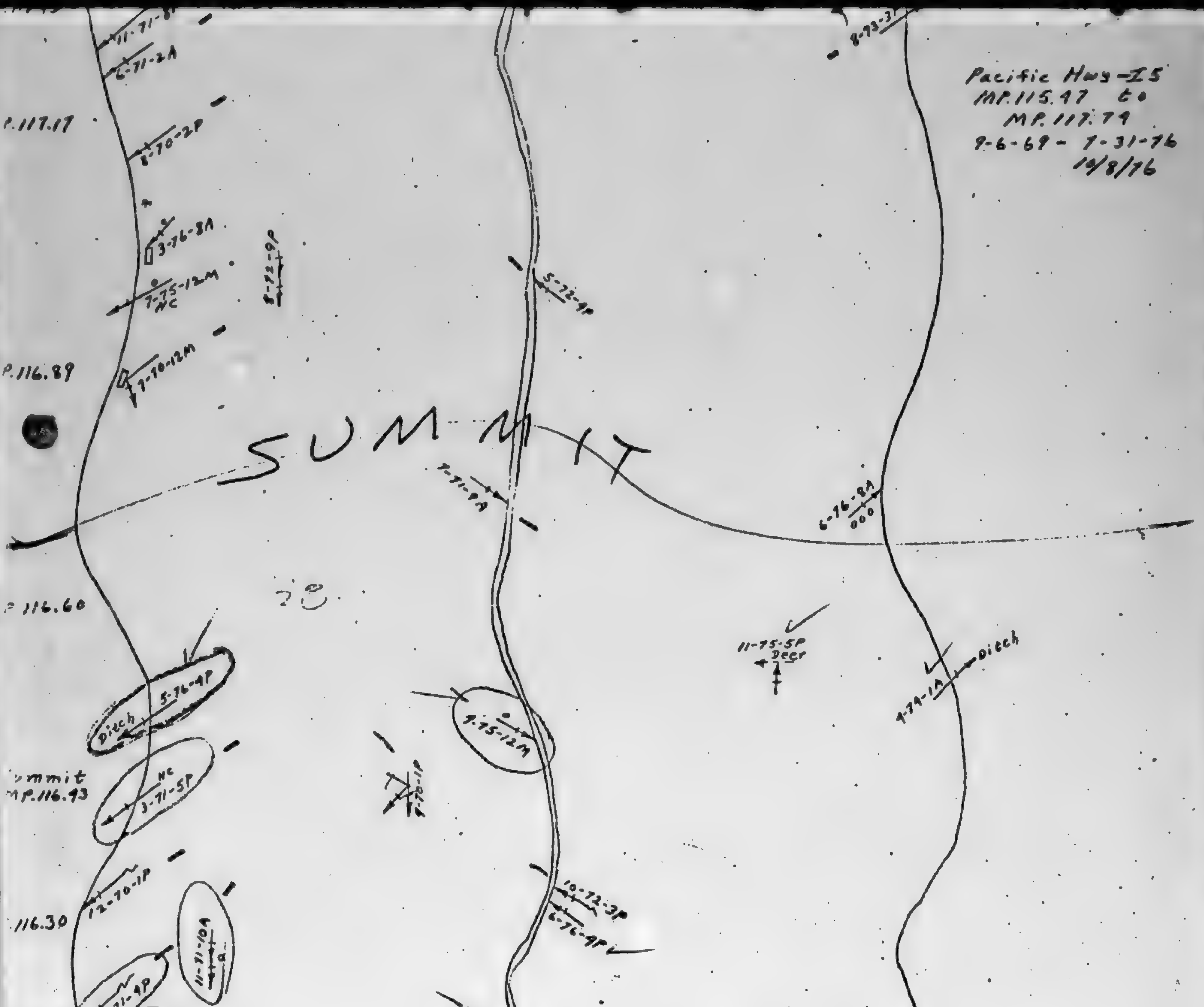
JW/KO/slc

cc: L.E. George
Jack McCormick
Al Bates



P.117.50
.117.43
P.117.17
P.116.89
P.116.60
ummit
MP.116.43
.116.30
116.03
115.89
SUMMIT
NC 10-71-6P
11-71-8P
6-71-2A
8-70-2P
3-76-8A
7-75-12M NC
8-72-9P
7-70-12M
Ditch 5-76-4P
NC 3-71-5P
12-70-1P
11-71-10A
5-71-9P
11-71-10A
12-69-3P
00 12-75-10A
5-74-2P
5-72-9P
7-71-9A
9-75-12M
7-70-1P
10-72-3P
6-76-9P
7-72-9P
10-69-9P
Fatal 7-74-3P
11-71-3P
10-75-1P
NC 3-73-9P
10-71-
6-70-6P
Object 12-73-6P
Lost Load NC 12-73-6P
7-70-8A
7-73-1P
8-73-3P Ditch
6-76-8A 000
11-75-5P Decr
4-74-1A Ditch
NC 1-72-6P
NC 9-73-1A
Ditch 1-73-2P

Pacific Hwy-I5
MP.115.97 to
MP.117.79
9-6-69 - 7-31-76
10/8/76


P.117.17
P.116.89
P.116.60
Summit
MP.116.43
116.30
116.03
115.89
115.60
SUMMIT
11-71-8
6-71-2A
8-70-2P
3-76-8A
7-75-12M
NC
8-72-9P
9-70-12M
8-73-3
5-73-9P
7-71-9A
6-76-8A
000
5-76-9P
Ditch
NC
3-71-5P
12-70-1P
11-71-10A
5-71-9P
00
11-71-10A
2-69-3P
11-73-1P
7-70-11A
1-73-3P
Fatal
000
6-76-12N
9-75-12M
7-70-1P
10-72-3P
6-76-9P
7-72-9P
10-69-9P
Fatal
000
7-71-3P
11-71-9P
10-75-1P
NC
3-73-9P
5-76-11P
000
Wrong Way
Wrong Way
9-70-12M
00
Fatal
10-71-3P
8-71-10A
12-71-2A
9-72-1A
Fatal
000
3-73-11A
6-76-10A
9-72-9P
6-70-6P
11-75-5P
Deer
12-73-6P
Deer
Lost Load
NC
12-73-6P
7-70-8A
3-72-7A
9-74-1A
Ditch
NC
1-73-6P
NC
4-73-1A
Ditch
1-73-2P
NC
9-70-6P
Ditch
5-74-9P
MP.115.97

Pacific Hwy-I5
MP.115.97 to
MP.117.79
9-6-69 - 7-31-76
10/8/76

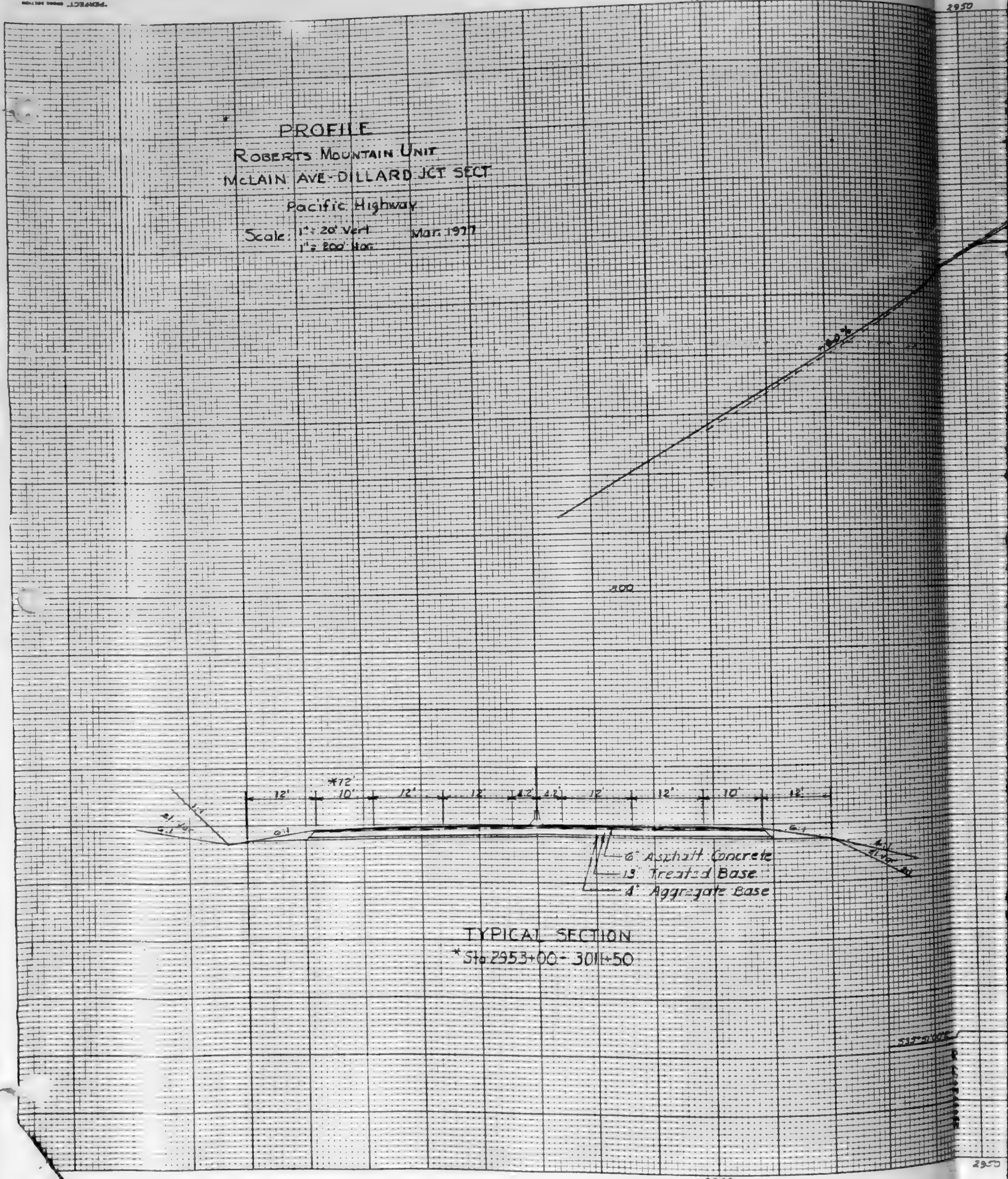
Day- 40
Nite- 17
Total- 57

PROFILE

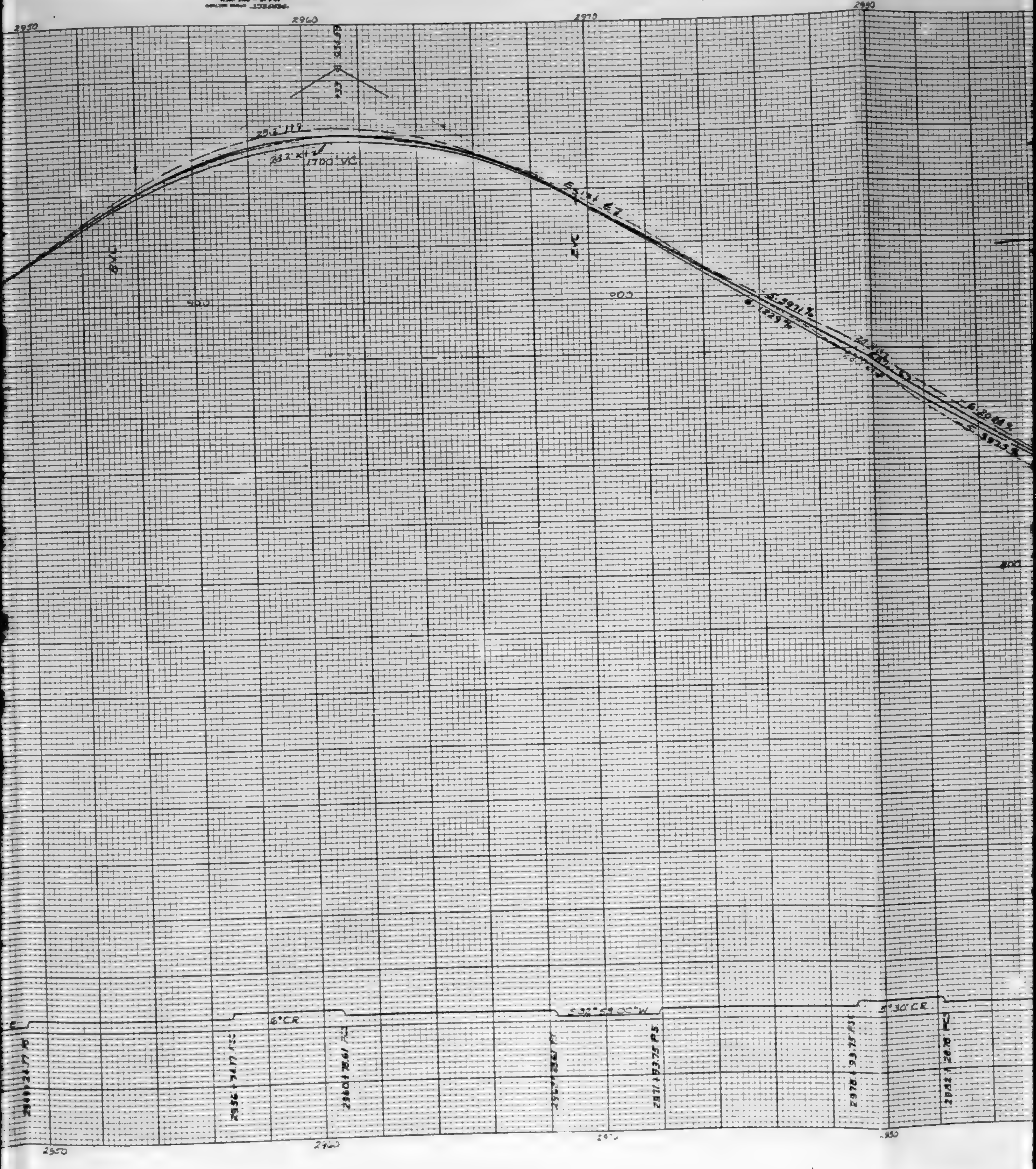
ROBERTS MOUNTAIN UNIT
McLAIN AVE - DILLARD JCT SECT

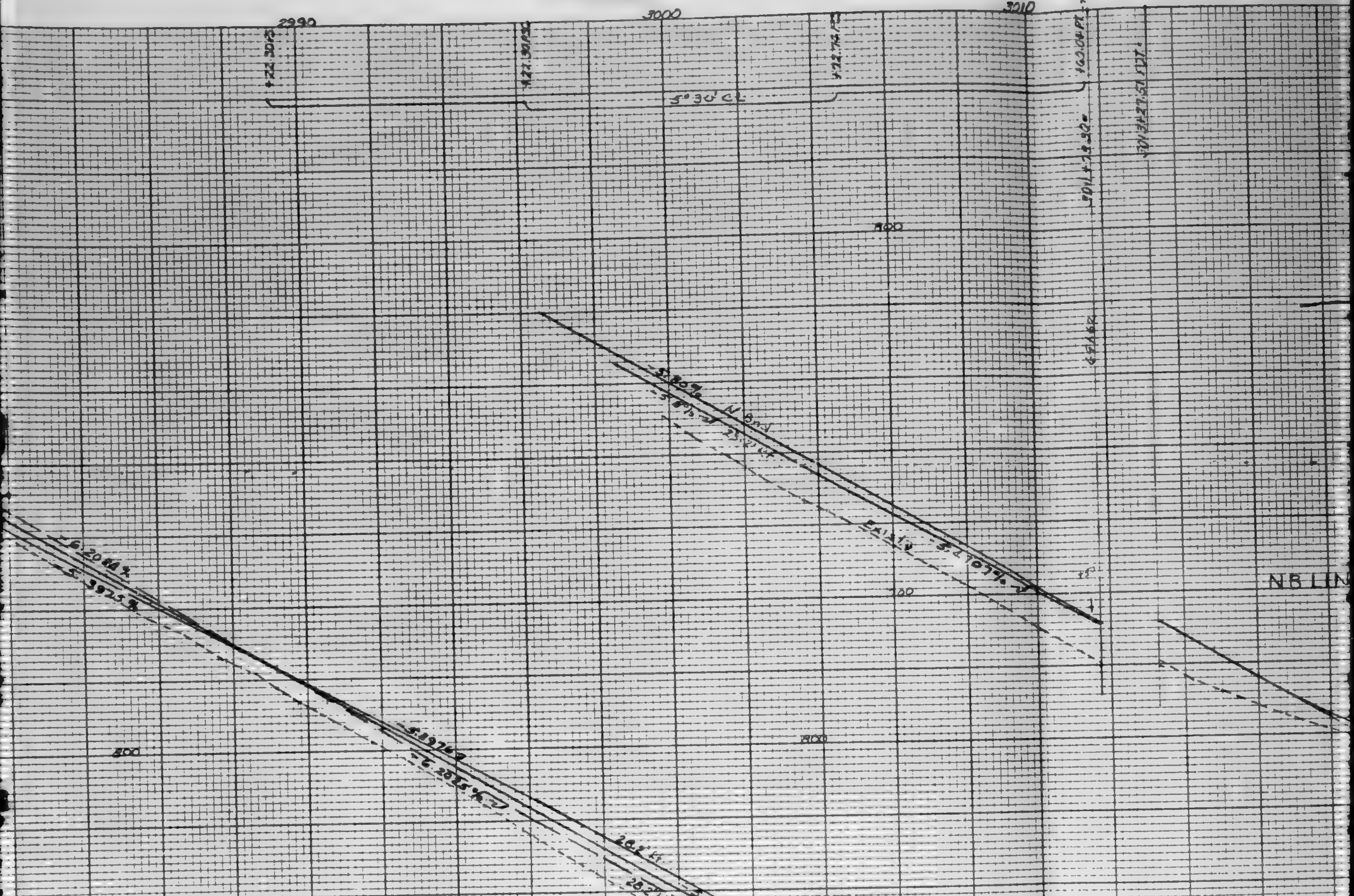
Pacific Highway

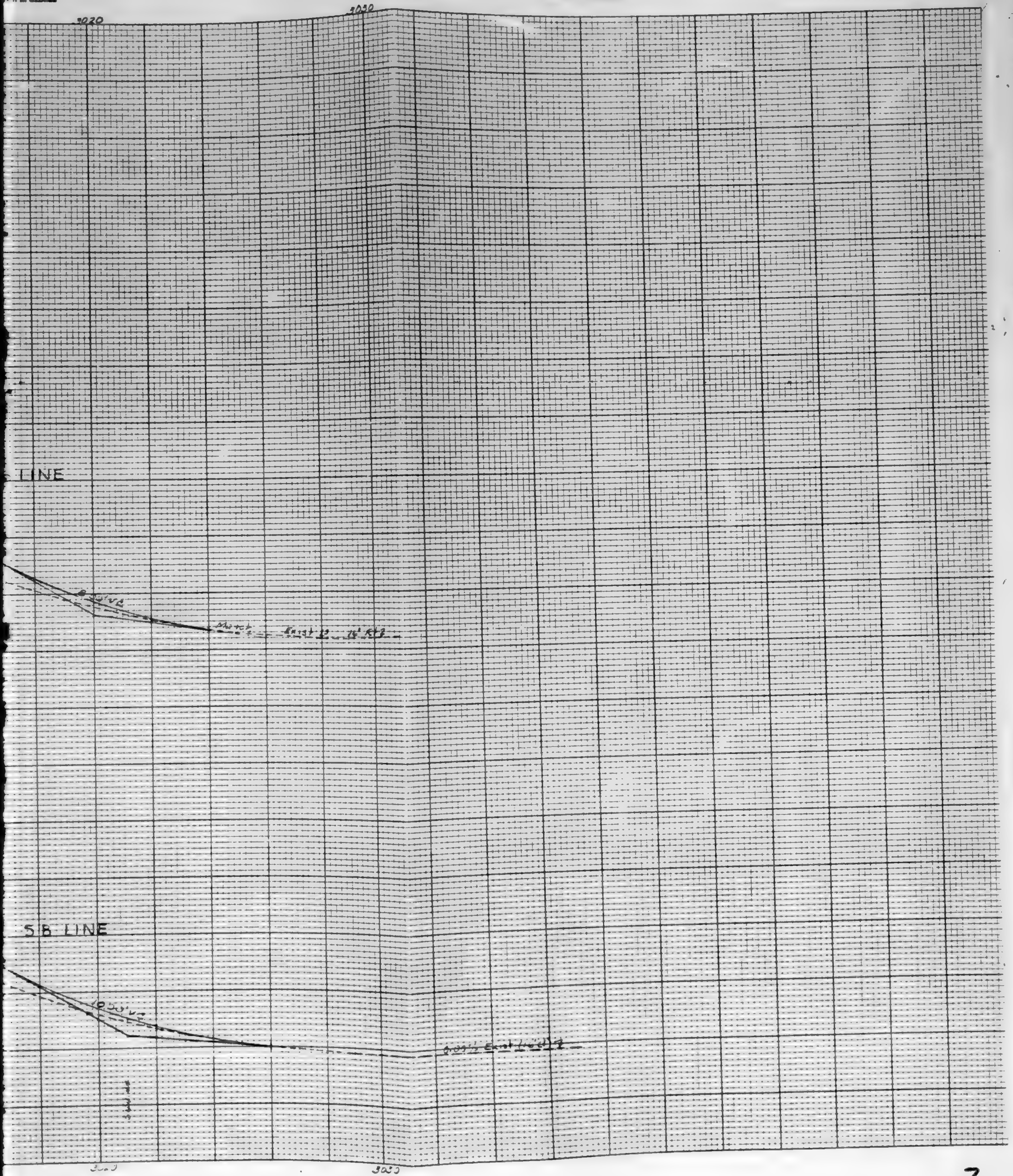
Scale: 1" = 20' Vert
1" = 200' Hor.
Mar. 1977


2940
2950
800
*12'
12'
10'
12'
12'
4.2'
4.2'
12'
12'
10'
12'
6:1
6" Asphalt Concrete
13" Treated Base
4" Aggregate Base
2940
2950

TYPICAL SECTION
* Sta 2953+00 - 3011+50


2950
2960
2970
2980
934.59
PI 2961+53
2958+19
2962+42
1700' VC
BVC
EVC
2967+67
900
900
-5.5971%
-6.1229%
-6.2064%
-5.3925%
800
6°CR
S 32°59'00" W
5°30'CR
2950+24.17
2956+74.17 P.C.
2960+78.61 P.T.
2968+25.61 P.I.
2971+83.75 P.S.
2978+93.75 P.S.
2982+20.78 P.C.
2950
2960
2970
2980


2990
3000
3010
+22.30 TS
+27.30 PSC
+22.74 PT
+03.04 PT
5°30' C.L.
3011+28.30=
3013+27.51 PT
800
N.B. Lt.
5.80%
5.20%
5.1907%
NB LIN
5.20%
5.3925%
800
800
5.8976
6.2925%
28.8 Lt
28.2 Lt
5.8%
5.1571%
700
5
N 97°4.00' W
5°30' C.L.
2982+28.70 PCS
2989+24.78 PT BK
2987+20.50 POT
+33 PS
2995+22.30 PSC
3004+30.80 PTS
SE 3011+30.80 PT
3011+71.44 POT
472.03
3013+29.51 POT
2990
3000
600
3010


3020
3030
LINE
SB LINE
3020
3030

SECTION A

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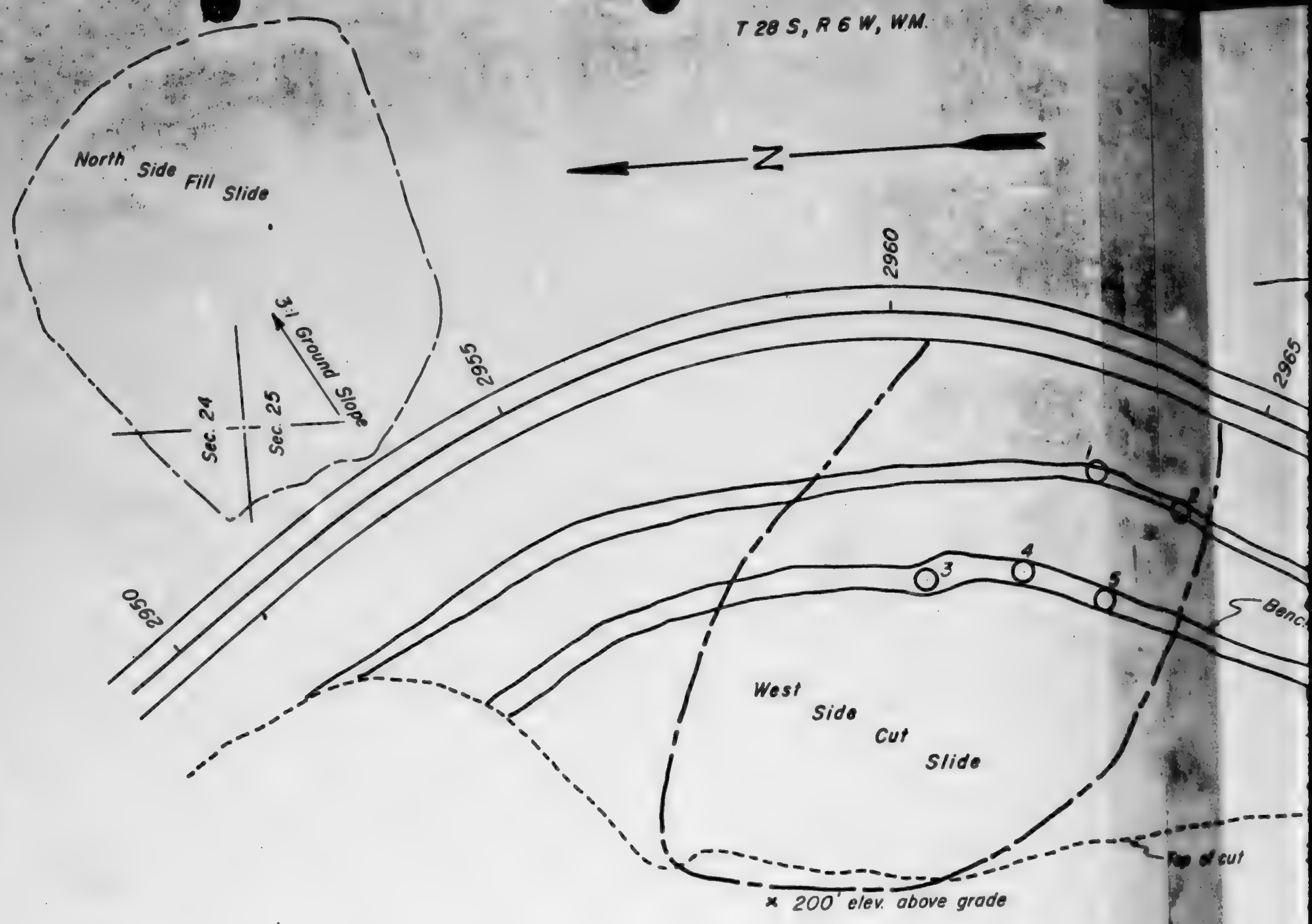
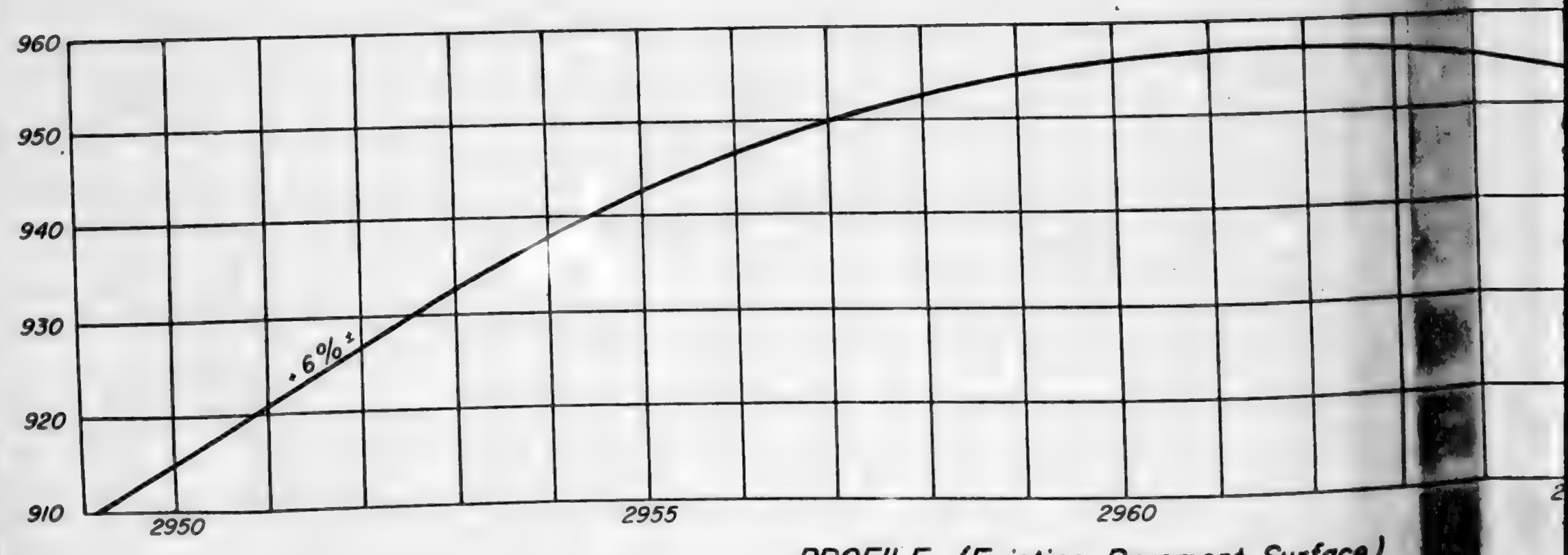
1954-1955 Original Highway Construction.....23


T 28 S, R 6 W, W.M.
N
North Side Fill Slide
3:1 Ground Slope
Sec. 24
Sec. 25
2950
2955
2960
2965
1
2
3
4
5
Bench
West Side Cut Slide
Top of cut
× 200' elev. above grade

PLAN

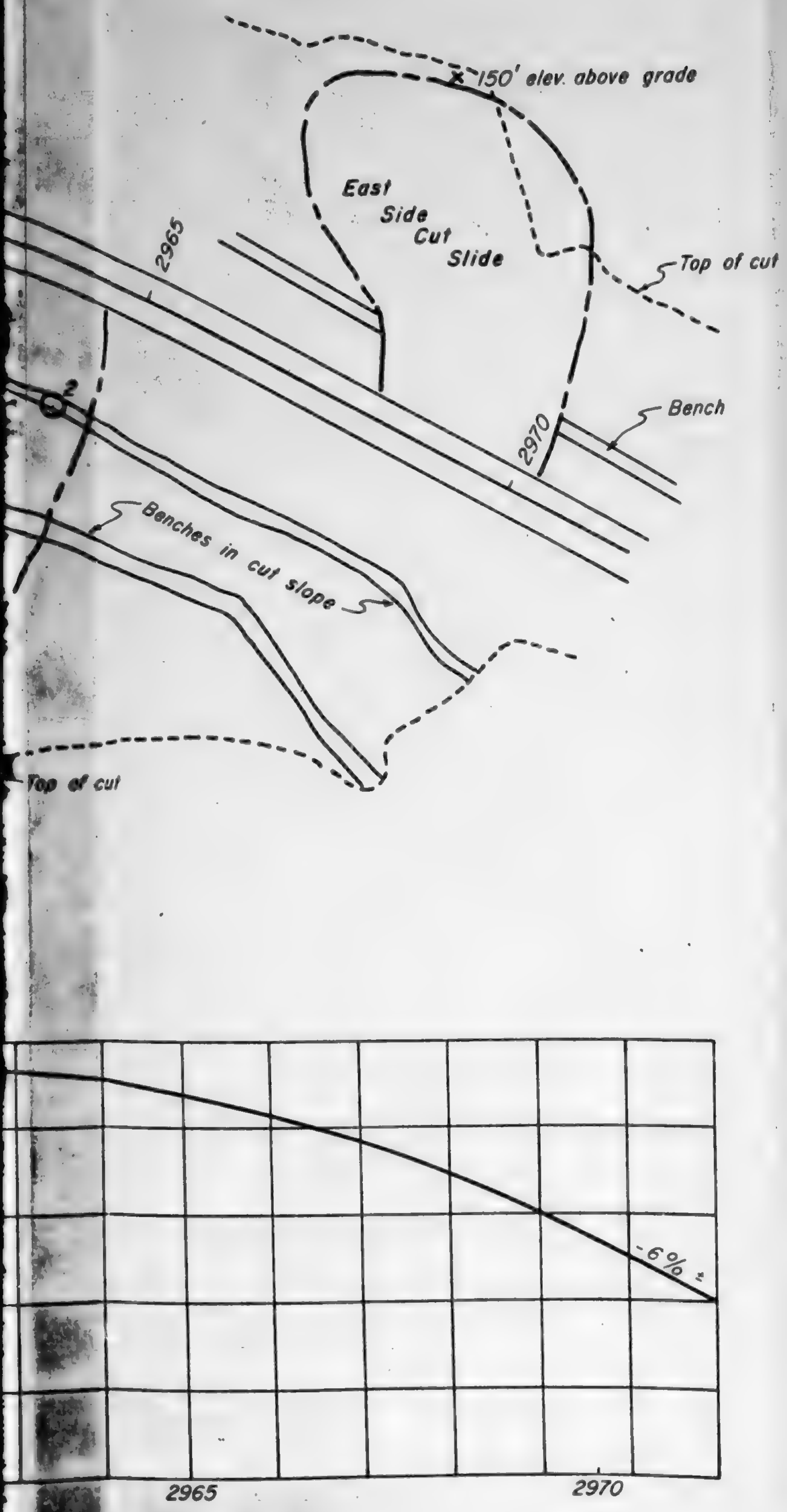


PROFILE (Existing Pavement Surface)

Legend

2⊙ Drill hole location and number.

— — Approximate slide limits.


150' elev. above grade
East Side Cut Slide
Top of cut
2965
2970
Bench
2
Benches in cut slope
Top of cut
-6% ±
2965
2970

Scale: Horiz. 1" = 200'
Vert. 1" = 20'

SKETCH MAP
OF
ROBERTS MTN. SLIDES

OREGON STATE HIGHWAY DIVISION

PACIFIC HIGHWAY (I-5)
DOUGLAS COUNTY

HISTORY OF ROBERTS MOUNTAIN SECTION

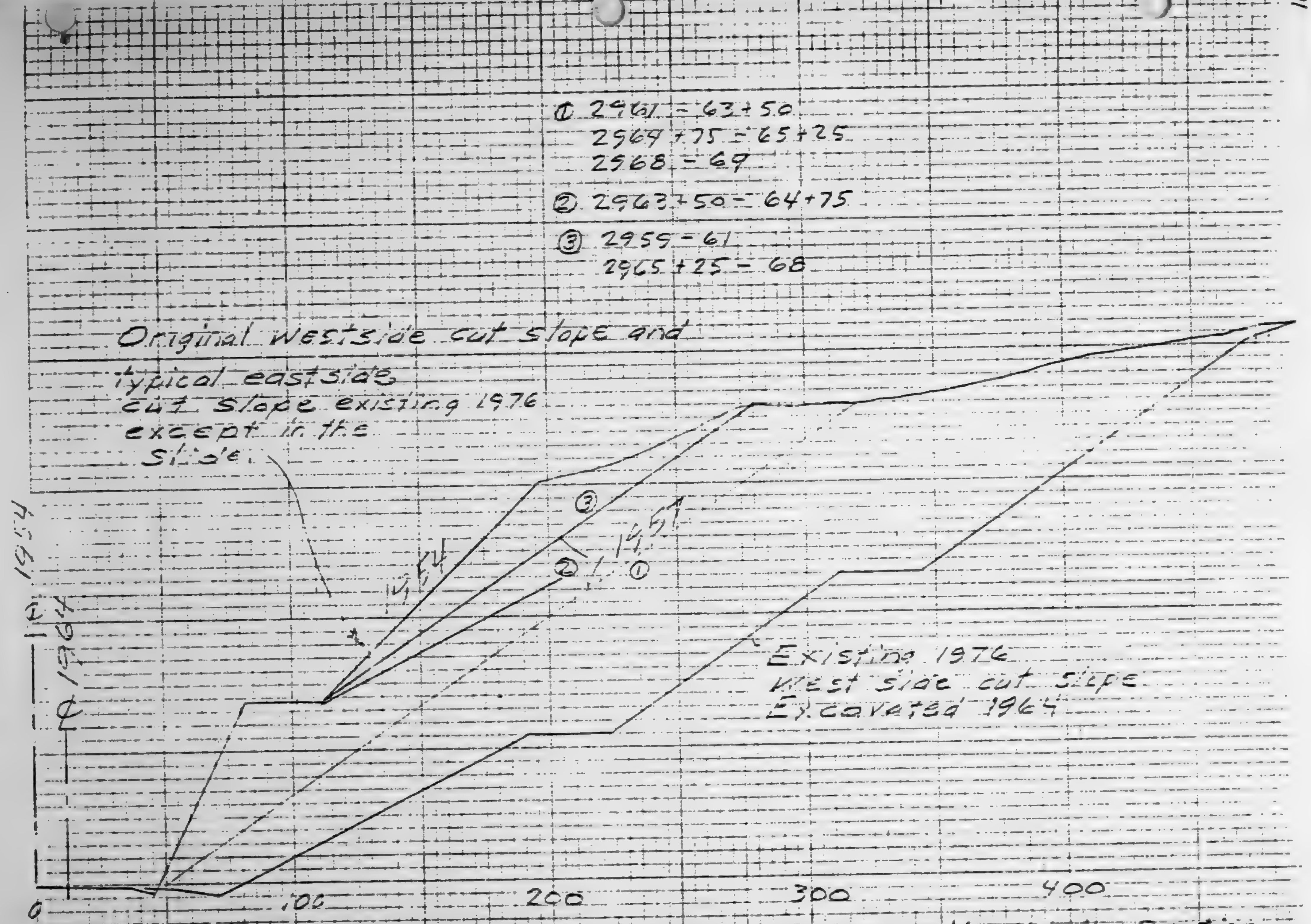
Initial grading on this alignment started 1954 for 4-lanes over the summit. Another contract for grading of flatter slopes was necessary before paving was finished in the fall of 1957. Mostly on the west side.

The fill slide (north) was counterbalanced in the 1957 grading contract.

Grading for the interstate highway was done in 1964 by widening on the west side. Slopes were made flatter with wide benches. On the eastside cut slope, removal of loose material was done by extra work order in the amount of $30,000.

In 1969, the grade was moved away from the fill slide on the north as much as 12-feet. Only 400 cy of excavation was required.

Some removal of debris has been done by maintenance from the eastside cut slide to clear the ditch and shoulder.


① 2961 = 63+50
2969+75 = 65+25
2968 = 69
② 2963+50 = 64+75
③ 2959 = 61
2965+25 = 68
Original westside cut slope and typical eastside cut slope existing 1976 except in the slide.
℄ 1954
℄ 1964
¼:1
③
②
①
1:1
1¼:1
Existing 1976 west side cut slope Excavated 1964
0
100
200
300
400

Roberts Mountain Section

Stages of Westside Cut Excavation

GEOLOGY

Rock-like graywacke (dark colored sandstone) is the rock type in the Roberts Mountain cut. It is part of a relatively old formation, three to five times or more older than the Columbia River basalt, as a comparison. It is highly fractured and somewhat sheared or crushed. Numerous slickensided surfaces are seen in the drill cores.

Given the history of development of new sliding with each new cut excavation, the slide triggering mechanism is rebound of former loading strain due to the unloading effect of excavation. Because the soil is rock-like (brittle), the rebound force is relieved by "breaking" of the mass on a plane surface (slide surface) rather than a yielding adjustment through several feet or more as would take place in plastic soil. Cracks and joints open up, fill with water when it is available, contributing hydraulic forces. Development of the sliding surface is aided by the presence of a number of slickensides which are residual from fault thrusting.

Probably the best prediction of what will happen if nothing is done to control the slides is that "what has been is what will be." If nothing is done, the creeping of the slides as has been experienced will continue and probably at about the same rate. If new cut slope excavations are made, new "breaking" can be expected. Stabilization of the existing slide masses is somewhat uncertain because adjacent yet unbroken masses may be developing sliding surfaces.

DOTHAN FORMATION

Original description: Diller, J. S., 1907, The Mesozoic sediments of southwestern Oregon: Am. Jour. Sci., 4th, vol. 23, p. 401-421.

Distribution: The Dothan Formation is fairly widespread in southwestern Oregon, forming a belt which averages approximately 10 miles in thickness and extends from the extreme southwestern corner of the state northeastward to a point immediately south of Roseburg. The type locality is located along Cow Creek in the Canyonville quadrangle.

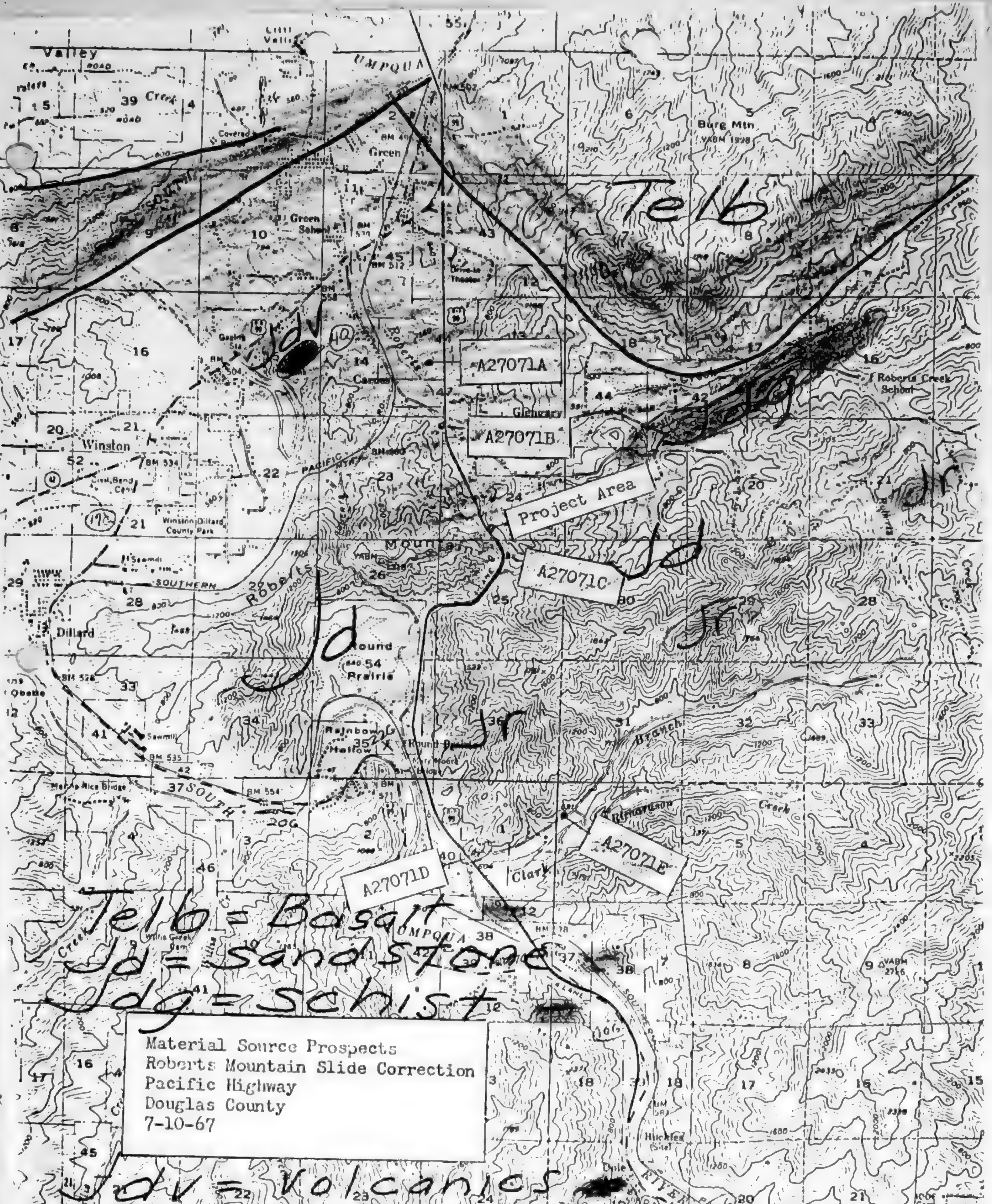
Lithology: The predominate rock type is a massive, well-indurated, medium-grained, poorly to moderately sorted lithic graywacke. Interbeds of dark gray to black mudstone are developed locally, and intercalations of red and white chert and dense pillow lavas altered to greenstone are present in places. Though the scarce conglomerates which make up part of the formation are generally composed of clasts of greenstone and chert, a few conglomerates composed of quartz-rich granitic cobbles have been reported (Dott, 1962). The over-all thickness of the unit is unclear, but must be on the order of several miles.

Structure and contacts: In a regional sense the Dothan Formation is thought to be a large thrust sheet which has been thrust under the older Rogue Formation to the east. In a more local sense the unit is fractured, riddled with quartz veins, steeply dipping and locally sheared especially along contacts with other units such as the Rogue Formation.

Age: The recent discovery of Buchia piochii in the Dothan indicates a Tithonian, (Portlandian-lower Purbeckian) post-Nevadan age for the unit. Other evidence favoring a post-Nevadan age includes the absence of intrusions, the presence of granitic cobbles, and a fairly high potassium feldspar content in the unit. Dott's (1965) radiometric age assignment of 142 M.Y. for the unit is effectively called into question by Hotz (1969), who considers the Dothan to be younger, and a northward extension of the lower part of the Franciscan Assemblage of California.

References:
Baldwin, 1969
Born, 1963
Dott, 1962
Dott, 1965
Hicks, 1964
Hixson, 1965
Hotz, 1969
Johnson, 1965
Ramp, 1969
Wells and others, 1949
Wells and others, 1953

E. M. Baldwin in Geology of Oregon, p 82, says, "Podlike masses of glaucophane schist, veined by albite and quartz and containing garnet and actinolite are present in shear zones in the Dothan and Galice formations. The pods are usually less than 200-feet in any dimension. They occur in sheared zones which obscure their relationship to the surrounding formations but they are thought to be metamorphic equivalents."


Telb
Jdv
Jdg
Jd
Jr
A27071A
A27071B
Project Area
A27071C
A27071D
A27071E
UMPQUA
Green
Green School
Burg Mtn
Glengary
Roberts Creek School
Winston
Winston Dillard County Park
Dillard
Roberts Mountain
Round Prairie
Rainbow Hollow
Branch
Richardson Creek
Clark
SOUTHERN
PACIFIC
SOUTH UMPQUA RIVER
Myrtle Creek Sch

Telb = Basalt
Jd = sandstone
Jdg = schist

Material Source Prospects
Roberts Mountain Slide Correction
Pacific Highway
Douglas County
7-10-67

Jdv = Volcanics
Jr = Siltstone

Laboratory Test Results on Rock Samples

	Data Sheet No.	Location	LAR	Sp. Gr.	Na SO$_4$ Loss	OAD Pass 20	OAD Height
D	A27071 A	NE1/4 of SE1/4, S14, T28S, R6W	8.6	3.11	2%	15.7%	0.8 in.
	A27071 B	NE1/4 of NE1/4, S23, T28S, R6W	58.2	2.68	90.6%	42.82%	5.8 in.
	A27071 C	NW1/4 of NE1/4, S25, T28S, R6W	35.6	2.58	42.9%	30.73%	5.1 in.
D	A27071 D	NE1/4 of SW1/4, S1, T29S, R6W	22.4	2.70	3.8%	24.20%	2.7 in.
	A27071 E	NW1/4 of NW1/4, S6, T29S, R5W	19.8	2.68	11.9%	44.90%	3.0 in.

FORM 8-30

OREGON STATE HIGHWAY DIVISION

INTER-DEPARTMENT CORRESPONDENCE

Salem, Oregon
March 16, 1976

SUBJECT: Roberts Mountain Section
Widening of the Fill
on the South Side
2980 – 3010 ±

To: Frank Terpin
Location Engineer

The effect of widening the subject fill on the stability of it has been investigated by eight drill holes and stability analysis using probable shear strength available revealed by them.

The analysis indicates that the fill is marginally stable as it is. Therefore, no widening should be done without counterbalancing by adding an equal or larger width of fill to the lower part of the fill.

F. W. Yarbrough
Soils & Geology Engineer

FWY:af

cc: J. H. Versteeg
A. Shirley

REFERRED TO
Beard ____ Reed ____
Cole ____ Sample ____
1 Eriksen FE ____ Watson ____
Hager ____ Wolfe ____
Return Discuss Do File Copy Due ____
BY FINAL DESIGN ENGINEER

1 Versteeg ✓
Olson
2 Christensen Dvz
Scott
Swenson
Anderson
Trout

RECEIVED
MAR 17 1976
ROAD DESIGN SECTION

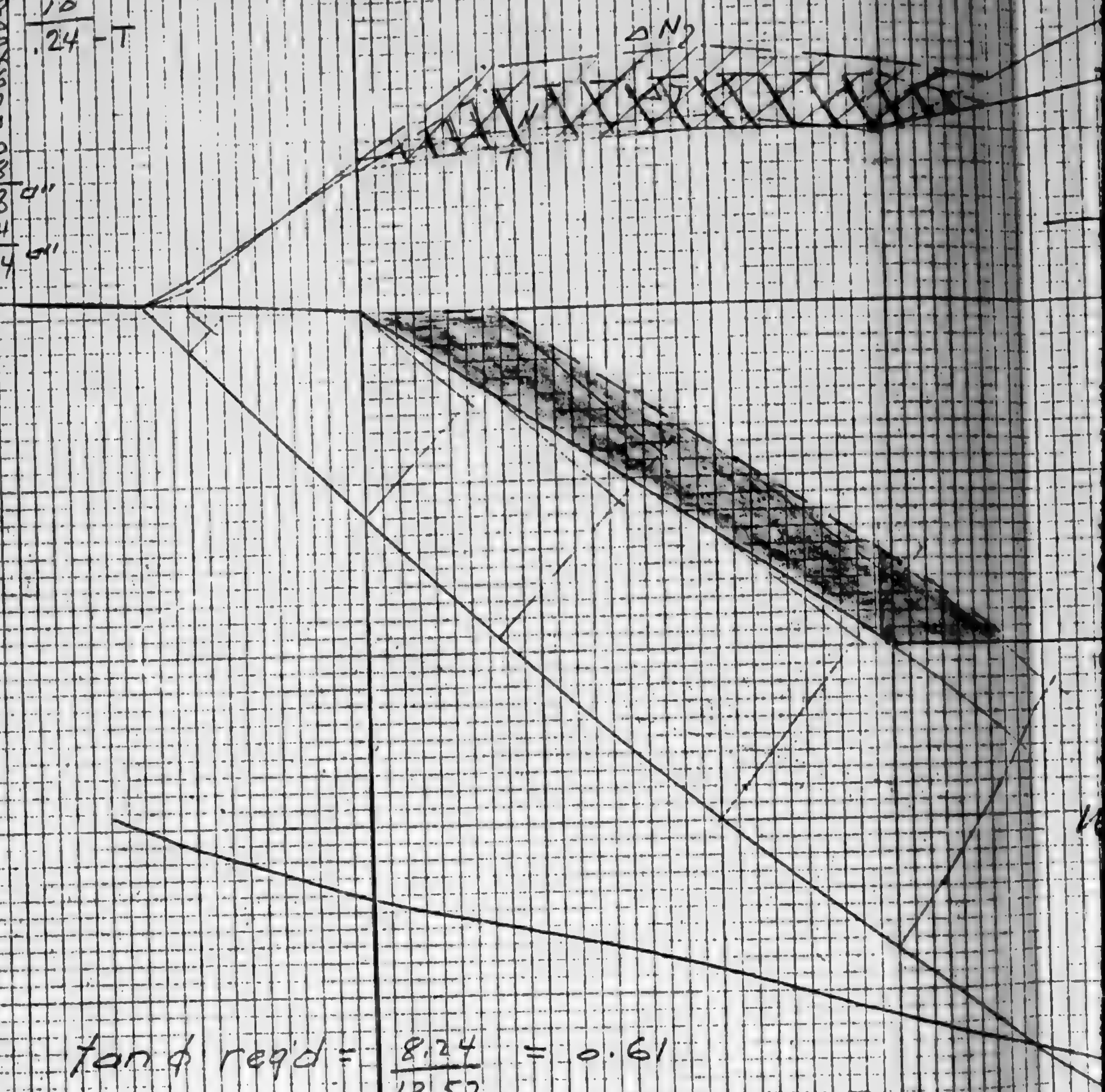
Requires Reply ☐
Requires Approval ☐
Receiver Keep ☐
Do not File ☐
Return To ____
Bring Up ___/___/___
Other ____

[redacted]

2
50
80
98
100
110
124
106
80
50
30
8
+T 8.48 □''
− .24
ΣT = 8.24 □''

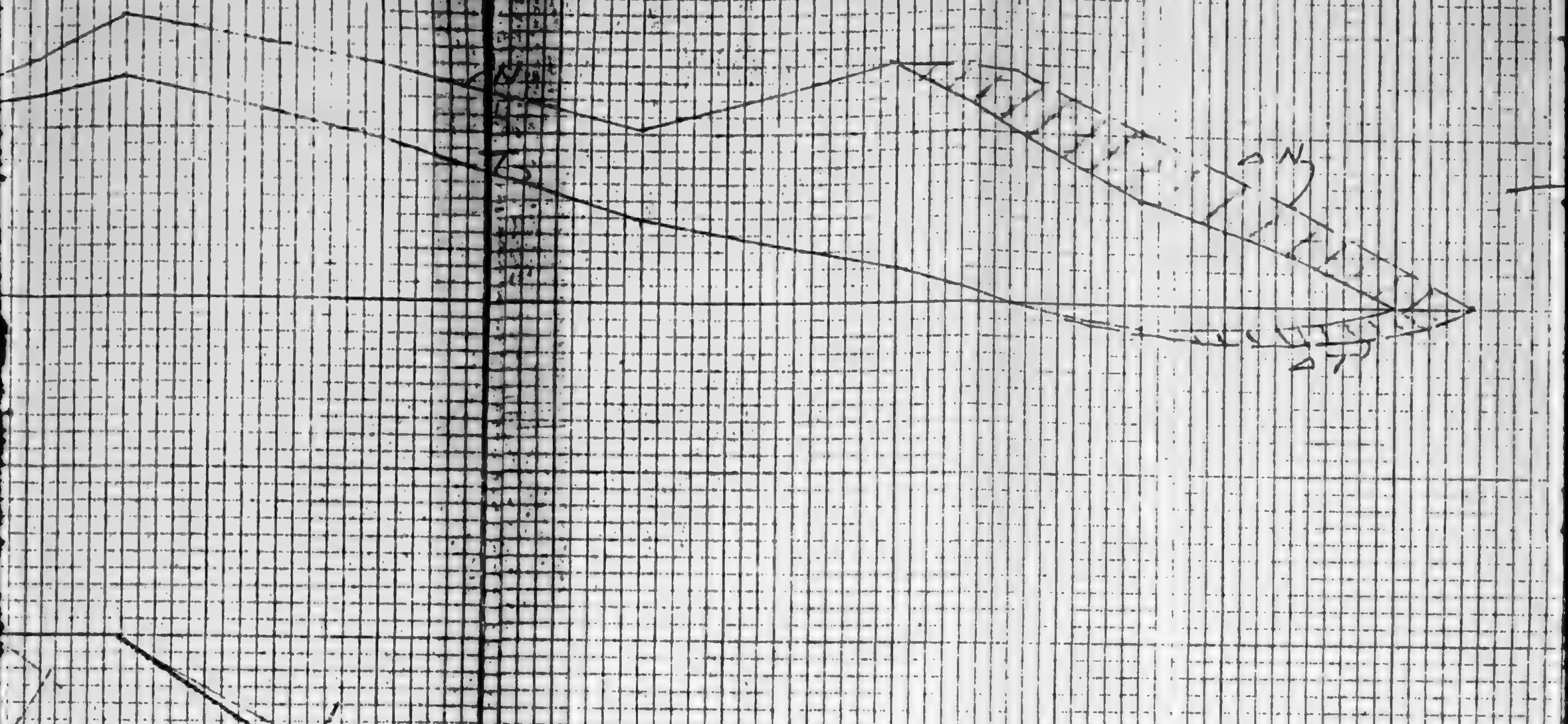
14
10
.24 − T

2
50
48
106
102
120
156
148
126
116
128
114
62
30
ΣN 13.52 □''
5



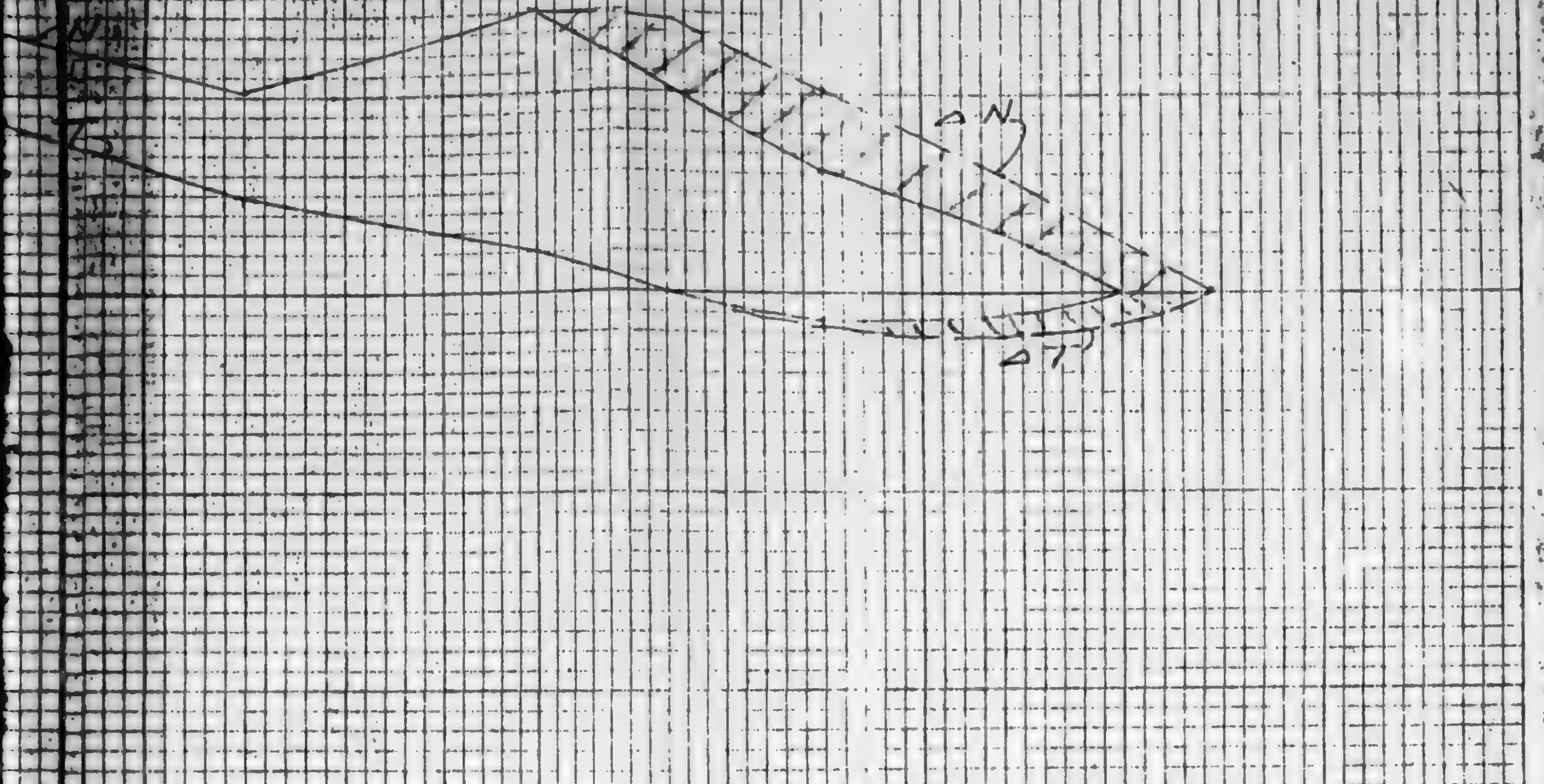
$\tan\phi$ req'd = $\frac{8.24}{13.52}$ = 0.61
≡ 32°

some layers have 28° or less.



ROBERTS MTN FILL

Effect of Widening



ROBERTS MTN FILL
Effect of Widening

3-16-75

ROBERTS	
FED ROAD Div. No.	
8	

STATE OF OREGON

STATE HIGHWAY DEPARTMENT

PLANS FOR PROPOSED PROJECT

GRADING & PAVING

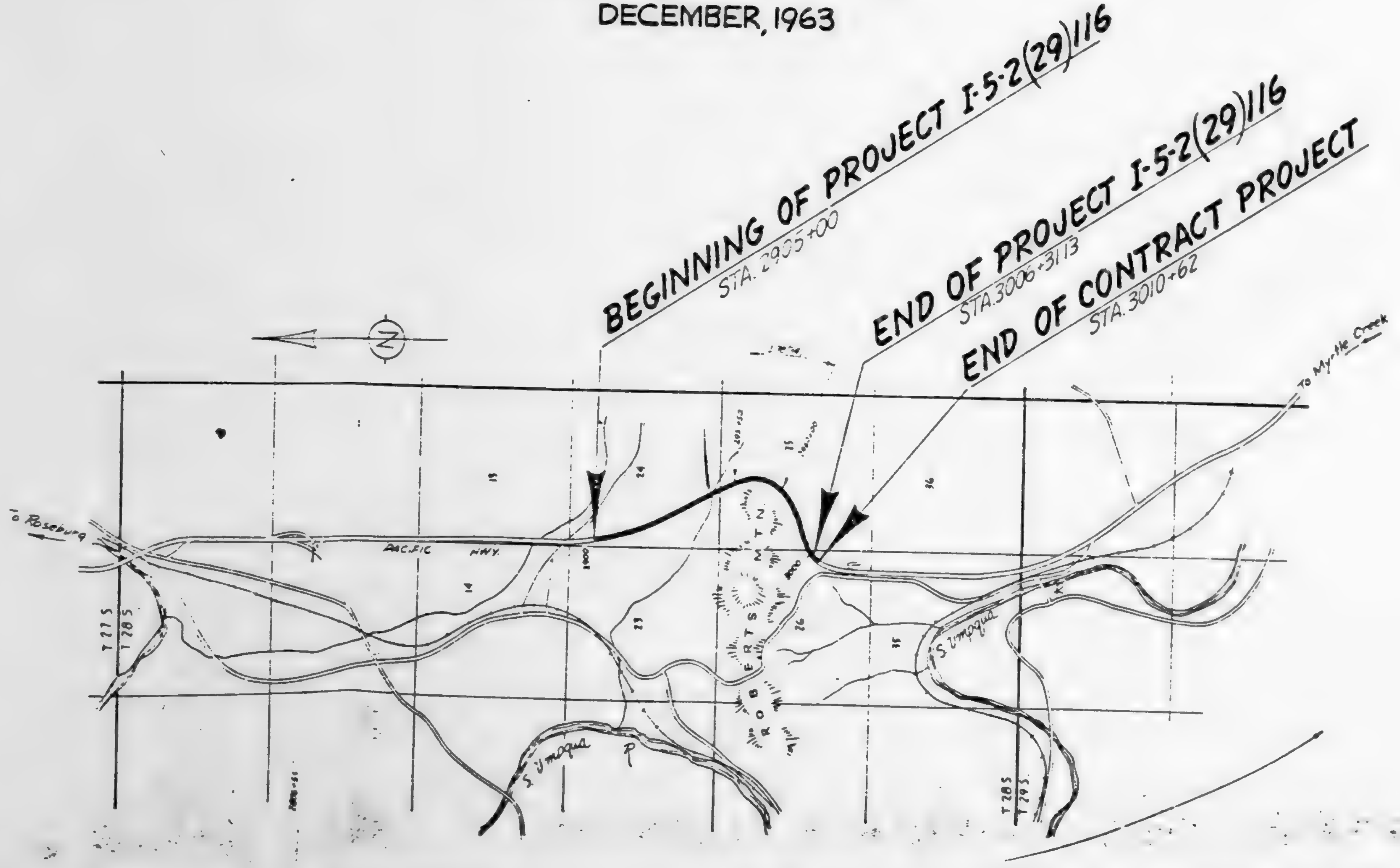
ROBERTS MOUNTAIN SECTION

PACIFIC HIGHWAY

DOUGLAS COUNTY

DECEMBER, 1963

Portland
Salem
Eugene
Roseburg
O R


BEGINNING OF PROJECT I-5-2(29)116
STA. 2905+00
END OF PROJECT I-5-2(29)116
STA. 3006+31.13
END OF CONTRACT PROJECT
STA. 3010+62
N
To Roseburg
To Myrtle Creek
PACIFIC HWY.
T 27 S
T 28 S
T 28 S
T 29 S
ROBERTS MTN
S. Umpqua R
S. Umpqua
13
14
23
24
25
26
35
36

Fr
Con

STATE OF OREGON

STATE HIGHWAY DEPARTMENT

PLANS FOR PROPOSED PROJECT

GRADING & PAVING

ERTS MOUNTAIN SECTION

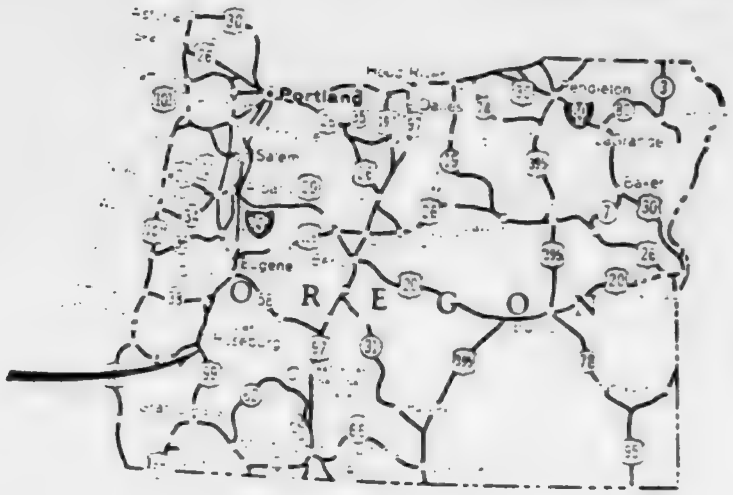
PACIFIC HIGHWAY

DOUGLAS COUNTY

DECEMBER, 1963

ROBERTS MOUNTAIN SECTION PACIFIC HIGH DOUGLAS COUN				SHEET No. 1
FED ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
8	OREGON	I-5-2(29)116	-	See Index

[illegible] AS CONSTRUCTED
2-8-66 CONTRACT E327

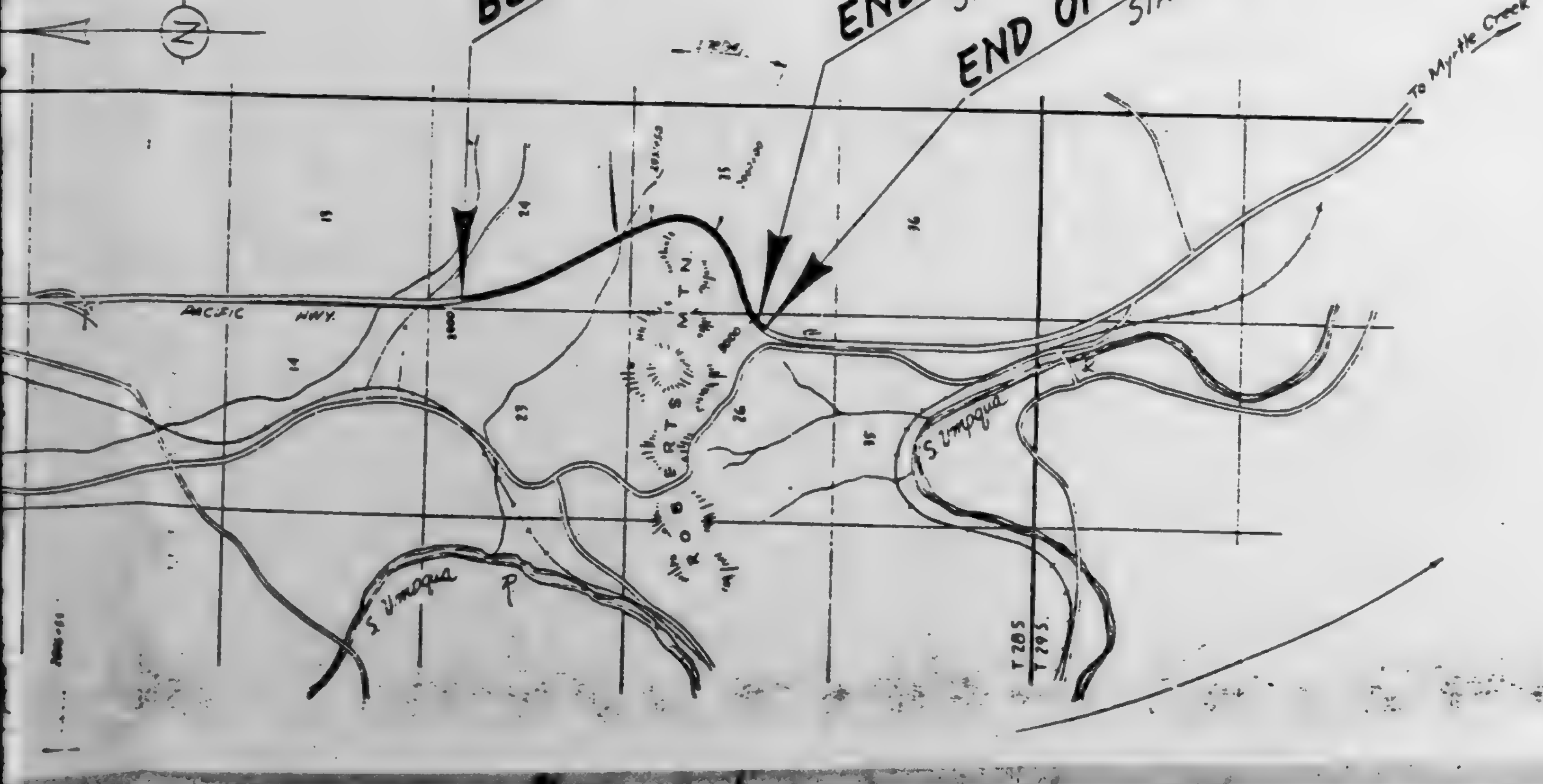


Portland
Hood River
The Dalles
Pendleton
Salem
La Grande
Baker
Eugene
O R E G O N

BEGINNING OF PROJECT I-5-2(29)116
STA. 2905+00

END OF PROJECT I-5-2(29)116
STA. 3006+31.13

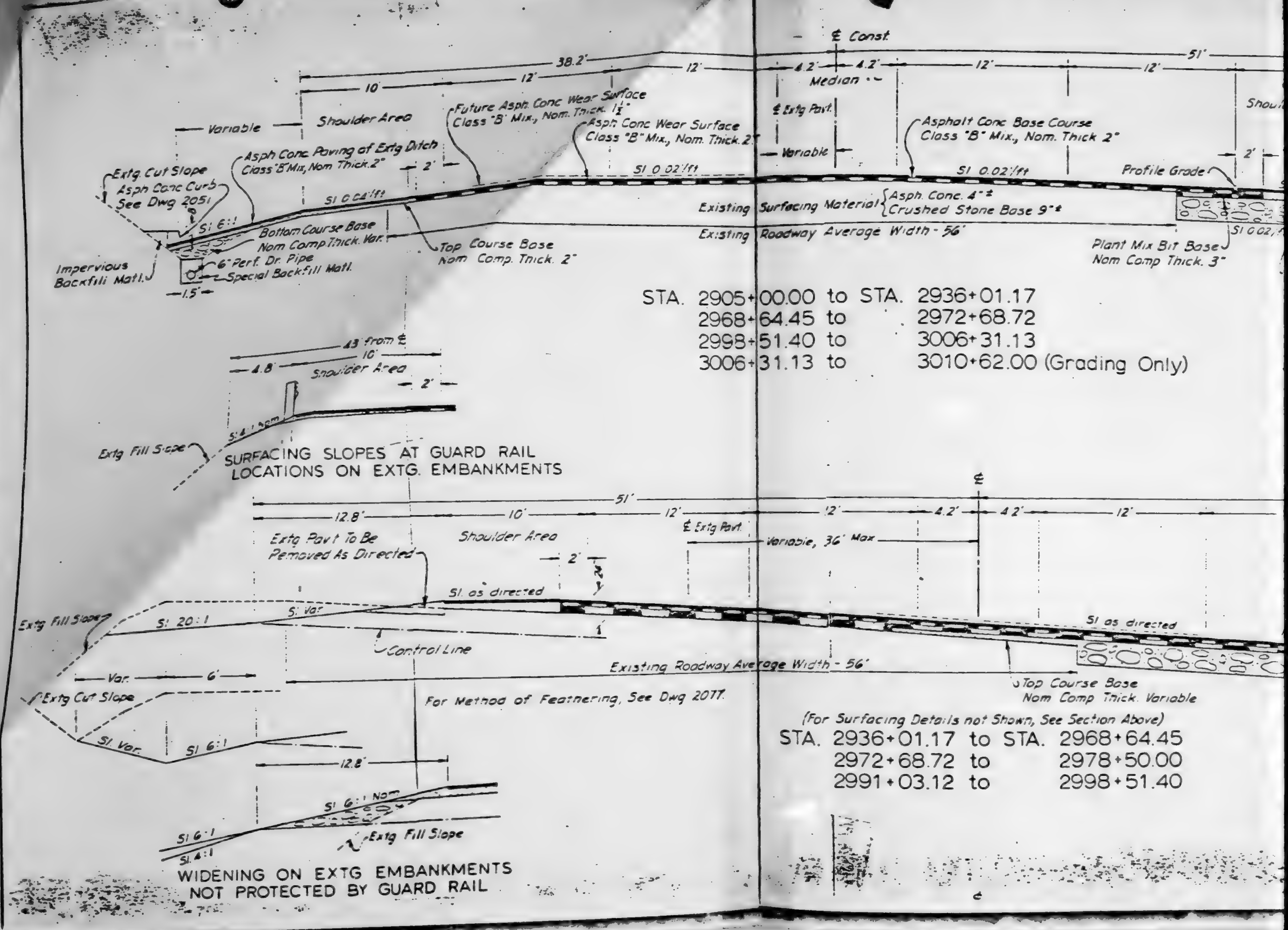
END OF CONTRACT PROJECT
STA. 3010+62



N
To Myrtle Creek
PACIFIC HWY.
ROBERTS MTN
S. Umpqua
S. Umpqua R.
T 28 S
T 29 S

Freeway
Construction
1964

TYPICAL SECTIONS



STA. 2905+00.00 to STA. 2936+01.17
2968+64.45 to 2972+68.72
2998+51.40 to 3006+31.13
3006+31.13 to 3010+62.00 (Grading Only)

SURFACING SLOPES AT GUARD RAIL LOCATIONS ON EXTG. EMBANKMENTS

(For Surfacing Details not Shown, See Section Above)
STA. 2936+01.17 to STA. 2968+64.45
2972+68.72 to 2978+50.00
2991+03.12 to 2998+51.40

WIDENING ON EXTG EMBANKMENTS NOT PROTECTED BY GUARD RAIL

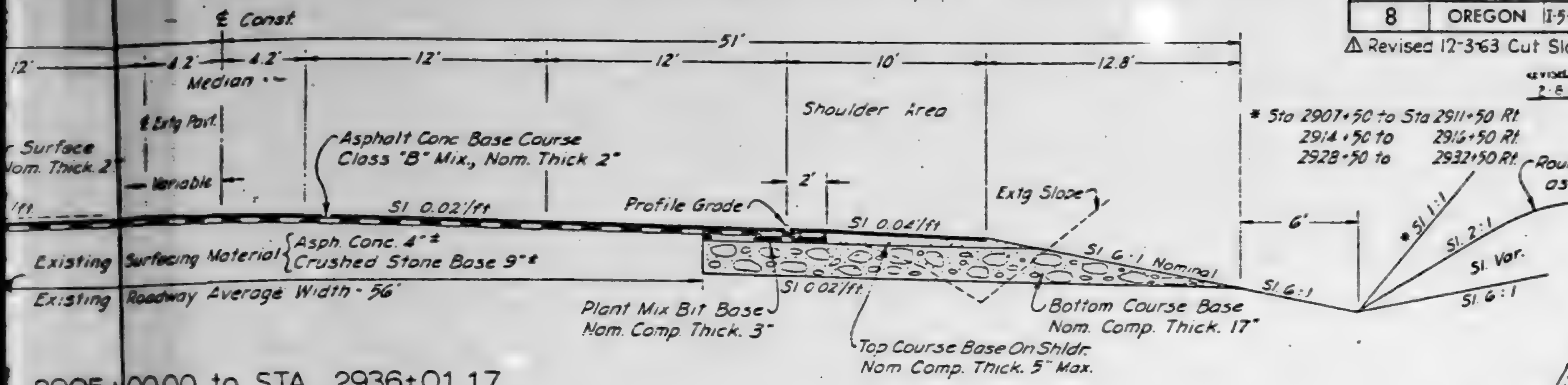
℄ Const.
38.2'
51'
10
12'
4.2'
Median
Variable
Shoulder Area
Future Asph. Conc Wear Surface Class "B" Mix., Nom. Thick. 1½"
Asph. Conc Wear Surface Class "B" Mix., Nom. Thick. 2"
℄ Extg Pavt.
Asphalt Conc Base Course Class "B" Mix., Nom. Thick 2"
Extg Cut Slope
Asph Conc Curb See Dwg 2051
Asph Conc Paving of Extg Ditch Class "B" Mix, Nom Thick. 2"
2'
Sl 0.02'/ft
Sl 0.04'/ft
Sl 6:1
Profile Grade
Existing Surfacing Material
Asph. Conc. 4"±
Crushed Stone Base 9"±
Bottom Course Base Nom Comp Thick. Var.
Top Course Base Nom Comp. Thick. 2"
Existing Roadway Average Width - 56'
Plant Mix Bit Base Nom Comp Thick. 3"
Impervious Backfill Matl.
6" Perf. Dr. Pipe
Special Backfill Matl.
1.5'
43' from ℄
4.8'
Sl 4:1 Nom
Extg Fill Slope
℄
12.8'
Extg Pavt To Be Removed As Directed
Variable, 36' Max
Sl. as directed
Sl 20:1
Sl Var
Control Line
Var.
6'
For Method of Feathering, See Dwg 2077.
Top Course Base Nom Comp Thick. Variable
Sl 6:1 Nom
Sl 6:1
Sl 4:1

TYPICAL SECTIONS

ROBERTS MOUNTAIN SECTION PACIFIC HIGHWAY DOUGLAS COUNTY				SHEET No. 2
FED ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
8	OREGON	I-5-2(29)116		See Index

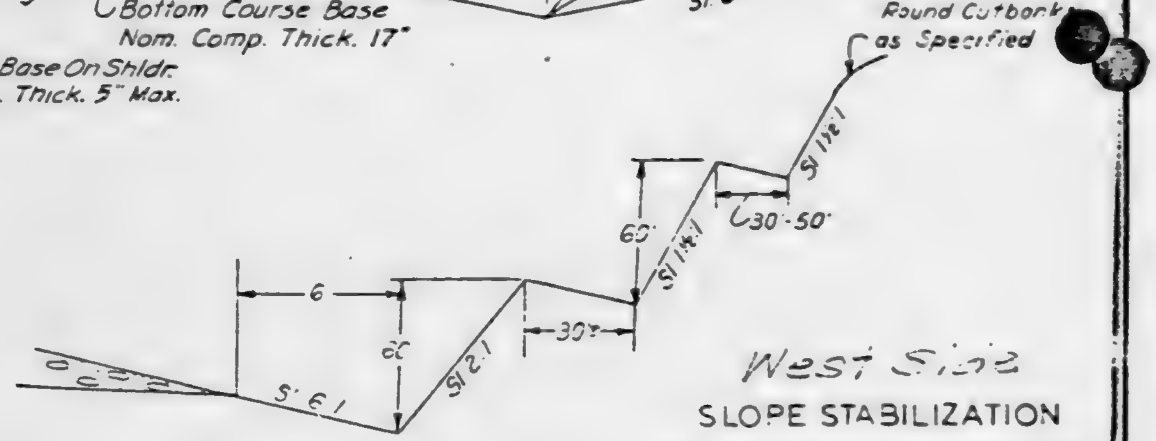
△ Revised 12-3-63 Cut Slope Detail

REVISED AS CONSTRUCTED 2-8-66 CONTRACT E367



℄ Const.
51'
12'
4.2'
4.2'
12'
12'
10'
12.8'
Median
℄ Extg Pavt.
Surface
Nom. Thick. 2"
Variable
Asphalt Conc Base Course
Class "B" Mix., Nom. Thick 2"
Shoulder Area
2'
Profile Grade
Sl 0.02'/ft
Sl 0.04'/ft
Extg Slope
Sl 6:1 Nominal
Sl 6:1
6'
Existing Surfacing Material
Asph. Conc. 4"±
Crushed Stone Base 9"±
Existing Roadway Average Width - 56'
Plant Mix Bit Base
Nom. Comp. Thick. 3"
Sl 0.02'/ft
Top Course Base On Shldr.
Nom Comp. Thick. 5" Max.
Bottom Course Base
Nom. Comp. Thick. 17"
* Sta 2907+50 to Sta 2911+50 Rt.
2914+50 to 2916+50 Rt.
2928+50 to 2932+50 Rt.
* Sl 1:1
Sl 2:1
Sl. Var.
Sl. 6:1
Round Cutbanks
as Specified

2905+00.00 to STA. 2936+01.17
2968+64.45 to 2972+68.72
2998+51.40 to 3006+31.13
3006+31.13 to 3010+62.00 (Grading Only)

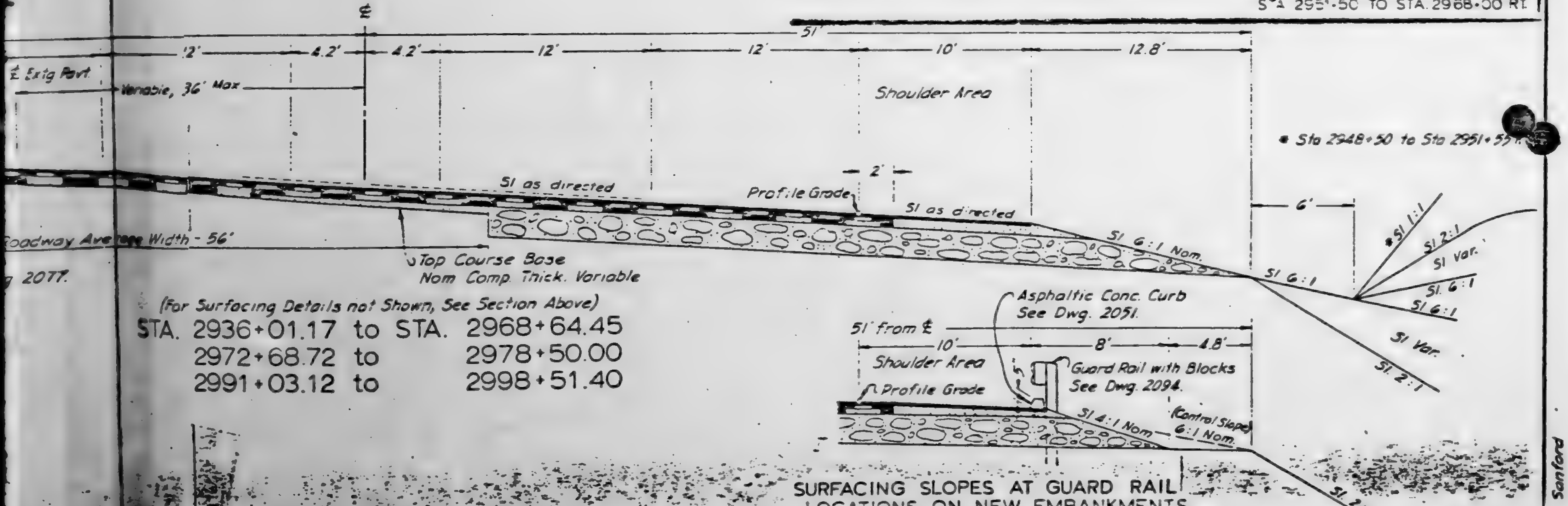


Round Cutbank
as Specified
Sl 1½:1
30'-50'
60'
Sl 1½:1
6
60'
30'
Sl 2:1
Sl 6:1

West Side

SLOPE STABILIZATION

STA 2951+50 TO STA. 2968+00 RT.



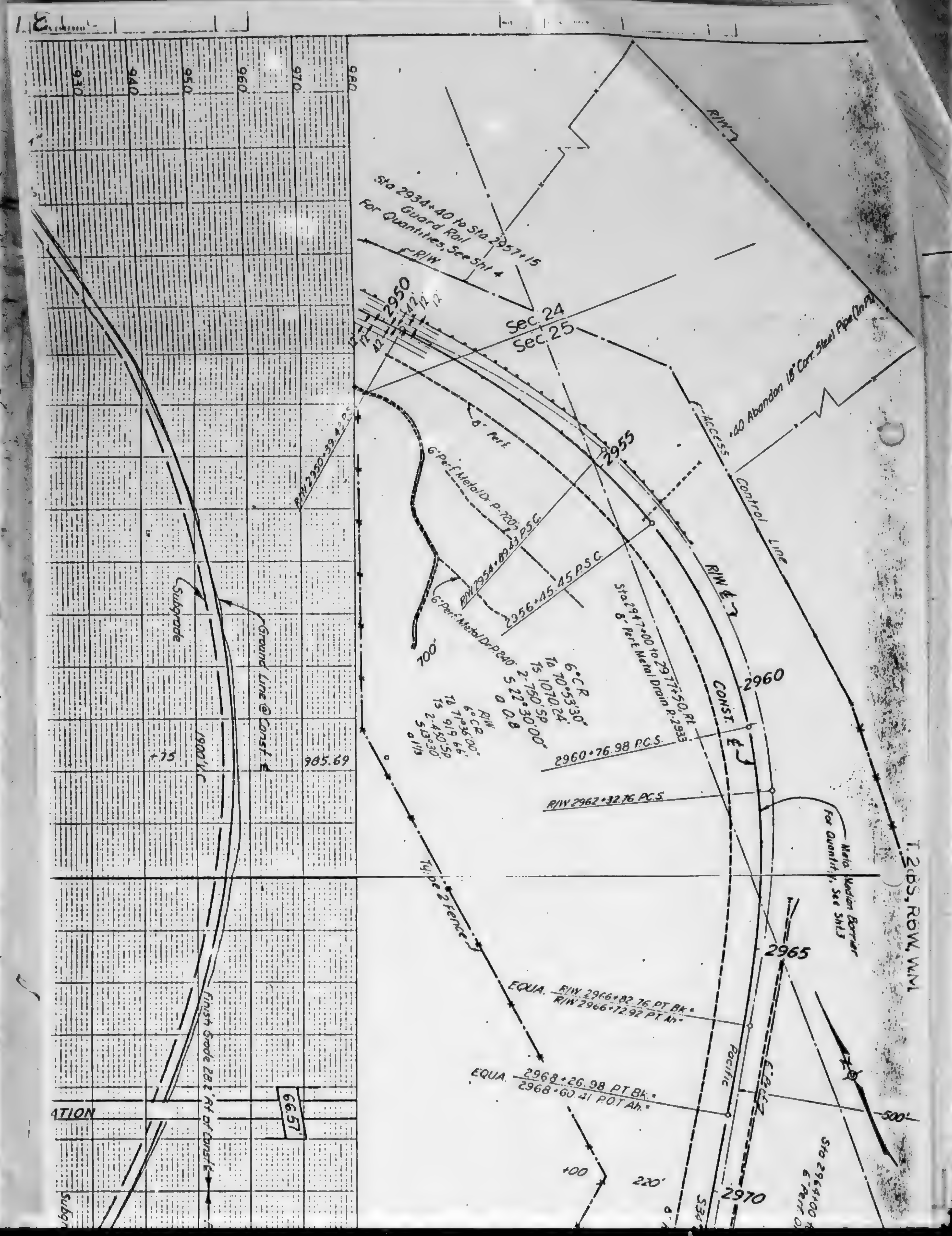
℄
51'
12'
4.2'
4.2'
12'
12'
10'
12.8'
℄ Extg Pavt.
Variable, 36' Max
Shoulder Area
2'
Sl as directed
Profile Grade
Sl as directed
Sl 6:1 Nom.
Sl 6:1
6'
* Sta 2948+50 to Sta 2951+55 Rt.
* Sl 1:1
Sl 2:1
Sl Var.
Sl 6:1
Sl 6:1
Sl Var.
Sl 2:1
Roadway Average Width - 56'
2077.
Top Course Base
Nom Comp. Thick. Variable
Asphaltic Conc. Curb
See Dwg. 2051.
51' from ℄
10'
8'
4.8'
Shoulder Area
Profile Grade
Guard Rail with Blocks
See Dwg. 2094.
Sl 4:1 Nom.
Control Slope
6:1 Nom.
Sl 2:1

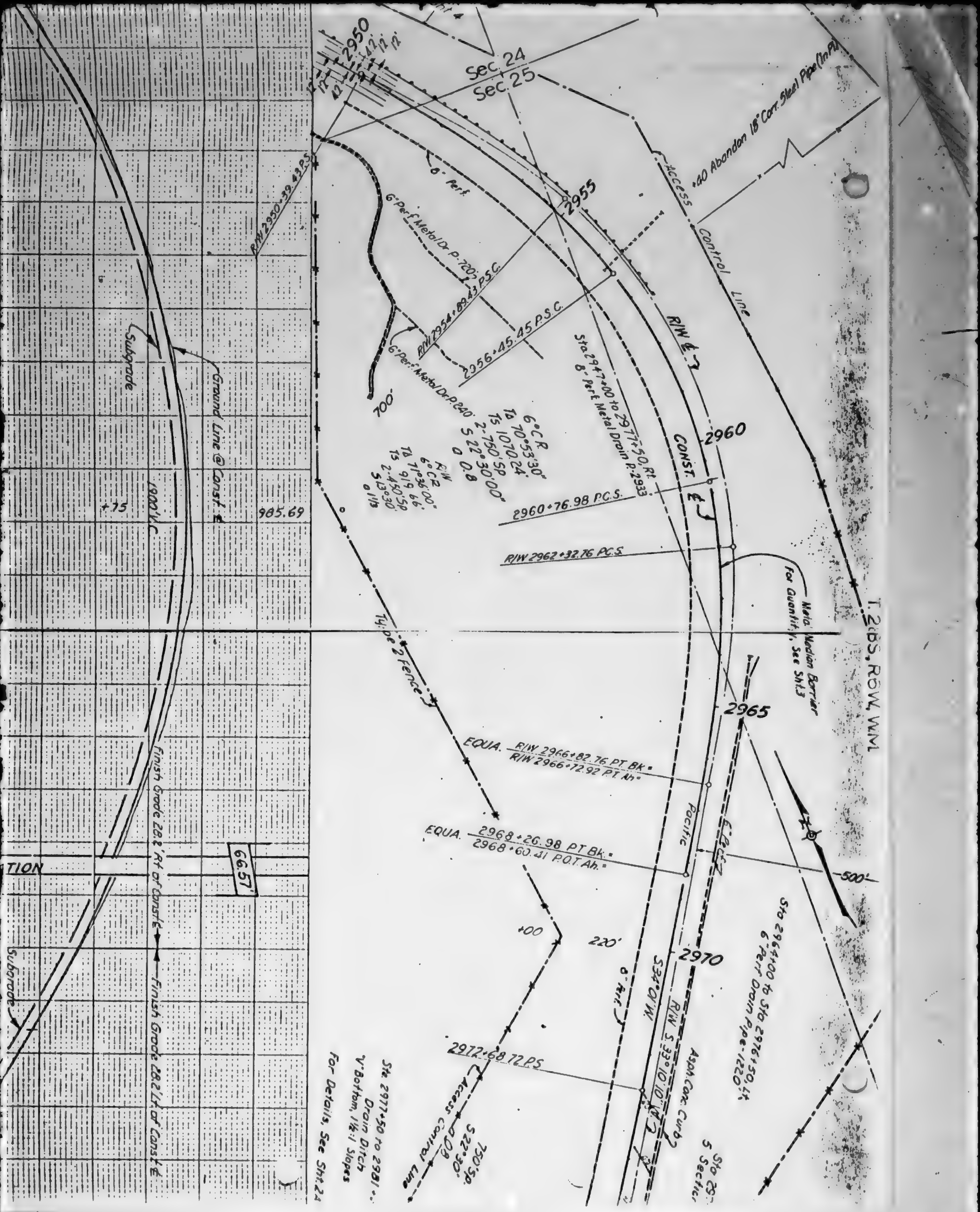
(For Surfacing Details not Shown, See Section Above)

STA. 2936+01.17 to STA. 2968+64.45
2972+68.72 to 2978+50.00
2991+03.12 to 2998+51.40

SURFACING SLOPES AT GUARD RAIL LOCATIONS ON NEW EMBANKMENTS

Sanford


930
940
950
960
970
980
Sta 2934+40 to Sta 2957+15
Guard Rail
For Quantities, See Sht 4
R/W
R/W
2950
Sec. 24
Sec. 25
.40 Abondon 18" Corr. Steel Pipe (In Pl.)
ACCESS Control Line
2955
8" Perf.
6" Perf. Metal Dr. P. 720'
R/W 2950+39.42 P.S.
R/W 2954+89.43 P.S.C.
2956+45.45 P.S.C.
Sta 2947+00 to 2977+50, Rt.
8" Perf. Metal Drain P. 2933
R/W ℄
6" Perf. Metal Dr. P. 240'
700'
6° C.R.
Δ 70°53'30"
Ts 1070.24'
2-750' SP
S 22°30'00"
a 0.8
R/W
6° C.R.
Δ 71°36'00"
Ts 919.66'
2-450' SP
S 13°30'
a 1.13
Subgrade
Ground Line @ Const. ℄
1900' V.C.
+75
985.69
CONST. ℄
2960
2960+76.98 P.C.S.
R/W 2962+32.76 P.C.S.
Metal Median Barrier
For Quantity, See Sht 3
T. 2 S., R 6 W., W.M.
Type 2 Fence
2965
EQUA. R/W 2966+82.76 P.T. Bk =
R/W 2966+72.92 P.T. Ah
EQUA. 2968+26.98 P.T. Bk =
2968+60.41 P.O.T. Ah.
Pacific
Finish Grade 28' Rt. of Const. ℄
ATION
66.57'
500'
+00
220'
2970
Sta 2964+00
6" Perf.
Subgr


2950
Sec. 24
Sec. 25
.40 Abandon 18" Corr. Steel Pipe (In Pl.)
Access Control Line
R/W 2950+39.43 P.S.
8" Perf.
6" Perf. Metal Dr. P. 720'
2955
R/W 2954+89.43 P.S.C.
2956+45.45 P.S.C.
6" Perf. Metal Dr. P. 240'
700'
Sta. 2947+00 to 2977+50, Rt.
8" Perf. Metal Drain P. 2933'
R/W ℄
6° C.R.
Δ 70°53'30"
Ts 1070.24'
2-750' SP
S 22°30'00"
a 0.8
R/W
6° C.R.
Δ 71°36'00"
Ts 919.66'
2-450' SP
S 13°30'
a 1.13
CONST. ℄
2960
2960+76.98 P.C.S.
R/W 2962+32.76 P.C.S.
Metal Median Barrier
For Quantity, See Sht. 3
T. 2 S., R. 6 W., W.M.
Type 2 Fence
2965
EQUA. R/W 2966+82.76 P.T. Bk. =
R/W 2966+72.92 P.T. Ah.
EQUA. 2968+26.98 P.T. Bk. =
2968+60.41 P.O.T. Ah.
Pacific
500'
+00
220'
2970
8" Perf.
S 34°01' W.
R/W S 33°10'10" W.
Asph. Conc. Curb
Sta 2964+00 to Sta 2976+50, Lt.
6" Perf. Drain Pipe - 1220'
2972+68.72 P.S.
Access Control Line
a 0.8
S 22°30'
750' S.P.
Sta. 2977+50 to 2981+..
Drain Ditch
V Bottom, 1½:1 Slopes
For Details, See Sht. 2A
Sta
5 Sectio
Subgrade
Ground Line @ Const. ℄
1900' V.C.
+75
985.69
Finish Grade 28.8' Rt. of Const. ℄
Finish Grade 28.8' Lt. of Const. ℄
66.57
TION
Subgrade

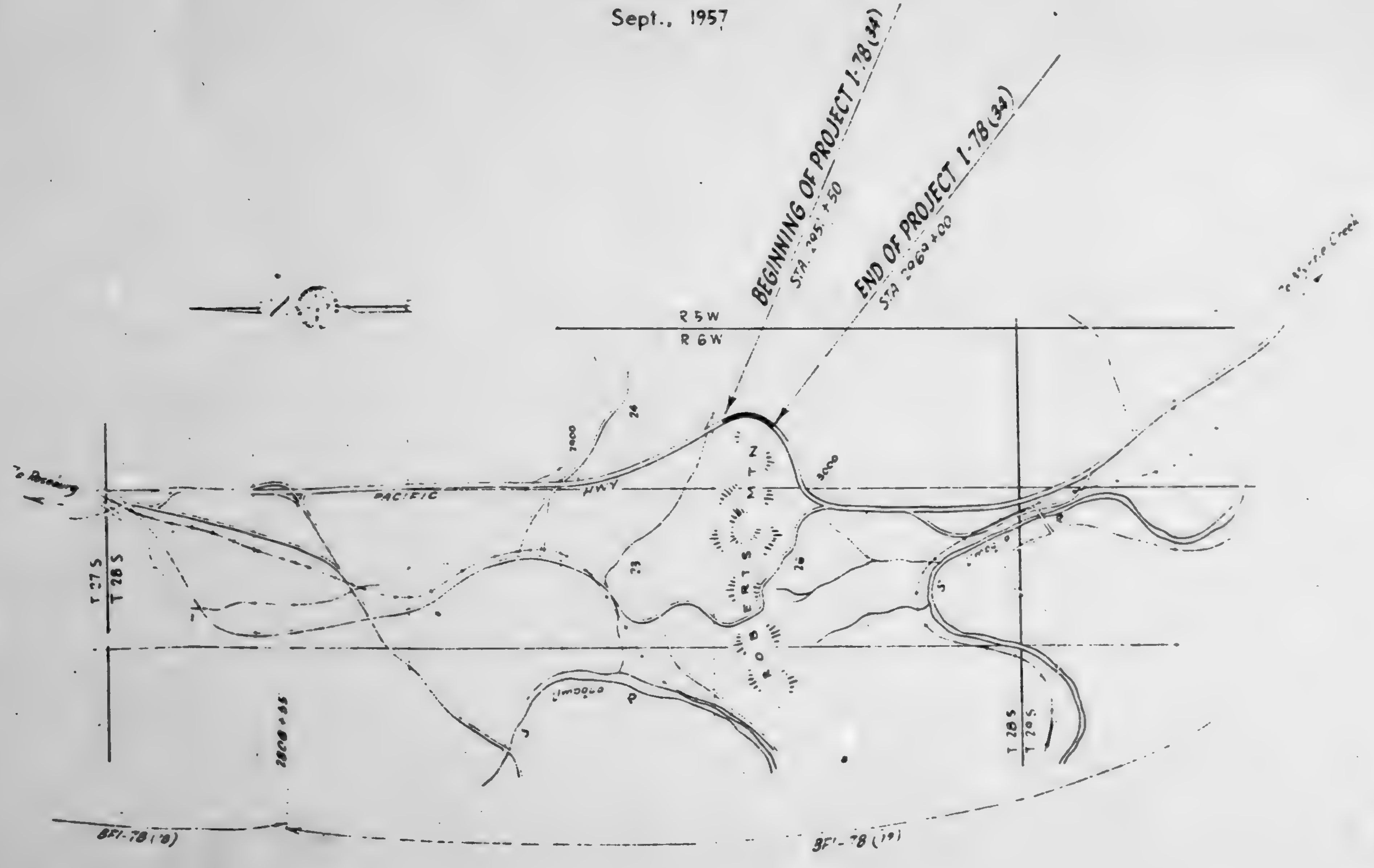
SLOPE STABILIZATION

ROBERTS MTN. SUMMIT SECTION

PACIFIC HIGHWAY

DOUGLAS COUNTY

Sept., 1957


BEGINNING OF PROJECT I-78 (34)
STA. 295+50
END OF PROJECT I-78 (34)
STA. 269+00
R 5 W
R 6 W
To Roseburg
To Myrtle Creek
T 27 S
T 28 S
T 28 S
T 29 S
PACIFIC HWY
ROBERTS MTN
2400
24
23
26
3000
Umpqua R
2808+85
BFI-78 (18)
BFI-78 (19)

Sketch Map

Scale 0 2000 4000 Feet

157
R H BALDOCK

STATE HIGHWAY COMMISSIO

BEN R CHANDLER Chairman
CHAS H REYNOLDS Commissio
[illegible] Commiss

38
38

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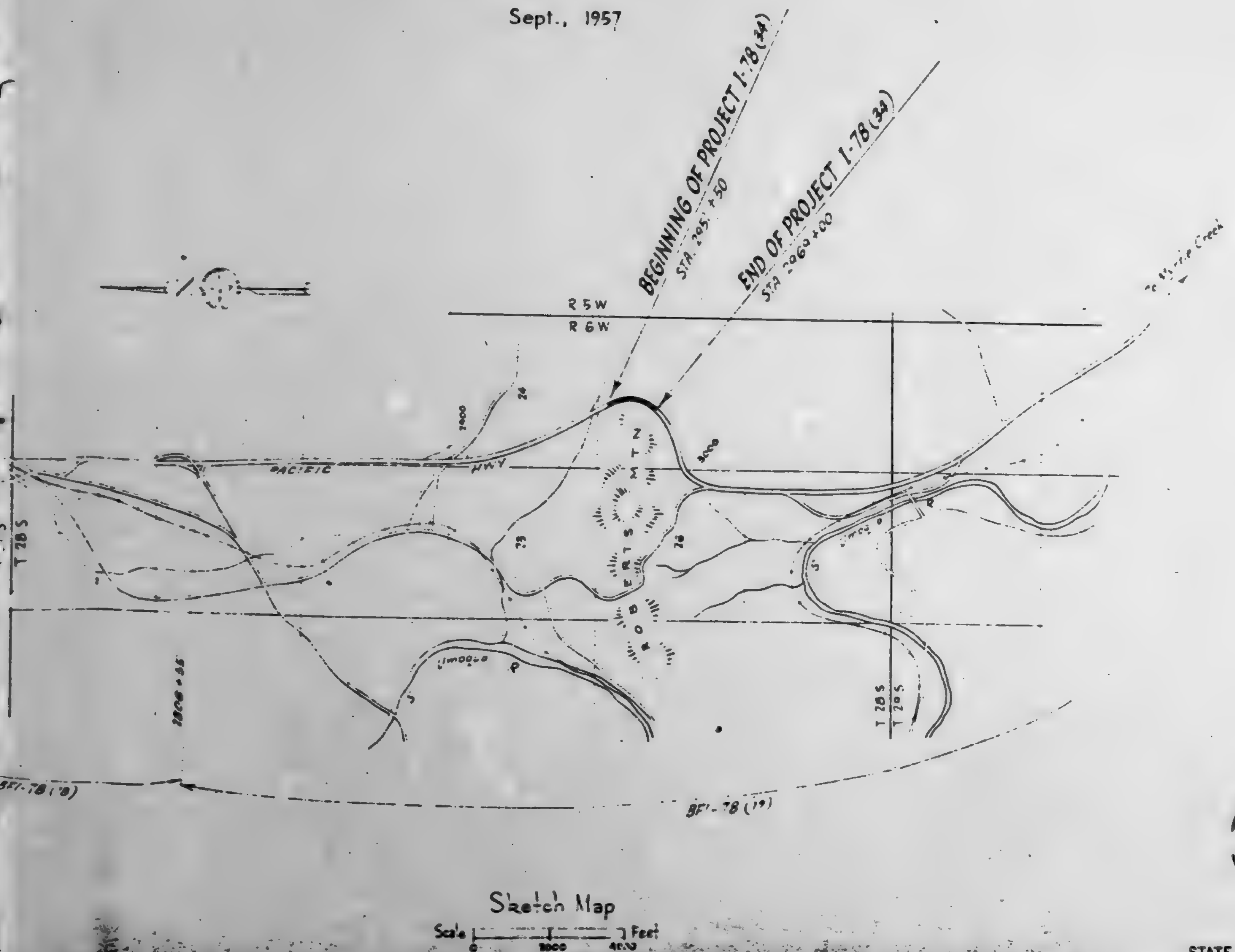
STo

SLOPE STABILIZATION

ROBERTS MTN. SUMMIT SECTION

PACIFIC HIGHWAY
DOUGLAS COUNTY
Sept., 1957


BEGINNING OF PROJECT I-78(34)
STA 295+50
END OF PROJECT I-78(34)
STA 296+00
R 5 W
R 6 W
T 28 S
T 29 S
PACIFIC HWY
ROBERTS MTN
Umpqua R
2900
3000
2806+55
23
24
26
SFI-78(18)
SFI-78(19)
Scale 0 2000 4000 Feet

Sketch Map

Slope
Stabilizatior
1957

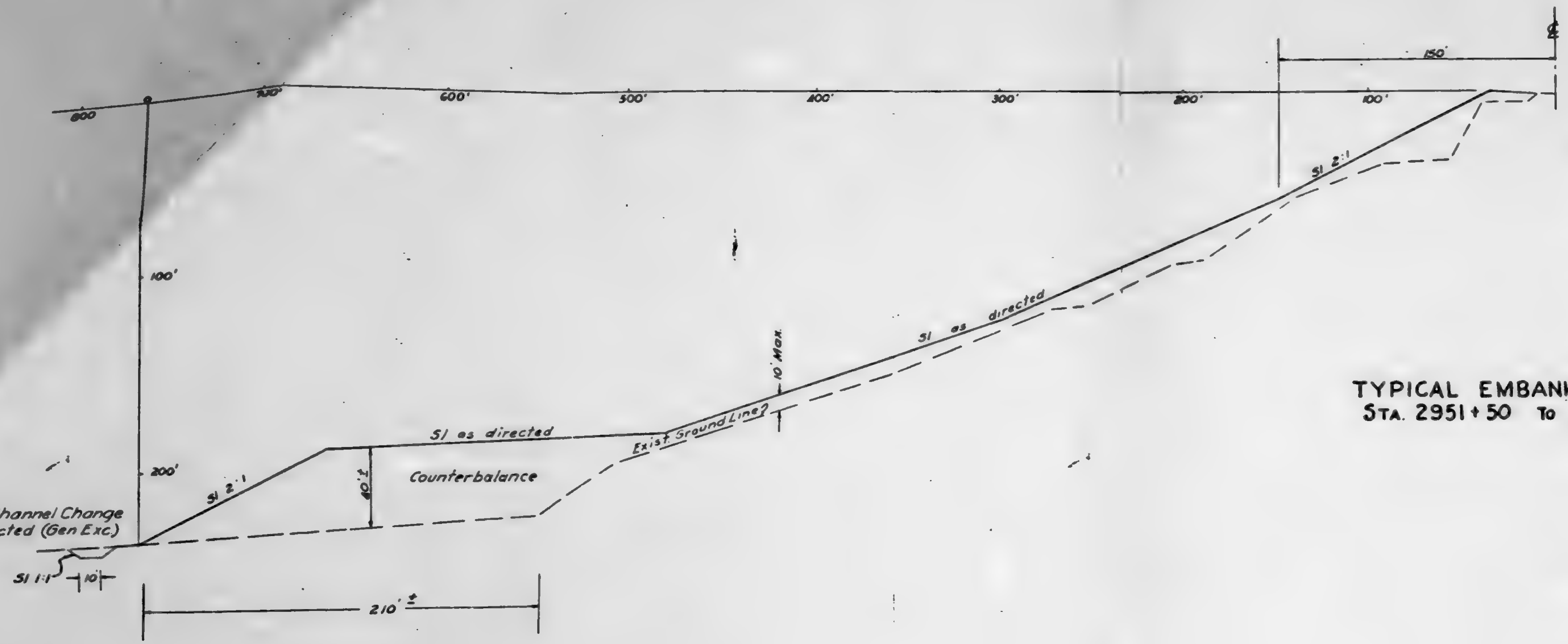
1349
W C WILLIAMS

STATE HIGHWAY ENGINEER

157
OREGON
NOV 8 1919
R H BALDOCK

STATE HIGHWAY COMMISSION
BEN R CHANDLER Chairman
CHAS H REYNOLDS Commissioner

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
APPROVED


800
700'
600'
500'
400'
300'
200'
100'
150'
℄
100'
200'
Sl 2:1
Sl as directed
Counterbalance
60'±
Exist Ground Line?
10' Max.
Sl as directed
Sl 2:1
Const Channel Change as directed (Gen Exc.)
Sl 1:1
10'
210'±

TYPICAL EMBANKMEN
STA. 2951+50 TO STA.

SUMMARY

Length of F.A.I. Project 0.331 Mile

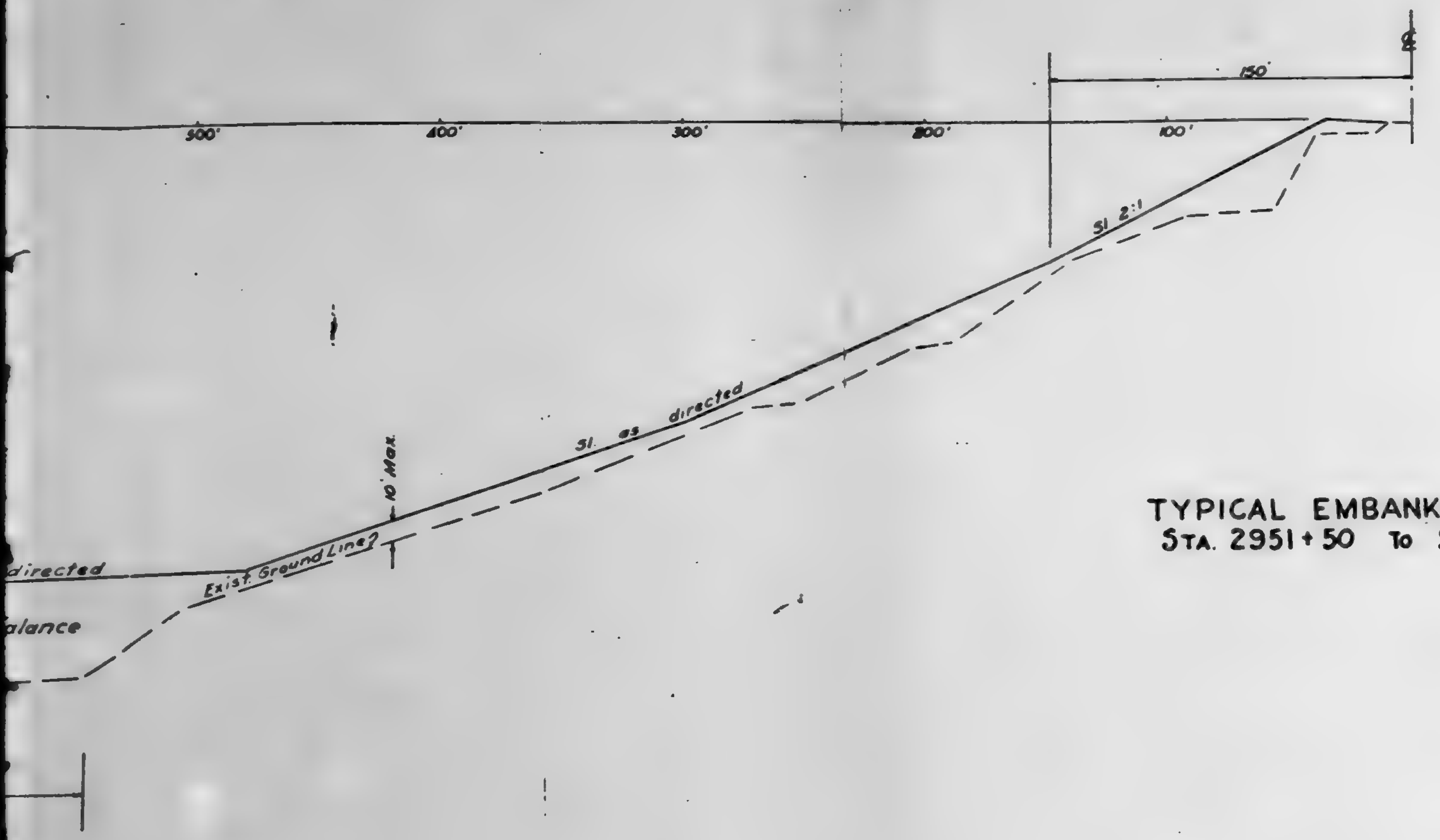
ITEM	UNIT	NET QUANTITY	ALLOWANCE	TOTAL
General Excavation, Unclassified	Cu.Yd	114,350	11,650	126,000
Type 2 Fence	Rod	130	10	140

℄
Bottom Crse A.C. Pvm

TYPICAL EXCAVATION

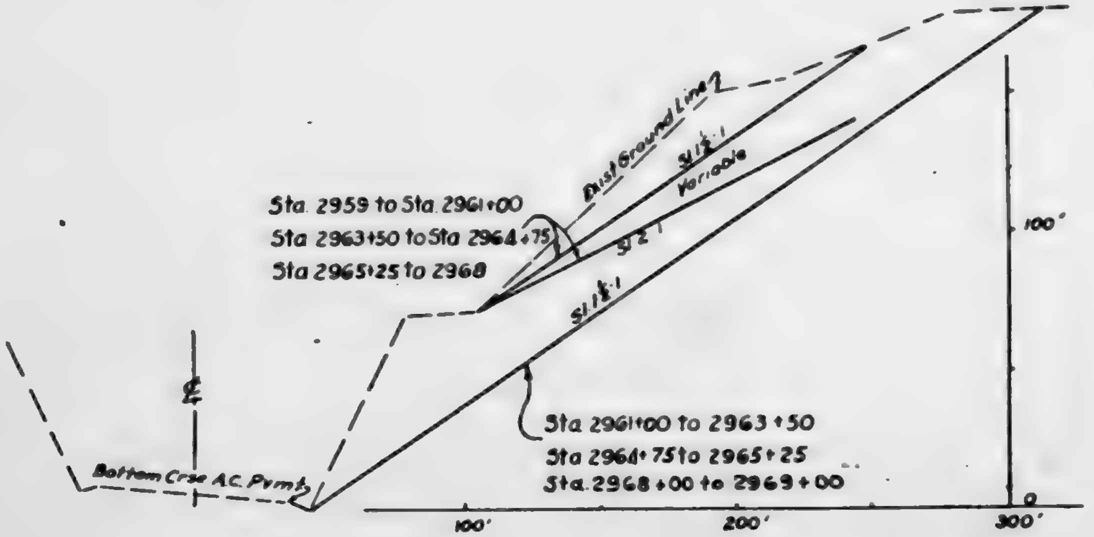
SLOPE STABIL[illegible]TION ROBERTS MTN. S[illegible] SECTION PACIFIC [illegible] DOUGLAS [illegible]ONTY			
FED. ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR
8	OREGON	I-78(34)	

REVISED AS CONSTRUCTED
12-57 CONTRACT 4892



℄
150'
500'
400'
300'
200'
100'
Sl. 2:1
Sl. as directed
10' Max.
Exist. Ground Line?
directed
alance

TYPICAL EMBANKMENT SECTION
STA. 2951+50 TO STA. 2955+50 Lt.

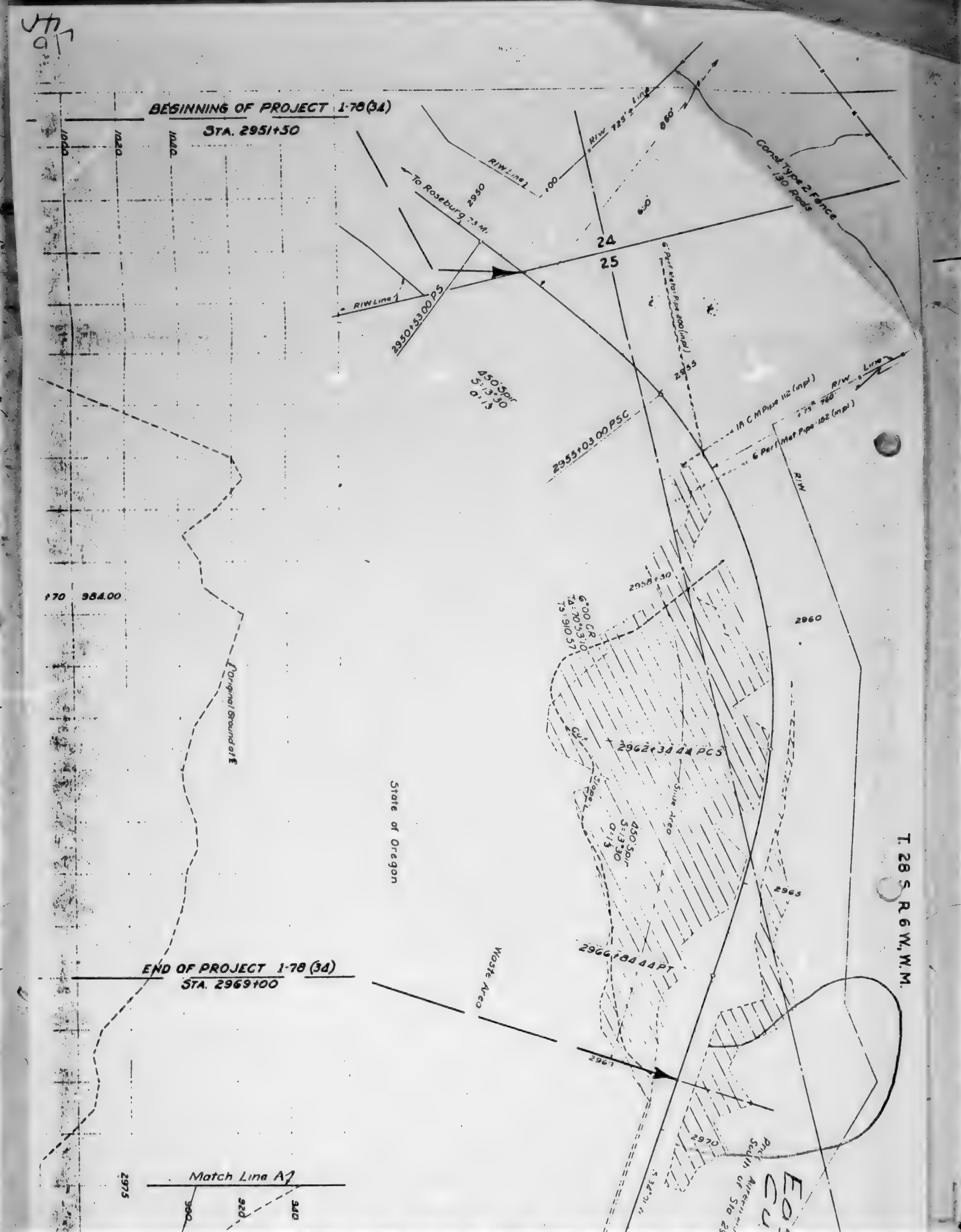


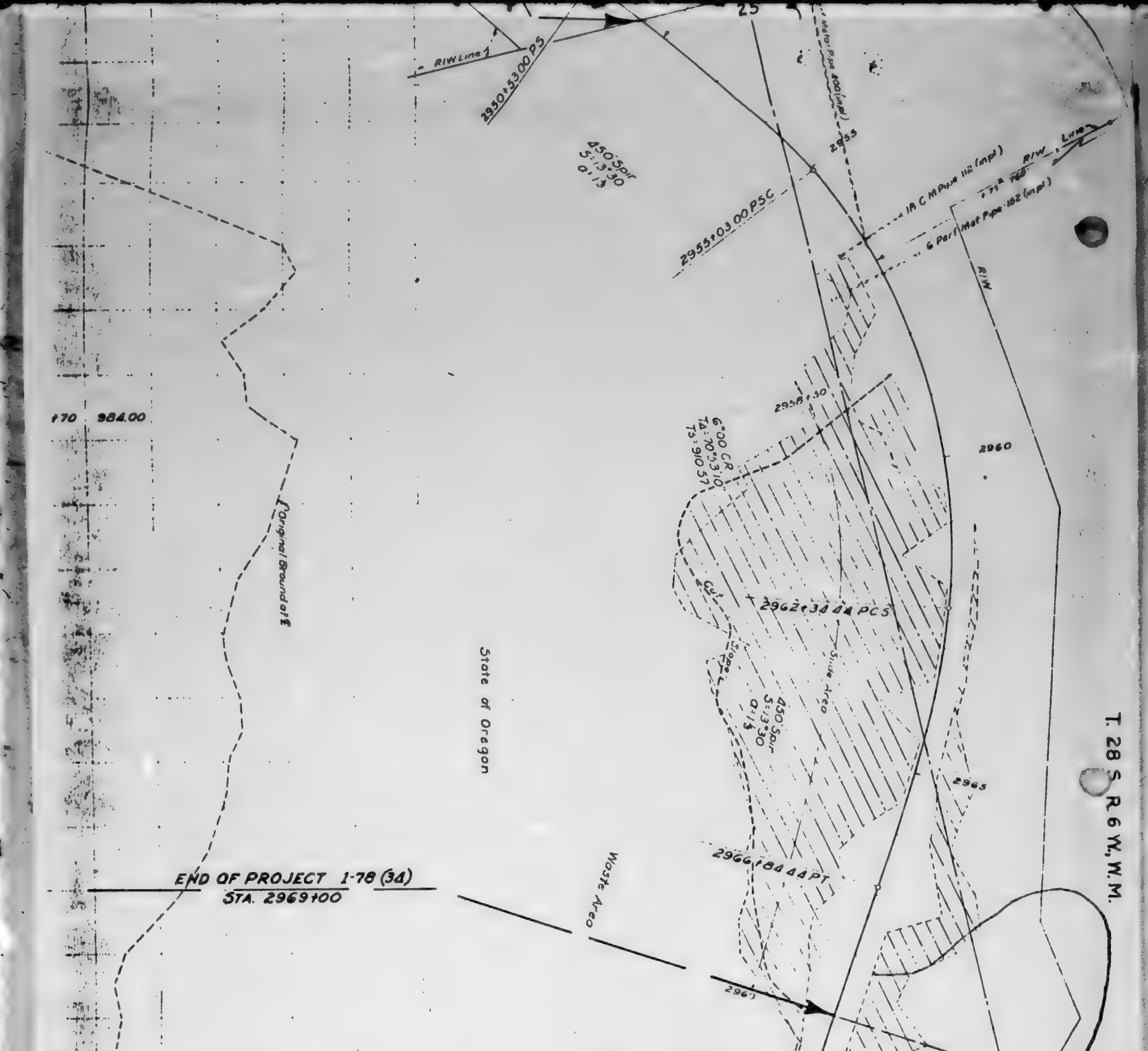
Exist Ground Line?
Sl 1½:1
Variable
Sl 2:1
Sl 1½:1
Sta. 2959 to Sta. 2961+00
Sta 2963+50 to Sta 2964+75
Sta 2965+25 to 2968
℄
Bottom Crse AC Pvmt
Sta 2961+00 to 2963+50
Sta 2964+75 to 2965+25
Sta. 2968+00 to 2969+00
100'
200'
300'
100'
0

TYPICAL EXCAVATION SECTION

Length of F.A.I. Project 0.331 Mile

NET QUANTITY	ALLOWANCE	TOTAL
114,350	11,650	126,000
130	10	140


BEGINNING OF PROJECT 1-78 (34)
STA. 2951+50
1000
1020
1040
R/W Line
To Roseburg 7.3 M.
2950
R/W 125' Line
850'
100
600
Const Type 2 Fence - 130 Rods
24
25
R/W Line
2950+53.00 PS
6" Perf Metal Pipe 800 (inpl)
450' Spir
S: 13°30'
θ: 1°3
2955
18 C M Pipe 112 (inpl)
R/W Line
75 ft 760
6" Perf Met Pipe 182 (inpl)
2955+03.00 PSC
R/W
2958+30
6°00 CR
Δ: 70°33'10"
Ts: 910.57
2960
+70 984.00
Original Ground at ℄
Cut
2962+34.44 PCS
Slope
Slide Area
450' Spir
S: 13°30
θ: 1°3
State of Oregon
2965
T. 28 S. R 6 W., W.M.
2966+84.44 PT
END OF PROJECT 1-78 (34)
STA. 2969+00
Waste Area
2967
2970
South of Sta 296
Match Line A
2975
900
920
940


25
R/W Line
2950+53.00 PS
Metal Pipe 800 (mpl)
450' Spir
S: 1°3'30
O: 1.3
2955
2955+03.00 PSC
18 C M Pipe 112 (mpl)
6 Perf Met Pipe 152 (mpl)
R/W
Line
R/W
+70 984.00
Original Ground at ℄
2958+30
6°00 CR
Δ: 70°33'10
Ts: 910.57
2960
Cut
Slope
2962+34.44 PC S
Slide Area
450' Spir
S: 1°3'30
O: 1.3
State of Oregon
2965
T. 28 S. R. 6 W., W.M.
2966+84.44 PT
END OF PROJECT 1-78 (34)
STA. 2969+00
Waste Area
2969
2970
Price South Airstrip No. 1 South of Sta 2969
2975
Match Line A1
980
920
940
Original Ground at ℄
Finish Grade
East Side
Cut Side
2975+89.16 PS
2975
N

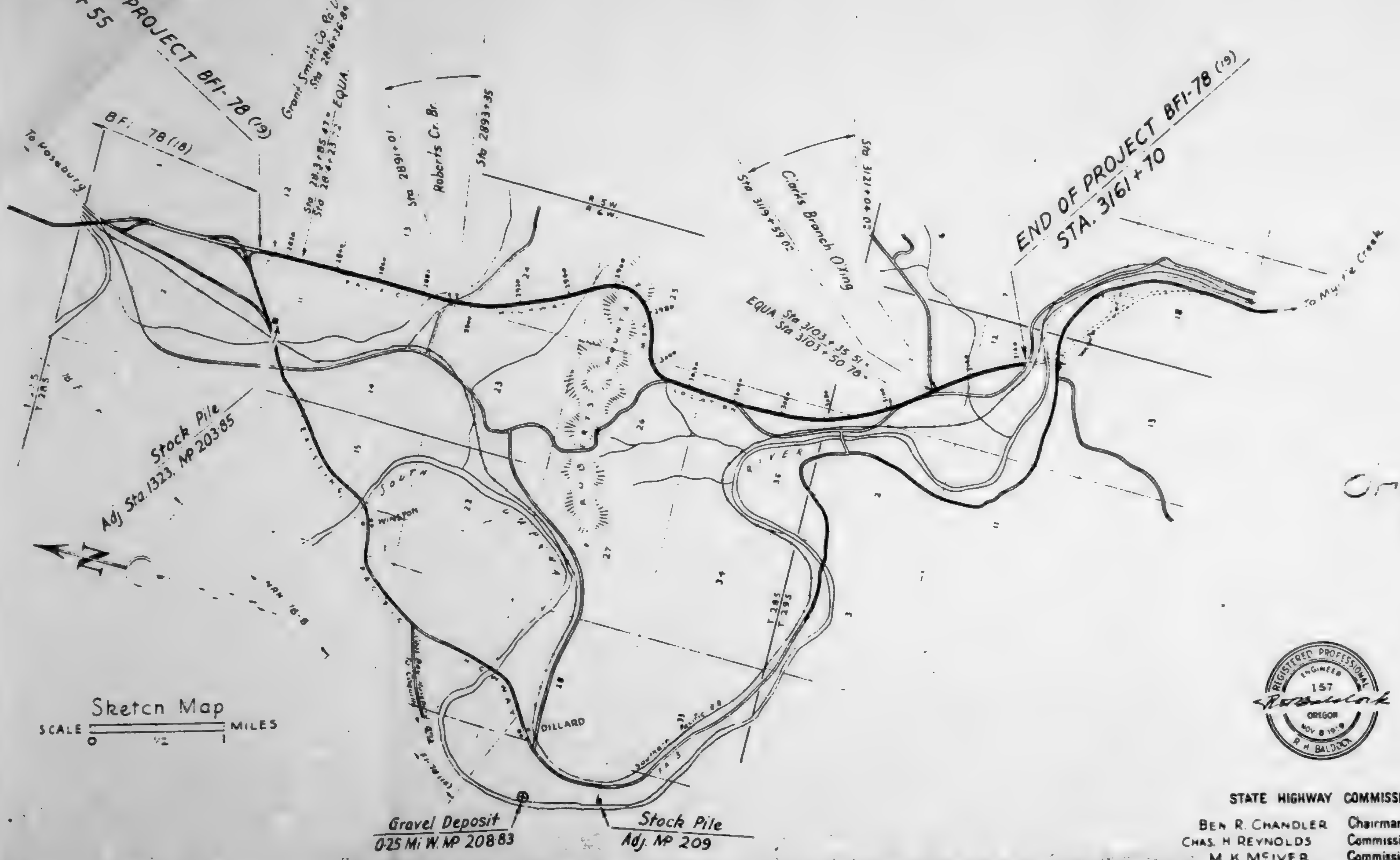
SHADY-CANYONVILLE SECTION

PACIFIC HIGHWAY

DOUGLAS COUNTY

FEB. 1954

FED ROAD Div No	
8	ORE


BEGINNING OF PROJECT BFI-78 (19)
STA. 2806+55
BFI 78 (18)
To Roseburg
Grant Smith Co. Rd. U'xing
Sta 2816+36.80
Sta 28.3+85.47 = EQUA.
Sta 28.4+23
Sta 2891+01
Roberts Cr. Br.
Sta 2893+35
R 5 W
R 6 W
Sta 3119+59.02
Clarks Branch O'Xing
Sta 3121+04.02
EQUA Sta 3103+35.51 =
Sta 3103+50.78
END OF PROJECT BFI-78 (19)
STA. 3161+70
To Myrtle Creek
Stock Pile
Adj Sta. 1323, MP 203.85
N
WINSTON
SOUTH
RIVER
DILLARD
T 28 S
T 29 S
Sketch Map
SCALE 0 1/2 1 MILES
Gravel Deposit
0.25 Mi W. MP 208.83
Stock Pile
Adj. MP 209

REGISTERED PROFESSIONAL ENGINEER 157 OREGON NOV 8 1939 R. H. BALDOCK

R. H. Baldock

STATE HIGHWAY COMMISSION

BEN R. CHANDLER	Chairman
CHAS. H REYNOLDS	Commissioner
M. K. McIVER	Commissioner

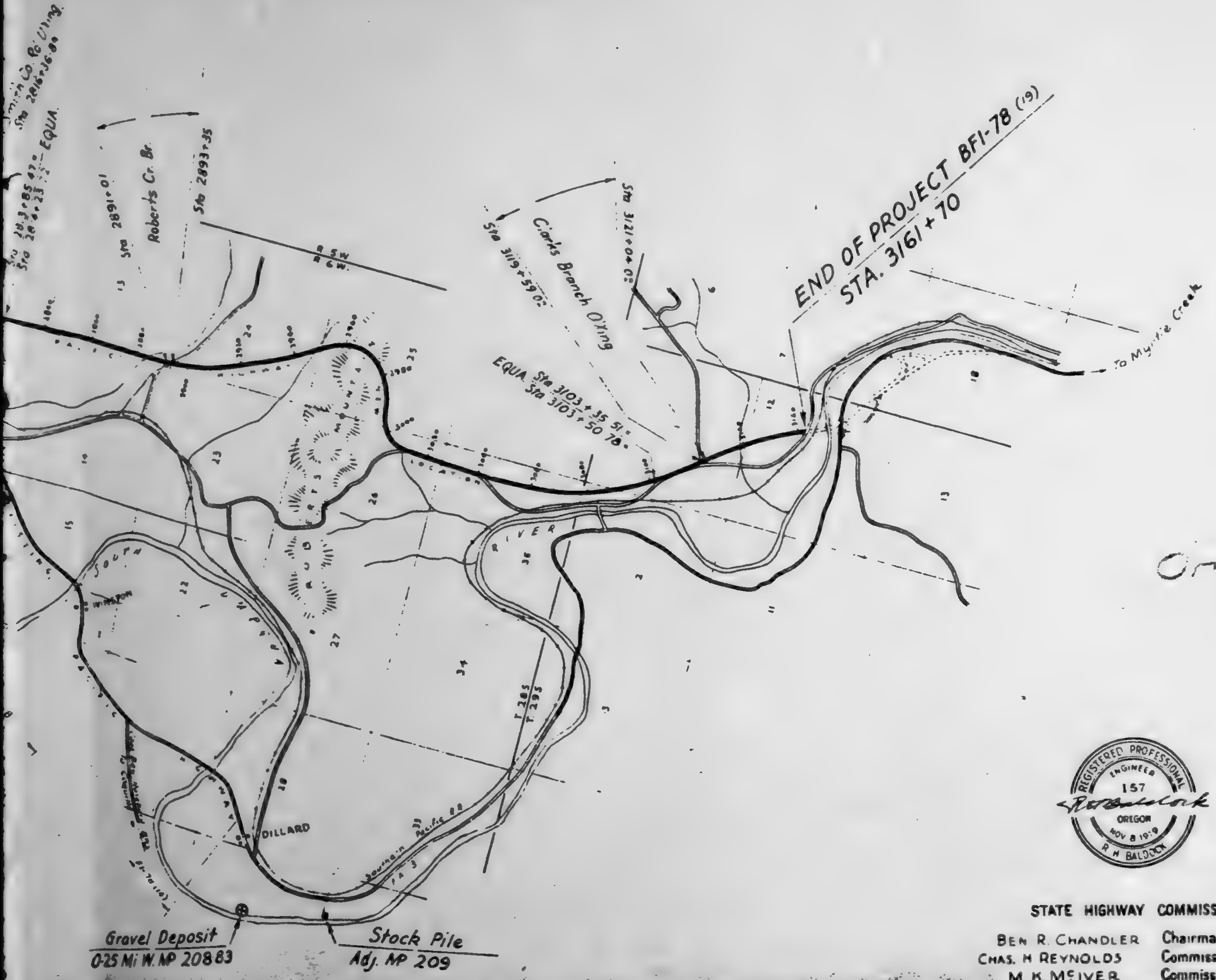
Original

147

SHADY-BOOTH RANCH UNIT
SHADY-CANYONVILLE SECTION
PACIFIC HIGHWAY
DOUGLAS COUNTY
FEB. 1954

SHADY-BOOTH RANCH UNIT SHADY-CANYONVILLE S PACIFIC HIGHWAY DOUGLAS COUNTY				SHEE No
				1
FED ROAD Div No	STATE	PROJECT NUMBER	FISCAL YEAR	TOTA SHEE
8	OREGON	BFI 78(19)		Se Ind

REVISED AS CONSTRUCTED
2 58 . CONTRACT 4153


Sta 28.3+85.47 =
Sta 28 +23 = EQUA.
Sta 2816+36.80
Co. Rd. O'Xing
Sta 2891+01
Roberts Cr. Br.
Sta 2893+35
R 5 W
R 6 W
Sta 3119+59.02
Clarks Branch O'Xing
Sta 3121+04.02
EQUA. Sta 3103+35.51 =
Sta 3103+50.78
END OF PROJECT BFI-78 (19)
STA. 3161+70
To Myrtle Creek
RIVER
SOUTH
UMPQUA
WINSTON
DILLARD
T 28 S
T 29 S
Southern Pacific RR
Gravel Deposit
0.25 Mi W. MP 208.83
Stock Pile
Adj. MP 209

Original Highway
Excavation
1954-55

R H Baldock
STATE HIGHWAY ENGINEER

REGISTERED PROFESSIONAL ENGINEER 157 OREGON NOV 8 1919 R H BALDOCK

STATE HIGHWAY COMMISSION

BEN R. CHANDLER	Chairman
CHAS. H REYNOLDS	Commissioner
M. K. McIVER	Commissioner

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED.

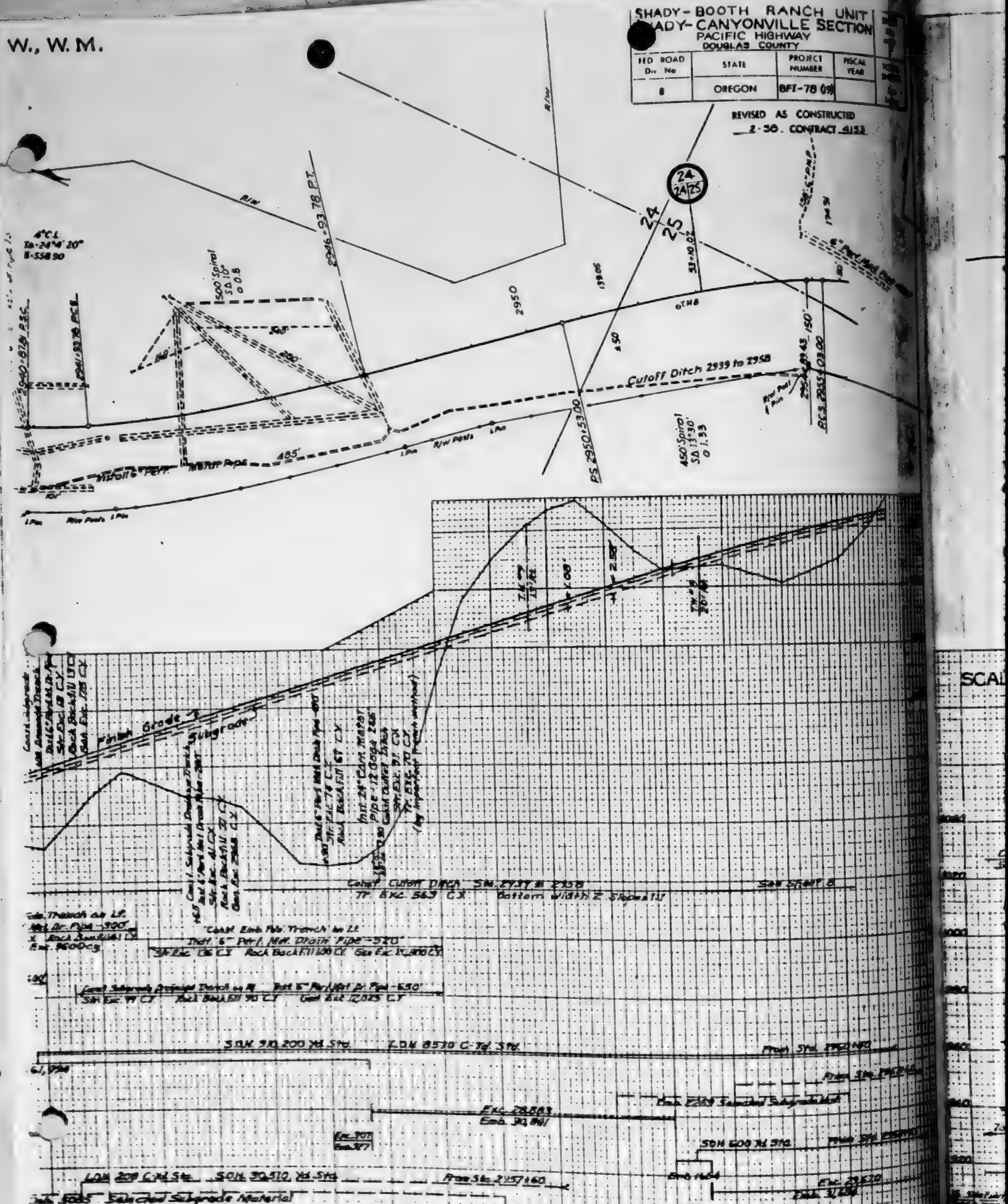
DIVISION ENGINEER
DATE

W., W. M.

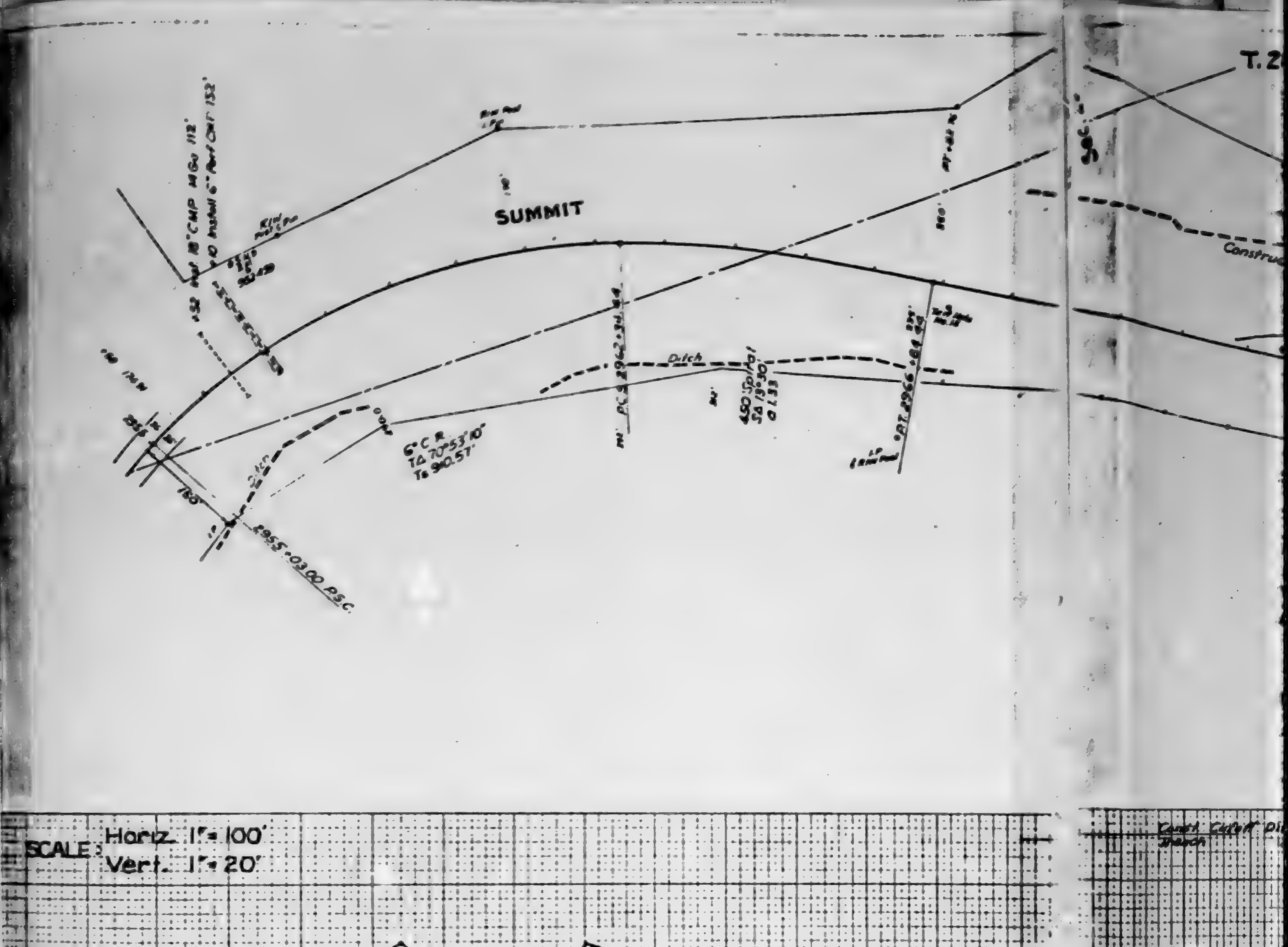
SHADY-BOOTH RANCH UNIT
SHADY-CANYONVILLE SECTION
PACIFIC HIGHWAY
DOUGLAS COUNTY

FED ROAD Div No	STATE	PROJECT NUMBER	FISCAL YEAR
8	OREGON	BFI-78 (9)	

REVISED AS CONSTRUCTED
2-56. CONTRACT 4153



24
24 25
R/W
2946+93.78 P.T.
4° C.L.
Δ=24°4'20"
500' Spiral
Cutoff Ditch 2939 to 2950
450' Spiral
SΔ 13°30'
PS 2950+53.00
2950
R/W Posts
485'
Finish Grade
Subgrade
Const. Cutoff Ditch Sta. 2937 to 2950
Tr. Exc. 563 C.Y. Bottom Width 2' Slopes 1½:1
"Const. Emb. Fdn. Trench" on Lt.
Inst. "6" Perf. Met. Drain Pipe - 520'
SDH 910,200 Yd. Sta.
TDH 8570 C-Yd. Sta.
Exc. 28,883
Emb. 30,861
SDH 600 Yd. Sta.
LDH 209 C.Yd. Sta.
SOH 30,510 Yd. Sta.
Emb. 3085 Selected Subgrade Material
Exc. 29,870
Emb. 31,630
2945
2950
2955
SCALE


T.Z
SUMMIT
Construc
Ditch
6° C.R.
TΔ 70°53'10"
Ts 910.57'
PCS 2962+34.84
450' Spiral
SΔ 13°30'
a 1.33
PT 2966+84.84
2955+03.00 P.S.C.
Install 18" CMP
Install 6" Perf CMP 152'
180'
SCALE: Horiz. 1" = 100'
Vert. 1" = 20'
Const. Cutoff Ditch
See Sheet 7
Exc. 14,310
Exc. 151,700
To Sta. 2940+80
Finish Grade
1900' V.C.
Exc. 154,508
To Sta. 2952+56
To Sta. 2920+90
To Sta. 2899+85
See Sheet 7
Exc. 33,125
To Sta. 2885+40
Exc. 7256
Exc. 16,018
Subgrade
EQUATION
Exc. 118,291
To Sta. 3010+55
Const. Cutoff Ditch
Trench
+85 994.00 (F.G.)

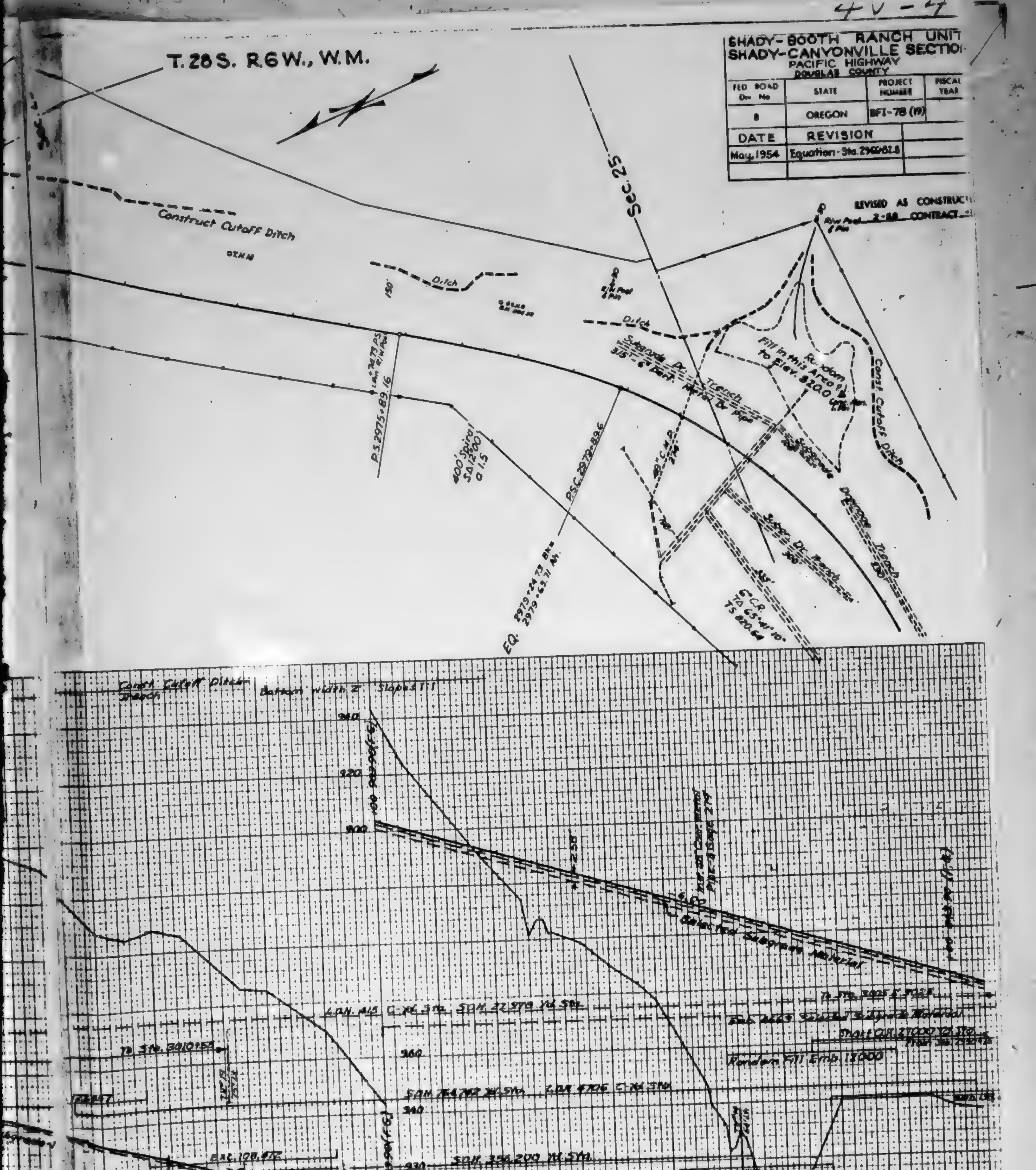
4V-4

SHADY-BOOTH RANCH UNIT
SHADY-CANYONVILLE SECTIO
PACIFIC HIGHWAY
DOUGLAS COUNTY

FED ROAD Div No	STATE	PROJECT NUMBER	FISCAL YEAR
8	OREGON	BFI-78 (19)	

DATE	REVISION	
May, 1954	Equation - Sta. 2969+82.8	

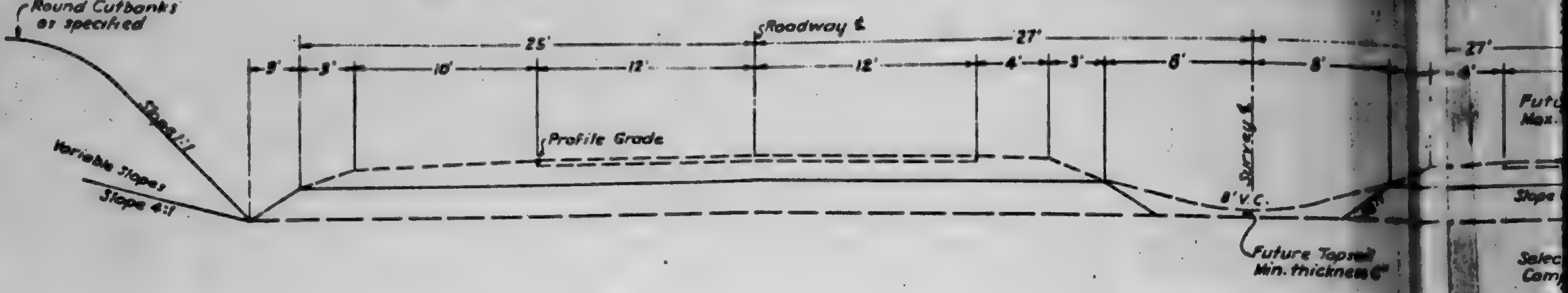
REVISED AS CONSTRUCT
2-58 CONTRACT



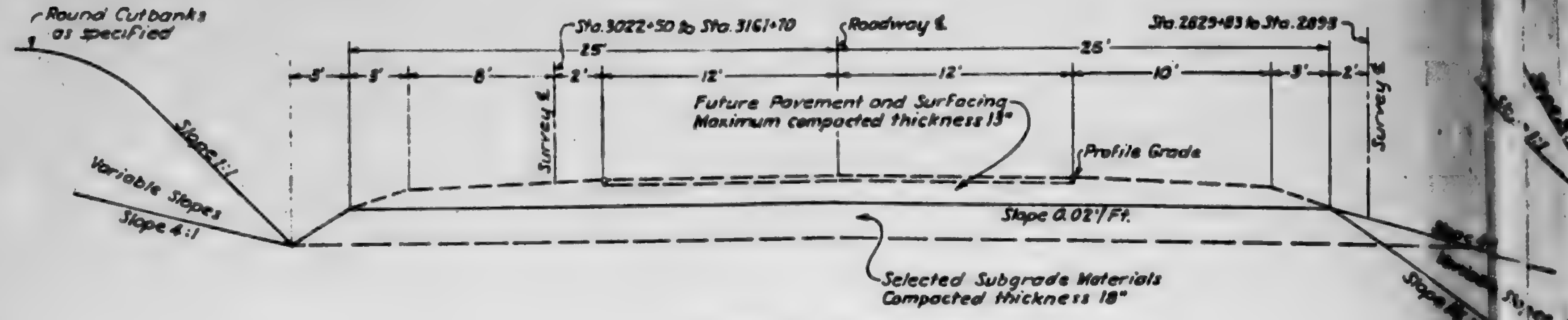
T. 28 S. R 6 W., W.M.
Sec. 25
Construct Cutoff Ditch
Ditch
Ditch
R/w Post & Pin
P.S. 2975+89.16
400' Spiral
S.A. 12.00
a 1.5
P.S.C. 2979+89.6
EQ. 2979+24.73 Bk.
2979+63.71 Ah.
Subgrade Dr. Trench
Fill in this Area P.I. to Elev. 820.0
Random
Const. Cutoff Ditch
Drainage Trench
Subgr. Dr. Trench
18" C.M.P.
6" C.R.
TΔ 65°41'10"
TS 820.64
Const. Cutoff Ditch Trench
Bottom width 2' Slopes 1:1
940
920
900
Selected Subgrade Material
L.O.H. 415 C. Yd. Sta.
S.O.H. 22,579 Yd. Sta.
To Sta. 3010+55
Random Fill Emb. 13,000
S.O.H. 754,792 Yd. Sta.
L.O.H. 4,706 C. Yd. Sta.
Exc. 108,472
S.O.H. 356,200 Yd. Sta.
Exc. 57,877
Emb. 32,460
360
340
930

25

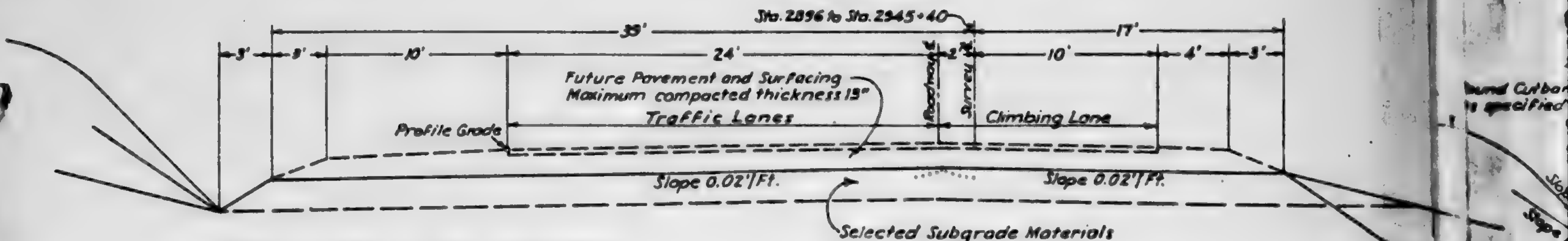
TYPICAL SECTIONS


Round Cutbanks as specified
Slope 2:1
Variable Slopes
Slope 4:1
25'
Roadway ℄
27'
5'
3'
10'
12'
12'
4'
3'
6'
8'
Profile Grade
Survey ℄
8' V.C.
Future Topsoil Min. thickness 6"

Grading Section 'A'
Four Lane Divided

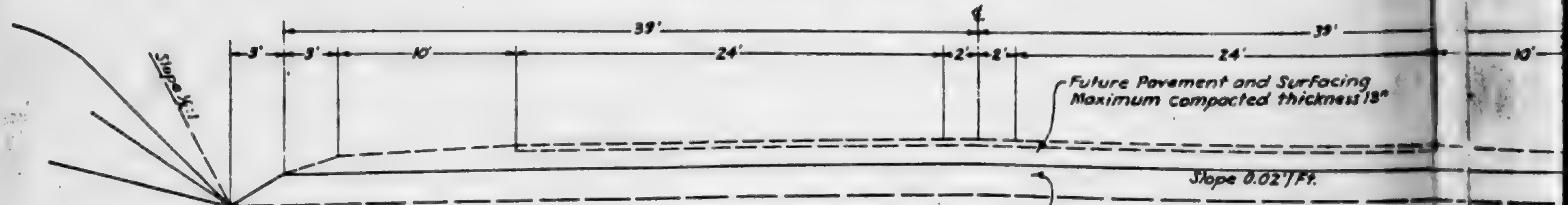

Round Cutbanks as specified
Sta. 3022+50 to Sta. 3161+70
Roadway ℄
Sta. 2829+83 to Sta. 2893
25'
25'
5'
5'
8'
2'
12'
12'
10'
3'
2'
Survey ℄
Survey ℄
Future Pavement and Surfacing Maximum compacted thickness 13"
Profile Grade
Slope 2:1
Variable Slopes
Slope 4:1
Slope 0.02'/Ft.
Selected Subgrade Materials Compacted thickness 18"

Grading Section 'B'
Two Lane

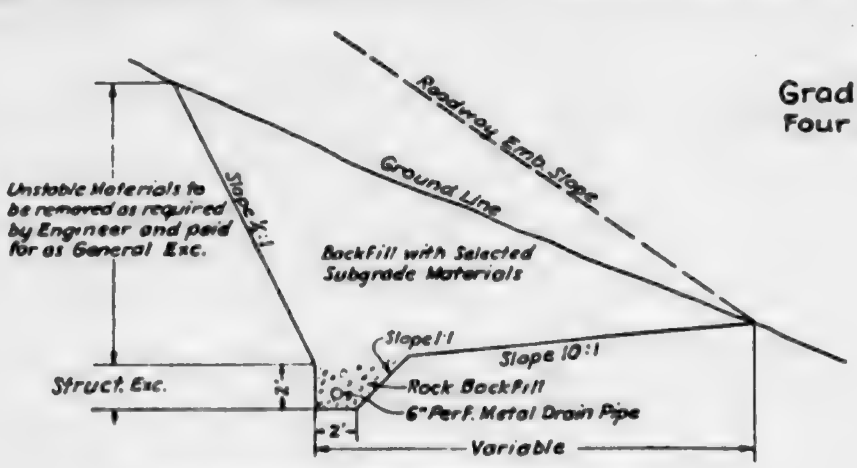

Sta. 2896 to Sta. 2945+40
39'
17'
3'
5'
10'
24'
2'
10'
4'
3'
Roadway ℄
Survey ℄
Future Pavement and Surfacing Maximum compacted thickness 13"
Traffic Lanes
Climbing Lane
Profile Grade
Slope 0.02'/Ft.
Slope 0.02'/Ft.
Selected Subgrade Materials Compacted thickness 18"

NOTE: Grading Section 'C', Sta. 2977 to Sta. 3019+50 is same as shown above, except Traffic Lanes are on Right of Survey ℄, as shown on Plans.

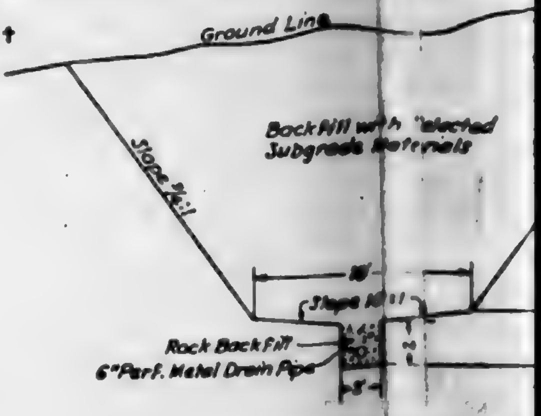
Grading Section 'C'
Two Lane and Climbing Lane


39'
℄
39'
3'
5'
10'
24'
2'
2'
24'
10'
Slope 1½:1
Future Pavement and Surfacing Maximum compacted thickness 13"
Slope 0.02'/Ft.
Selected Subgrade Materials Compacted thickness 18"

Grading Section 'D'
Four Lane over Summit


Roadway Emb. Slope
Ground Line
Slope 1½:1
Unstable Materials to be removed as required by Engineer and paid for as General Exc.
Backfill with Selected Subgrade Materials
Slope 1:1
Slope 10:1
Struct. Exc.
2'
Rock Backfill
6" Perf. Metal Drain Pipe
2'
Variable

Embankment Foundation Trench


Ground Line
Backfill with Selected Subgrade Materials
Slope 1½:1
18'
Slope 10:1
Rock Backfill
6" Perf. Metal Drain Pipe
3'

Subgrade Drainage Tr

+V-4

SHADY-BOOTH RANCH UNIT
SHADY-CANYONVILLE SECTIO
PACIFIC HIGHWAY
DOUGLAS COUNTY

FED. ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR
8	OREGON	BFI-78 (9)	

REVISED AS CONSTRUCTED
2-58 CONTRACT 4153

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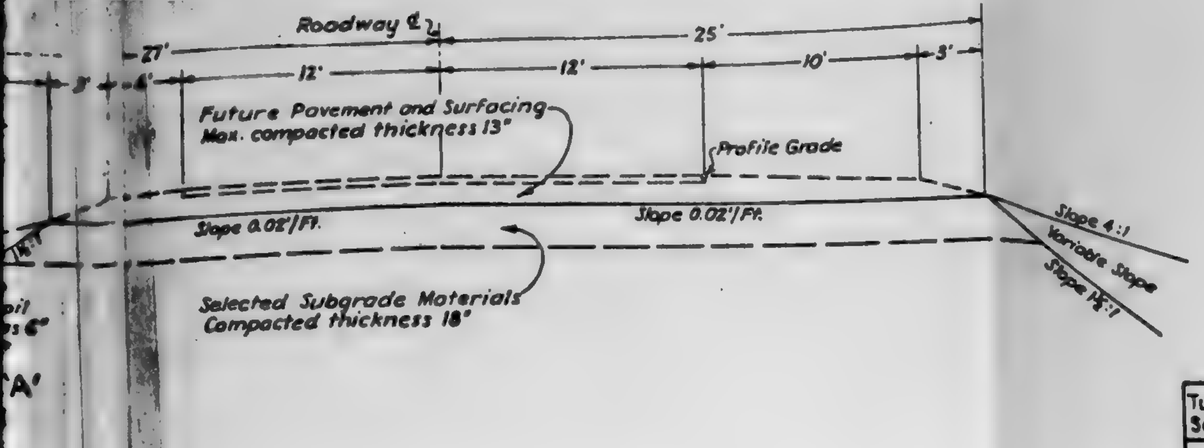
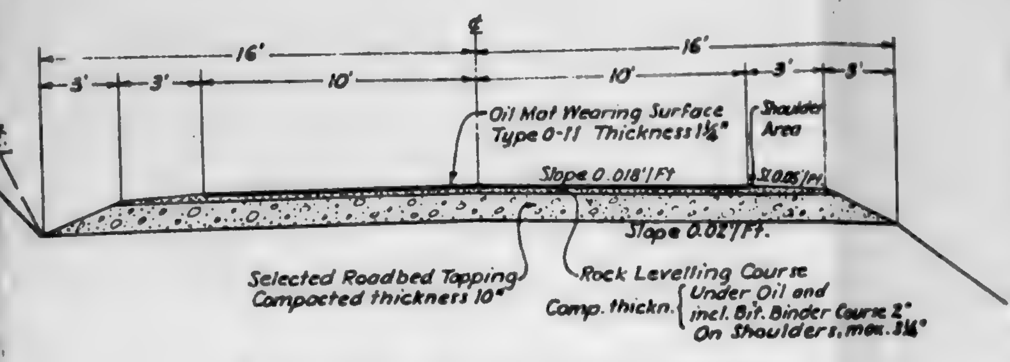


Roadway ℄
27'
25'
3'
4'
12'
12'
10'
3'
Future Pavement and Surfacing
Max. compacted thickness 13"
Profile Grade
Slope 0.02'/Ft.
Slope 0.02'/Ft.
Slope 4:1
Variable Slope
Slope 1½:1
Selected Subgrade Materials
Compacted thickness 18"
oil
s 6"
A'



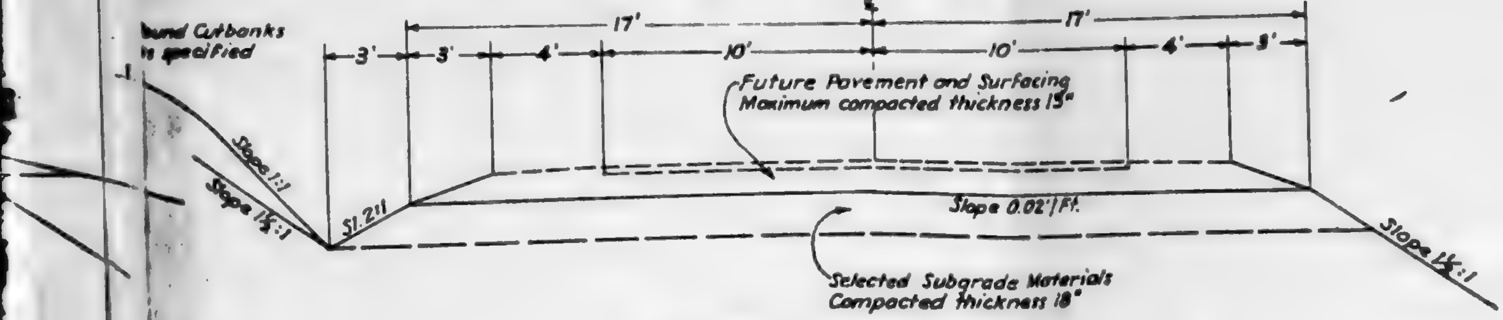
℄
16'
16'
3'
3'
10'
10'
3'
3'
Oil Mat Wearing Surface
Type 0-11 Thickness 1½"
Shoulder Area
Slope 0.018'/Ft.
Sl. 0.05'/Ft.
Slope 0.02'/Ft.
Selected Roadbed Topping
Compacted thickness 10"
Rock Levelling Course
Comp. thickn. { Under Oil and incl. Bit. Binder Course 2"
On Shoulders, max. 3½"

SUBGRADE WIDTH TABLE

Typical Section	Station to Station	Subgrade Width	Remarks
A	2806+55 to 2817	104'	Four Lane Divide
	2817 " 2829+83	Variable	Taper to Two La
B	2829+83 " 2893	50'	Two Lane
	2893 " 2896	78'	Four Lane
C	2896 " 2945+40	78'	
	2945+40 " 2951+50	78'	Four Lane
D	2951+50 " 2971+50	78'	Four Lane over Su
	2971+50 " 3010+58.5		Four Lane
C	3010+58.5 " 3019+50	56'	Climbing Lane
	3019+50 " 3022+50	Variable	Taper to Two La
B	3022+50 " 3161+70	50'	Two Lane

Section for County Road Changes

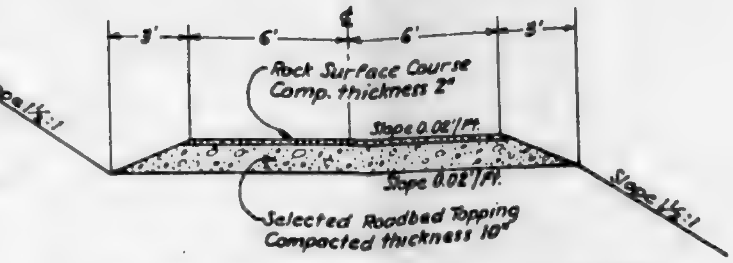
Y Line - Crossing over at Sta. 2816+37
C Line - on Rt. opposite Sta. 3020 to 3043
A Line - on Rt. opposite Sta. 3093 to 3117
B Line - Crossing under at Sta. 3120+43



und Cutbanks
s specified
Slope 1:1
Slope 1½:1
Sl. 2:1
17'
17'
3'
3'
4'
10'
10'
4'
3'
℄
Future Pavement and Surfacing
Maximum compacted thickness 13"
Slope 0.02'/Ft.
Slope 1½:1
Selected Subgrade Materials
Compacted thickness 18"

Grading Section - Connec. 'E'

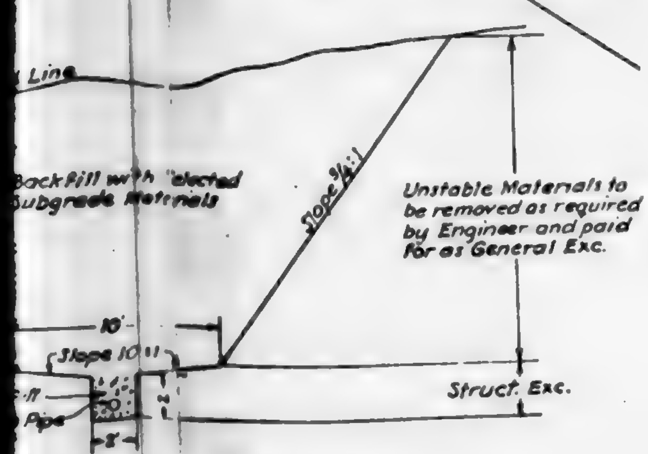
E Stations 9+50 to 12+12.6
Opposite Sta. 2806+55 to 2809+17



℄
3'
6'
6'
3'
Slope 1½:1
Rock Surface Course
Comp. thickness 2"
Slope 0.02'/Ft.
Slope 0.02'/Ft.
Slope 1½:1
Selected Roadbed Topping
Compacted thickness 10"

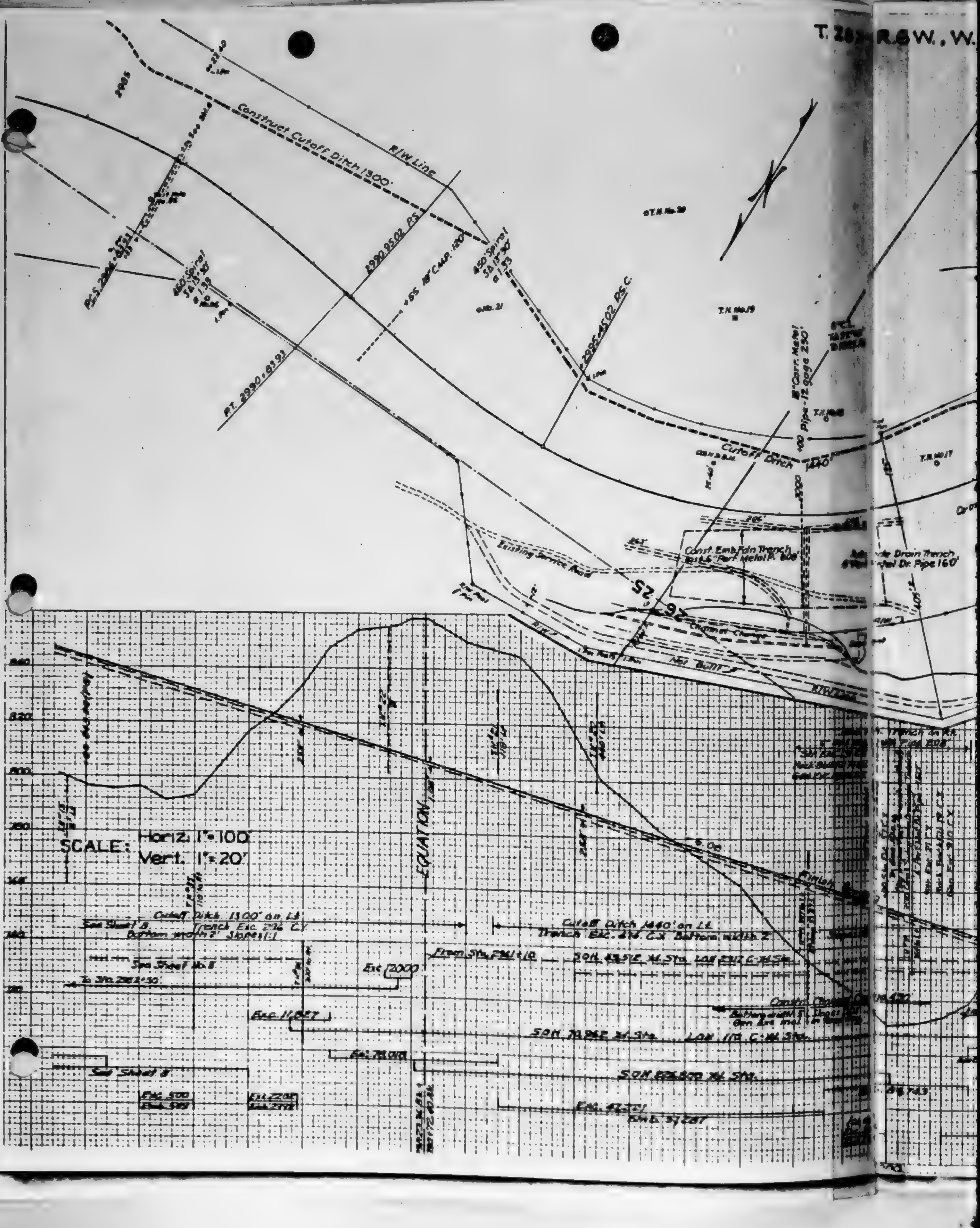
Section for Detour and Service Roads

Detour Road for Y Line, crossing at Sta. 2816+37
F Line Service Road, on Lt. opposite Sta. 2920 to Sta. 2926
G Line Service Road, crossing at Sta. 2938+50
D Line Service Road, on Lt. opposite Sta. 3013 to Sta. 3018+50
Service Road, on Rt. opposite Sta. 2994 to Sta. 3007



Line
Backfill with Selected
Subgrade Materials
Slope ¾:1
Unstable Materials to
be removed as required
by Engineer and paid
for as General Exc.
10'
Slope 10:1
ill
Pipe
8'
Struct. Exc.

ade Drainage Trench

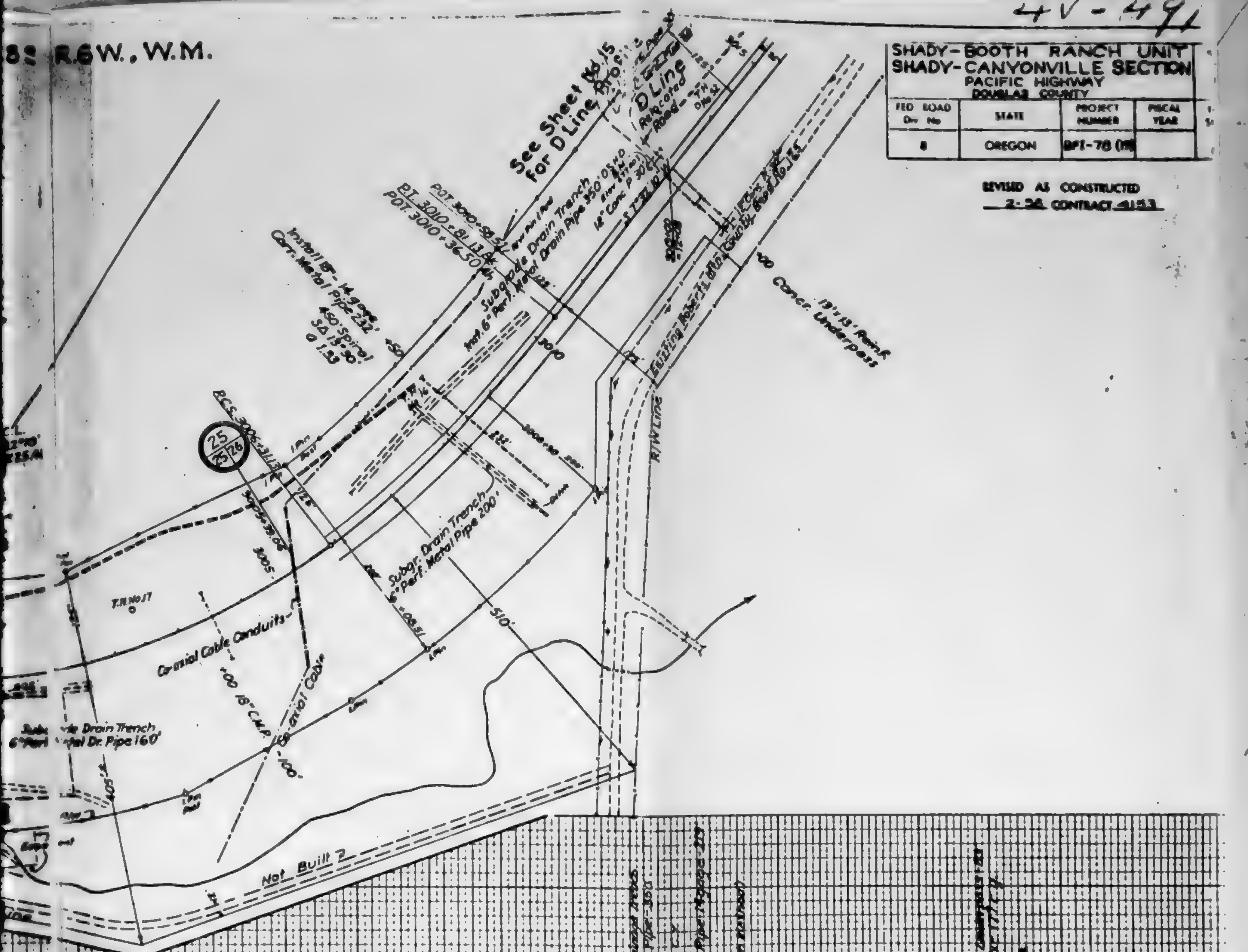

T. 28 R.6W., W.
Construct Cutoff Ditch 1300'
R/W Line
2985
P.C.S. 2986+25.52
450' Spiral
SΔ 15°-30'
P.T. 2990+83.93
2990+95.02 P.S.
+55 18" C.M.P. 120'
2995+45.02 P.S.C.
No. 21
T.H. No. 20
T.H. No. 19
T.H. No. 18
T.H. No. 17
18" Corr. Metal Pipe - 12 gage 250'
100
Cutoff Ditch 1440'
3000
205'
265'
Const. Emb. Fdn. Trench
Inst. 6" Perf. Metal P. 800'
Drain Trench
Metal Dr. Pipe 160'
Existing Service Road
25
26
Channel Change
Not Built
R/W Line
Trench on Rt.
Pipe 808'
SCALE: Horiz. 1"=100'
Vert. 1"=20'
840
820
800
780
760
740
720
EQUATION
6.00
Finish
Cutoff Ditch 1300' on Lt.
See Sheet 8.
Trench Exc. 276 C.Y.
Bottom width 2' Slopes 1:1
Cutoff Ditch 1440' on Lt.
Trench Exc. 276 C.Y. Bottom width 2'
See Sheet No. 8
To Sta. 2982+50
Exc. 12000
From Sta. 2961+10
SOH 43,572 Yd. Sta.
LOH 2912 C-Yd. Sta.
Exc. 11,827
Const. Channel Change
SOH 70,962 Yd. Sta.
LOH 118 C-Yd. Sta.
Exc. 78,010
See Sheet 8
SOH 226,800 Yd. Sta.
Exc. 500
Emb. 395
Exc. 2205
Emb. 2398
Exc. 42,771
Emb. 37,287

4V-491

SHADY-BOOTH RANCH UNIT
SHADY-CANYONVILLE SECTION
PACIFIC HIGHWAY
DOUGLAS COUNTY

FED ROAD Div No	STATE	PROJECT NUMBER	FISCAL YEAR
8	OREGON	BFI-78 (	

REVISED AS CONSTRUCTED
2-36 CONTRACT 4153


R.6W., W.M.
See Sheet No. 15 for D Line Profile
D Line Relocated Road
P.O.T. 3010+98.5
P.T. 3010+81.13 Bk.
P.O.T. 3010+36.50 Ah.
Subgrade Drain Trench 6" Perf. Metal Drain Pipe 350'
Install 18" - 14 gage Corr. Metal Pipe 232'
450' Spiral
3010
3005
12'x13' Reinf. Conc. Underpass
R/W Line
T.H. No. 17
Coaxial Cable Conduits
Coaxial Cable
18" C.M.P.
Subgr. Drain Trench 6" Perf. Metal Pipe 200'
Subgrade Drain Trench 6" Perf. Metal Dr. Pipe 160'
Not Built
Subgrade
Selected Subgrade Material
Emb. 7262
Exc. 500
Emb. 565
Exc. 12,480
Emb. 13,554
25

SECTION B

EASTSIDE CUT SLIDE

Rock Inlay Foundation Exploration Summary....................................26

Geotechnical Analysis.........................30

Shear Strength Existing.......................32

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FORM E-30

OREGON STATE HIGHWAY DIVISION

INTER-DEPARTMENT CORRESPONDENCE

ROSEBURG, OREGON 97470

shows logs of 2 drill holes at the toe of the slide.

DATE January 2,1977

TO MEMO to the file

FROM ELLIOTT PARKER
REGION 3 ENGINEERING GEOLOGIST
BY Peter W. Bowers, Jr. Peter W Bowers Jr.
Engineering Geologist

RECEIVED
FEB 4 1977
LOCATION SECTION

SUBJECT Pacific Highway Douglas County
Shady Interchange-Dillard Junction Section
Roberts Mountain - Eastside Cut Slide
ROCK INLAY FOUNDATION EXPLORATION Summary

On January 26,1977 the Foundation Exploration at the freeway level below the toe of the Eastside Cut Slide was completed.

Two holes were core drilled from the surface to their total depths. Hole No. 1-77, located on the north bound shoulder at approximate Ln Sta. 2970+18.72, was drilled to a depth of 22.5' with 55% core recovery. Hole No. 2-77, also located on the north bound shoulder but at approximate Ln Sta. 2968+94, was drilled to a depth of 17.0' with 47% core recovery. These depths were the maximum that could be accomplished and still get equipment off the freeway and back into the Maintenance Yard the same day.

SUMMARY:

The material encountered consisted predominantly of soft fissil shale with scattered included subangular moderately hard siltstone rock fragments. This material is the same as that involved in the Westside Cut Slide and Eastside Cut Slide problem areas. There is an obvious lack of competency in this material as encountered.

c.c. Location Engineer
Region 3 Construction Engineer
F.H.W.A.

Enclosures
Drill Logs
Location Map

ole No. 1-77 Sheet 1 of 1

roject Roberts Mtn. - Eastside Cut Slide

ighway Pacific Hwy. County Douglas

ocation NB Shoulder ~Lt Sta. 2970+18.77 Prefix 610-19.21-910

urpose of Hole Foundation Exploration

riller Beal & Merica Logged by P. Rowers

rill Mobil 50 Angle Vert.

asing HQ Core HQ Wireline

rive Sampler OD — ID — Hammer Wt — Fall —

ndisturbed Sampler —

	Decomposed rock (hand crushable)
	Mixed decomposed and weathered rock
	Weathered rock (color, hardness, strength, etc., modified by weather:
X	Zone of fragmental core
	Mixed weathered and fresh rock
/	Bedding dip
∫	Slickensides
ø	- Joint

NOTES

Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fingernail
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type	Blows	Inches	N Value	Recovered / Sampled	% Recovery	Water Level	% Moisture	Depth	Graphic Log	Description	Remarks	Date
	Core		Run 1		90/42	47					Road & shoulder material to ~2^{0}		1-25-7
											Shale, soft, gray, brn. blk., fissil, w/est. 10-30% siltstone, mod. hd., subangular frags.	* Drill wtr. return 100% - dk. brn.	
		7^{5} Run 2			60/34	57			10^{0}		* thin siltstone beds, gray, seamy, mod. hd. @ 7^{5}-8^{0}, 12^{6}-13^{6}, & 17^{6}-18^{6}.		
			12^{5} Run 3		60/34	57							
		17^{5} Run 4	22^{5}		60/38	70			20^{0} 22^{5}				
											Bottom of Hole 22^{5}	1-25-77	
											* 2 Core Boxes		
											* ~55% Total Core Recovery		

SOILS & GEOLOGY EXPLORATION LOG

Hole No. 2-77 Sheet 1 of 1

Project Roberts Mtn. - Eastside Cut Slide

Highway Pacific Hwy County Douglas

Location NB Shoulder ~ Ln 2968+93.72 Prefix 610-1921-910

Purpose of Hole Foundation Exploration

Driller Beal & Merica Logged by P. Bowers

Drill Mobil 50 Angle Vert.

Casing HQ Core HQ Wireline

Drive Sampler OD — ID — Hammer Wt — Fall —

Undisturbed Sampler —

GRAPHIC LOG

Decomposed rock (hand crushable)

Mixed decomposed and weathered rock

Weathered rock (color, hardness, strength, etc., modified by weathering)

x Zone of fragmental core

Mixed weathered and fresh rock

Bedding dip

Slickensides

Joint

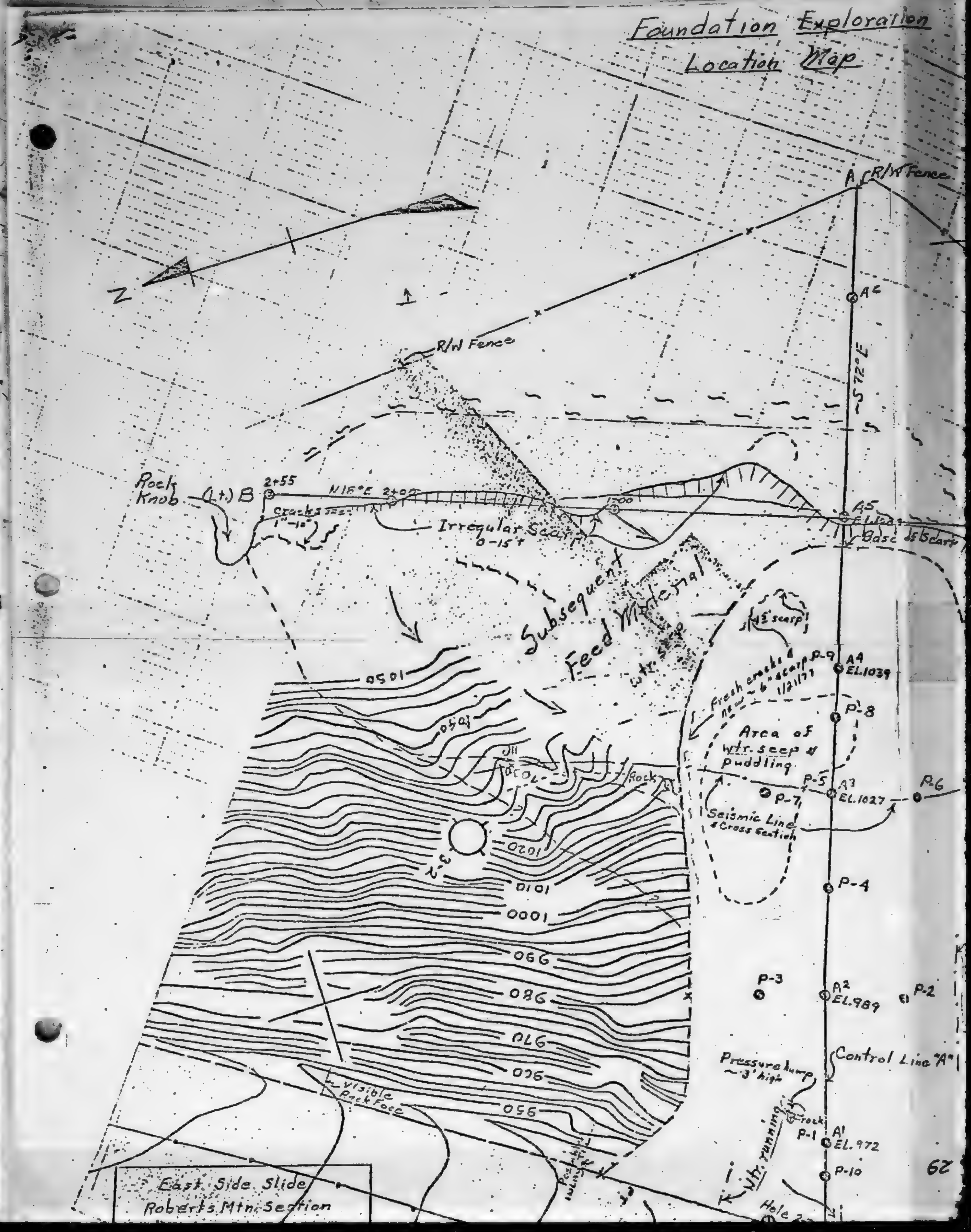
NOTES

Soft	- can be scratched with fingernail
Mod Hard	- can be scratched with knife, not by fingernail
Hard	- difficult to scratch with knife
Very Hard	- cannot be scratch with knife

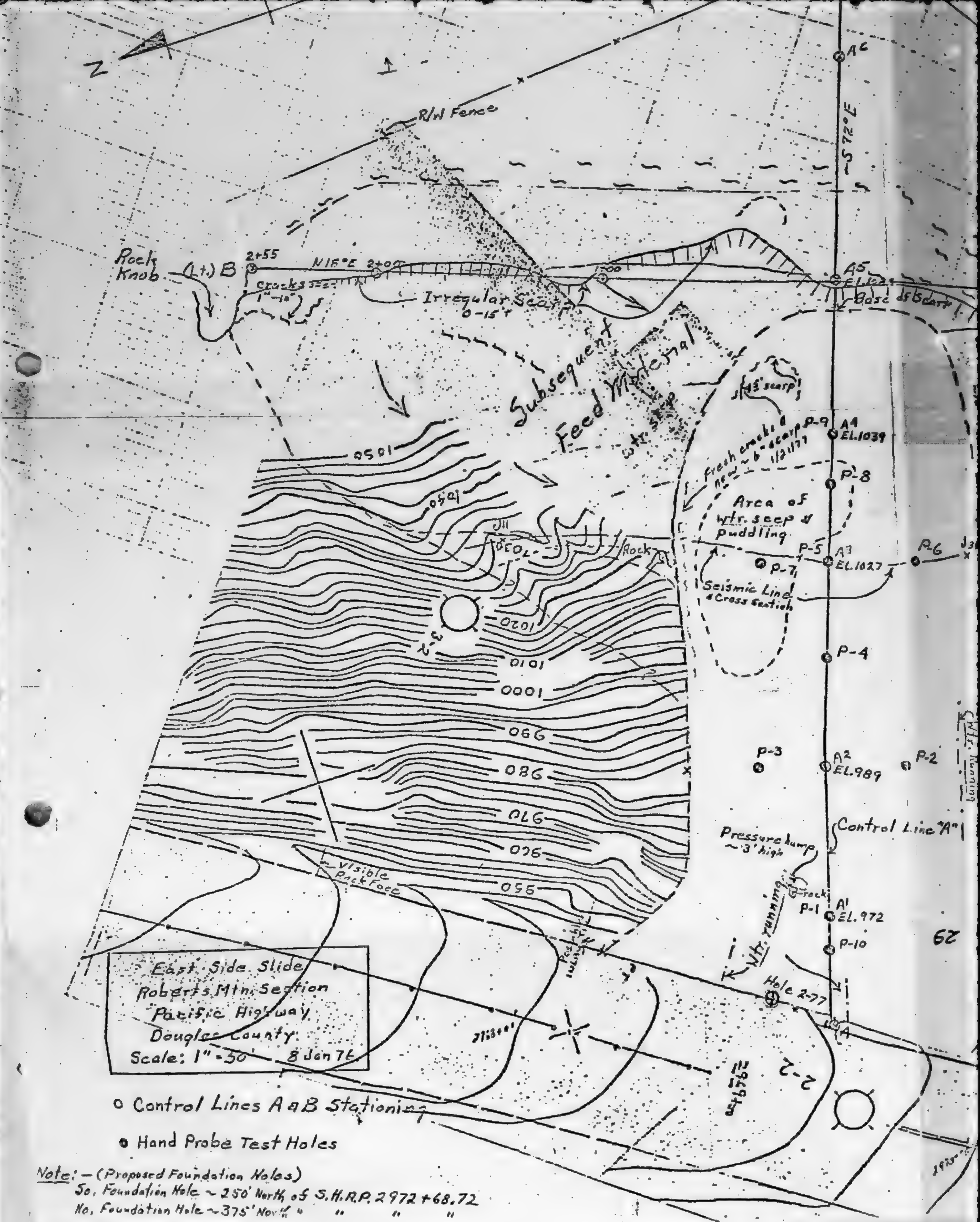
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type	Blows	Inches	N Value	Recovered / Sampled	% Recovery	Water Level	% Moisture	Depth	Graphic Log	Description	Remarks	Date
	Core		Run 1								Road & shoulder material to ~2^{0}'		1-26-
					84/38	45					Shale, soft, gray, brn. blk., fissil	*drilled into drain - wtr. comingout ~200' southward	
											w/scatt. mod. hd. siltstone subangular	*est. full drill wtr. return - brn. to gry. brn.	
		7^{0}									frags		
		Run 2			67/25	37			10^{0}		*thin sections of sandstone, gray,		
											seamy, med. gr., mod. hd. as noted,		
			12^{6}								drills max. core 0^{1}', av. fragmental.		
			Run 3		53/32	60							
		17^{0}							17^{0}		*btm. in siltstone, gry, mod. hd.		
											Bottom of Hole 17^{0}'	1-26-77	
											*1 Core Box		

Foundation Exploration Location Map



R/W Fence
A
A6
S 72° E
R/W Fence
Rock Knob
(Lt.) B
2+55
N 16° E
2+00
1+00
Cracks
1"–10"
Irregular Scarp
0–15'±
A5
El. 10??
Base of Scarp
Subsequent Feed Material
wtr. seep
15' scarp
Fresh cracks & new ~6" scarp
1/21/77
P-9
A4
El. 1039
P-8
Area of wtr. seep & puddling
Rock
P-5
A3
El. 1027
P-6
P-7
Seismic Line & Cross Section
P-4
1050
1040
1030
1020
1010
1000
990
980
970
960
950
3-2
P-3
A2
El. 989
P-2
Pressure hump ~3' high
Control Line "A"
rock
P-1
A1
El. 972
P-10
Wtr. running
Visible Rock Face
Hole 2
East Side Slide
Roberts Mtn. Section


N
R/W Fence
~S72°E
A6
Rock Knob
(Lt.) B
2+55
N18°E
2+00
1+00
cracks
1"-10"
Irregular Scarp
0-15'±
A5
EL.1029
Base of Scarp
Subsequent Feed Material
wtr. seep
15' scarp
Fresh cracks & new ~6" scarp 1/21/77
P-9
A4
EL.1039
P-8
Area of wtr. seep & puddling
P-5
A3
EL.1027
P-6
P-7
Seismic Line & Cross Section
Rock
1050
1040
1030
1020
1010
1000
990
980
970
960
950
P-4
P-3
A2
EL.989
P-2
Wtr. running
Control Line "A"
Pressure hump ~3' high
rock
Visible Rock Face
P-1
A1
EL.972
P-10
Wtr. running
Hole 2-77
A
2-2
29

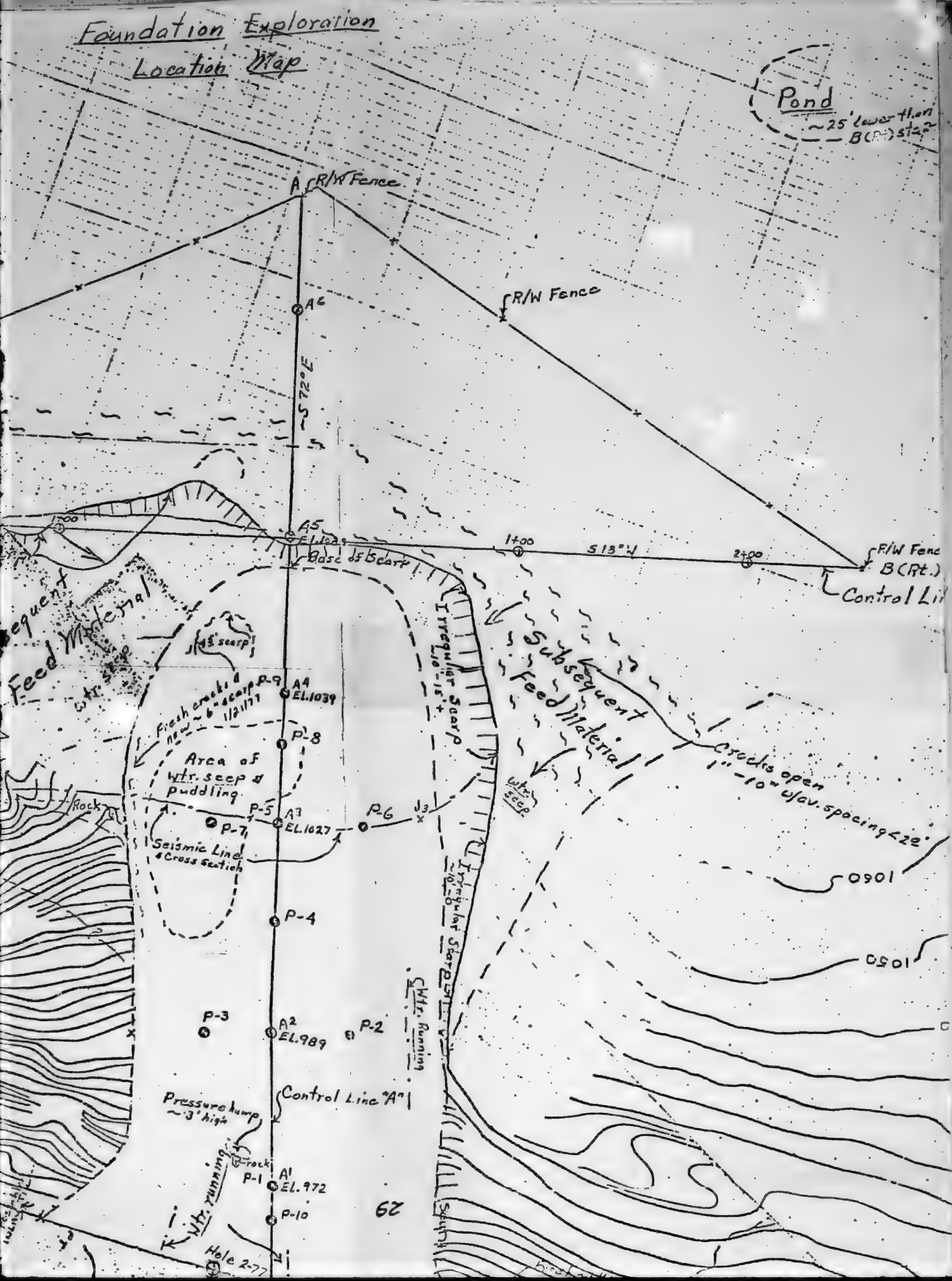
East Side Slide
Roberts Mtn. Section
Pacific Highway
Douglas County
Scale: 1" = 50' 8 Jan 76

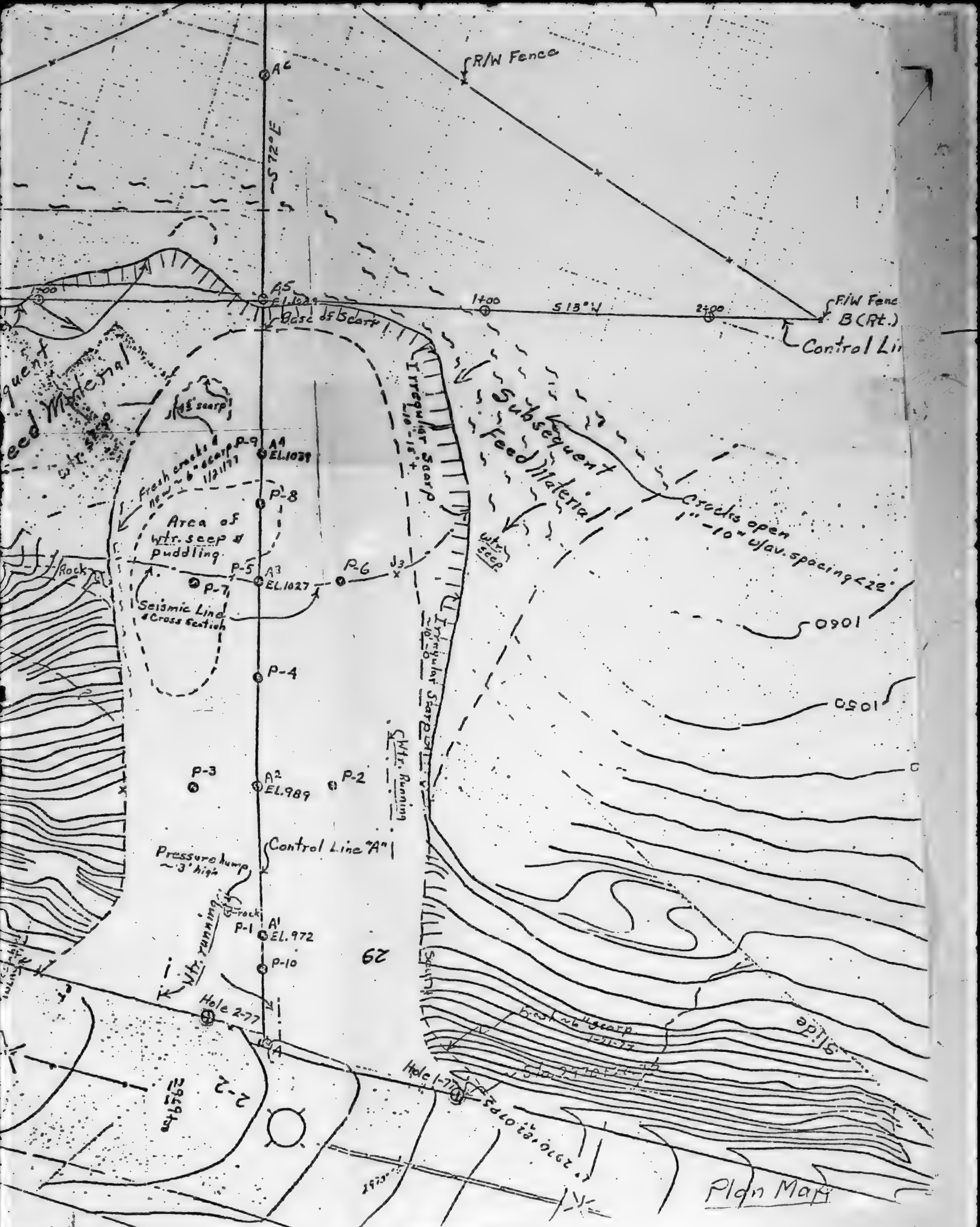
○ Control Lines A & B Stationing

● Hand Probe Test Holes

Note: – (Proposed Foundation Holes)
So. Foundation Hole ~ 250' North of S.H.R.P. 2972+68.72
No. Foundation Hole ~ 375' North " " " "

Foundation Exploration Location Map


Pond
~25' lower than B(Rt) sta.
A
R/W Fence
A6
S72°E
R/W Fence
1+00
A5
EL.1029
Base of Scarp
1+00
S13°W
2+00
F/W Fence
B(Rt.)
Control Li
sequent
Feed Material
wtr. seep
45' scarp
Fresh cracks & new ~6" scarp 1/21/77
P-9
A4
EL.1039
Irregular Scarp 10-15'±
Subsequent Feed Material
wtr. seep
Cracks open 1"-10" w/av. spacing<2'
P-8
Area of wtr. seep & puddling
Rock
P-5
A3
EL.1027
P-6
J3
P-7
Seismic Line & Cross Section
Irregular Scarp ~10'-0
1060
P-4
1050
Wtr. Running
P-3
A2
EL.989
P-2
Control Line "A"
Pressure lump ~3' high
rock
Wtr. running
A1
P-1
EL.972
P-10
Hole 2-77
29


R/W Fence
A6
S 72° E
A5
EL.1029
Base of Scarp
1+00
1+00
S 13° W
2+00
F/W Fence
B (Rt.)
Control Li
Subsequent Feed Material
wtr. seep
Irregular Scarp ~10'-15'+
4.5' scarp
Fresh cracks & new ~6" scarp 1/21/77
P-9
A4
EL.1039
P-8
Area of wtr. seep & puddling
Subsequent Feed Material
Cracks open 1"-10" w/av. spacing <2'
1060
1050
Rock
P-5
A3
EL.1027
P-6
J3
P-7
Seismic Line & Cross Section
P-4
Irregular Scarp ~10'-0
Wtr. Running
P-3
A2
EL.989
P-2
Control Line "A"
Pressure hump ~3' high
rock
Wtr. running
P-1
A1
EL.972
P-10
29
Hole 2-77
A
Hole 1-77
New ~6" scarp 1-21-77
Slide
2-2
2994±
2970.02
2973

Plan Map

FORM E-30

OREGON STATE HIGHWAY DIVISION

INTER-DEPARTMENT CORRESPONDENCE

Salem, Oregon
June 3, 1976

SUBJECT: Geotechnical Analysis of
the Eastside Slide
Roberts Mountain Section
Pacific Highway I-5
Douglas Co.

To: Frank Terpin
Location Engineer

The Eastside cut slide appears to be in part landslide and in part fluid flow of detritus down the slope. There is a considerable surface area above the slide (not present on the west side) contributing drainage to the slide area. The condition of formation of the detritus appears peculiar to this location. Why or how it forms is not understood. Geology of the slide formation is described hereunder.

Proposed alternate schemes of controlling this slide are:

1.	Excavate the slide mass with 40' fallout	$ 68,000
2.	Reinforced Earth Wall and Rock Dam	386,000
3.	Reinforced Earth Wall only	333,000
4.	Rock Inlay Buttress S.F. 1.3	241,000

As on the West Side, the rock inlay buttress is fairly certain to end the problem.

The schemes involving a reinforced earth wall cannot be adopted until the Reinforced Earth Company has said the walls can be reinforced to withstand the sliding force.

Internal drainage schemes are not proposed for this slide because of its fluid characteristic with potential for rapid movement which could destroy such a system if an initial installation was inadequate. Also, the mass remains quite impervious because no cracks develop, or remain if they do, and, for this reason, internal drainage possibly could not be made to work.

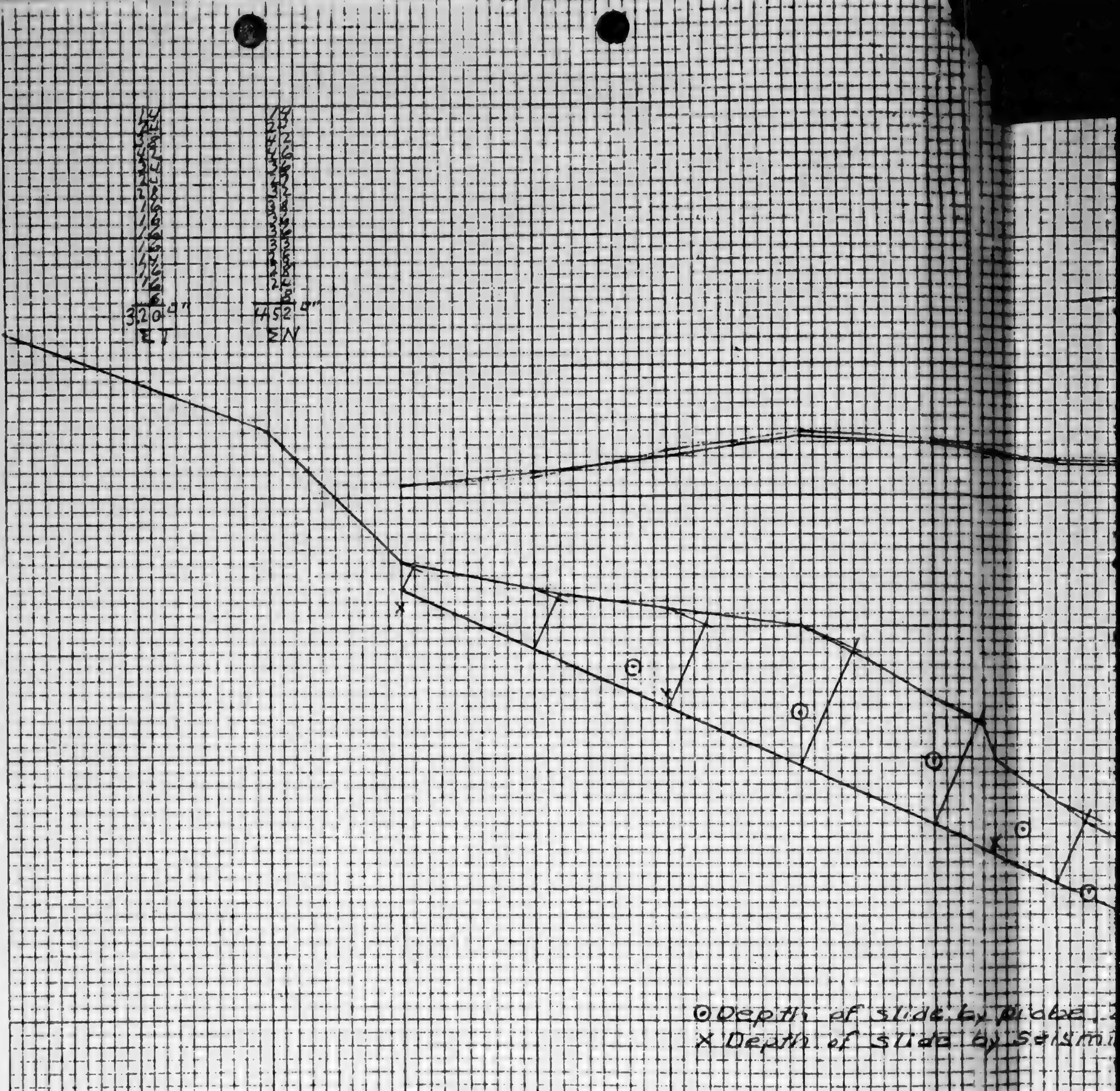
The plan to excavate the detritus and slide mass has considerable merit along with the risk. There must be a vertical limit to the troublesome formation as there is obviously a lateral limit, and excavation approaches to it. If the present sliding mass is excavated, another may or may not develop. This scheme offers large cost saving if it does not.

The cost of a surface interceptor drain around the top of the slide to channel the surface water to the side and extensive seeding and mulching to stop the detritus flow down the slope is not included in any of the cost estimates above. This work probably should be done with any proposed scheme.

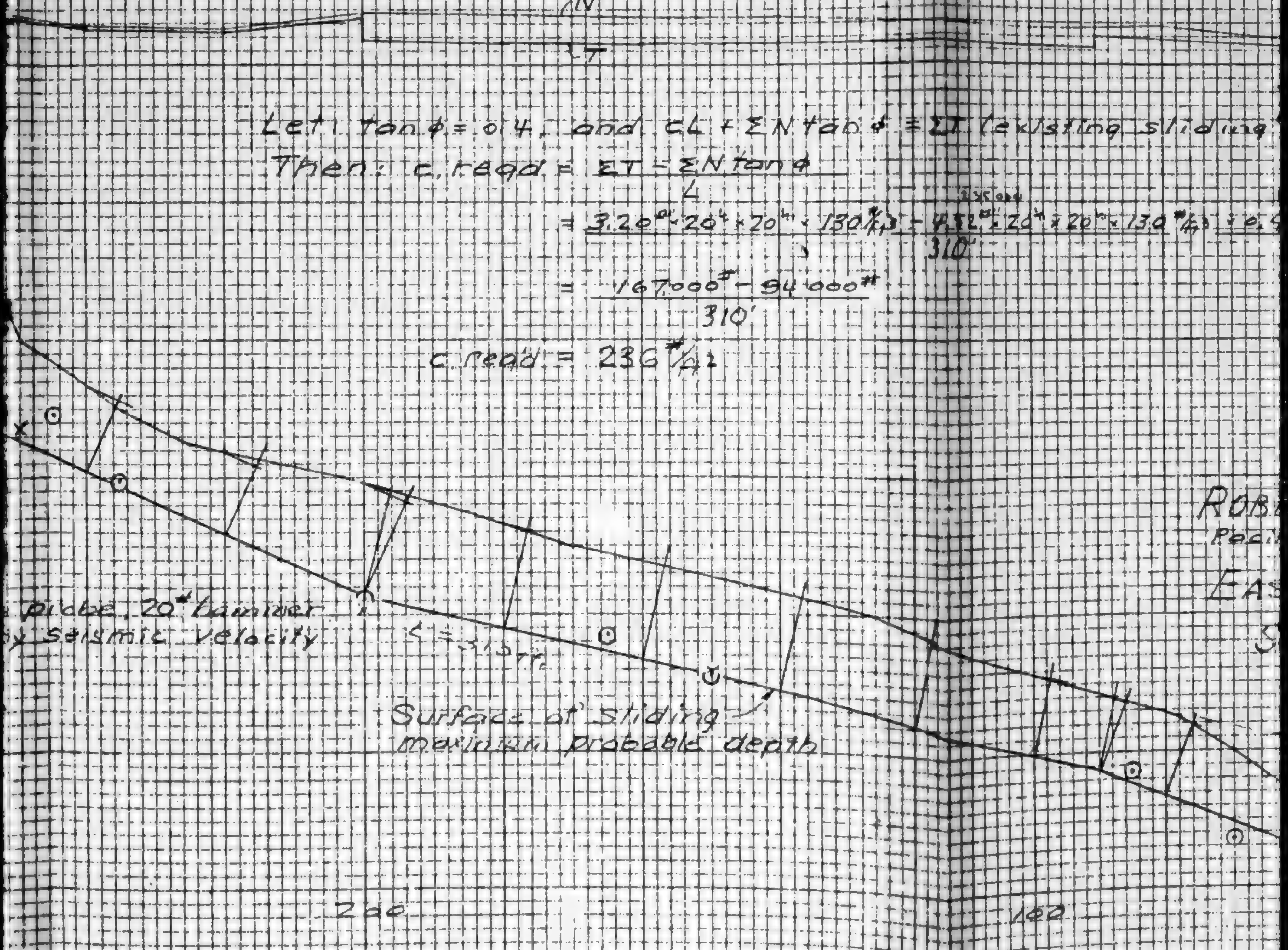
F. W. Yarbrough
Soils & Geology Engineer

FWY:af

K+E 10 X 10 TO THE INCH
KEUFFEL & ESSER CO.
PRINTED IN U.S.A.
781001


320 9"
ΣT
452 9"
ΣN
x
400
300

⊙ Depth of slide by probe
X Depth of slide by Seismi


N
T
probe, 20# hammer
by seismic velocity
L = 315 ft.
Surface of sliding
maximum probable depth
200
100
ROB
Paci
EAS
S

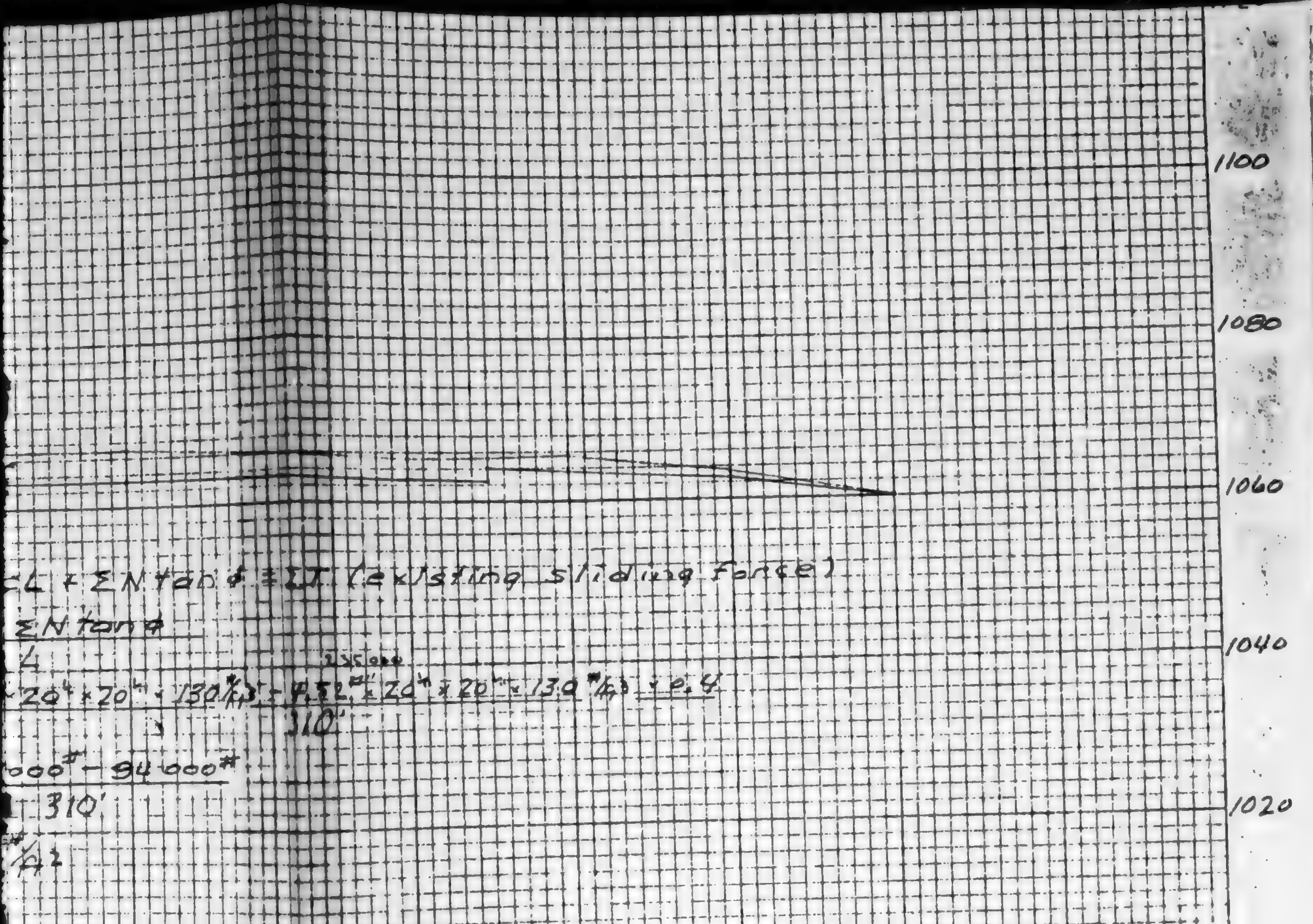
Let tan φ = 0.4, and cL + ΣN tan φ = ΣT (existing sliding

Then: $c_{reqd} = \dfrac{\Sigma T - \Sigma N \tan\phi}{L}$

$$= \frac{3.20^{\#} \times 20' \times 20' \times 130^{\#}/_{ft^3} - \overset{235{,}000}{4.52^{\#}} \times 20' \times 20' \times 130^{\#}/_{ft^3} + e.}{310'}$$

$$= \frac{167{,}000^{\#} - 94{,}000^{\#}}{310'}$$

$c_{reqd} = 236^{\#}/_{ft^2}$


1100
1080
1060
1040
1020
1000
980
960
940
ving
ble depth
100
℄
2369+50

cL + ΣN tan φ = ΣT (existing sliding force)

ΣN tan φ

L

20' × 20' × 130#/ft3 − 4.52# × 20' × 20' × 130#/ft3 + e.4 (235,000)

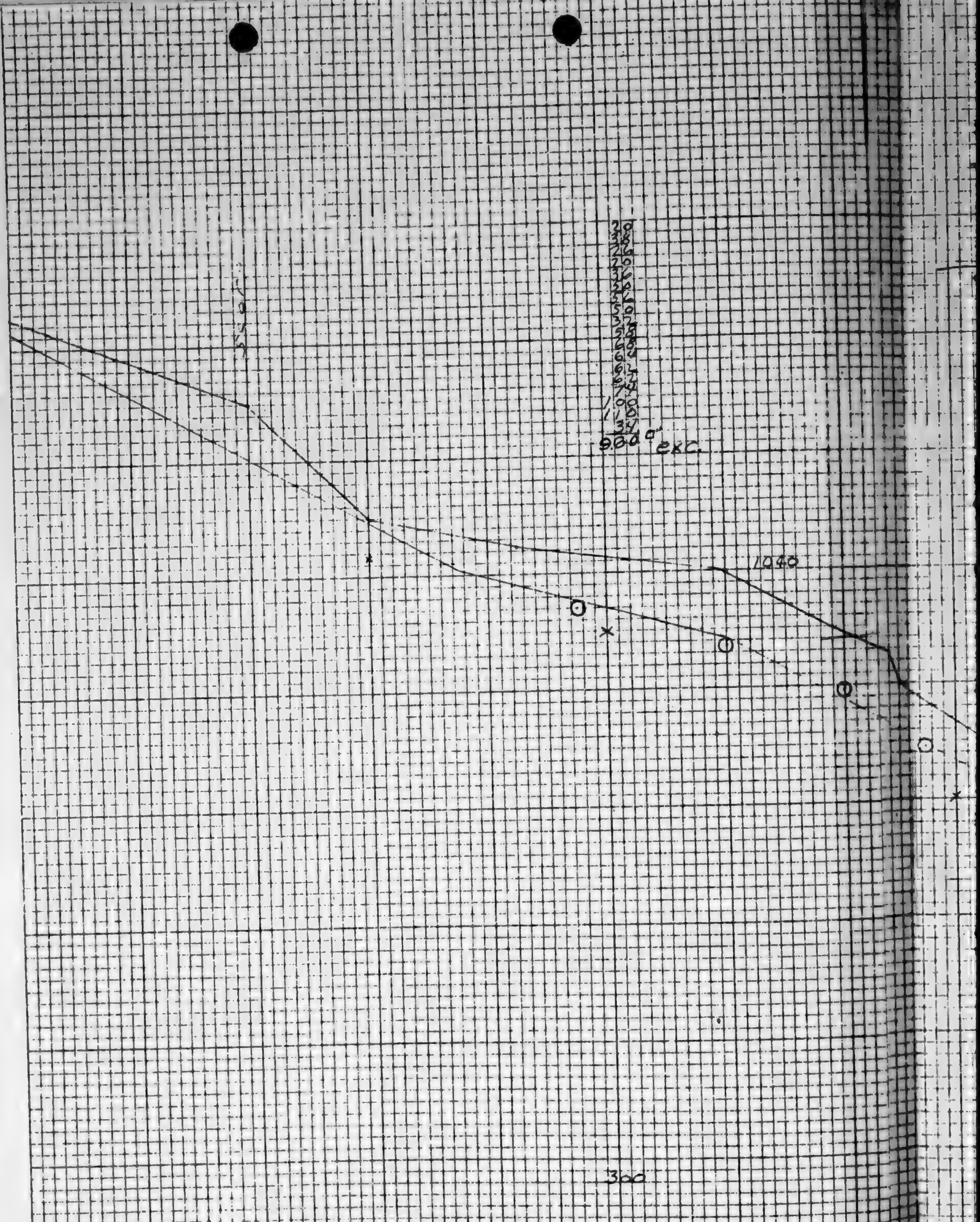
310'

000# − 94 000#

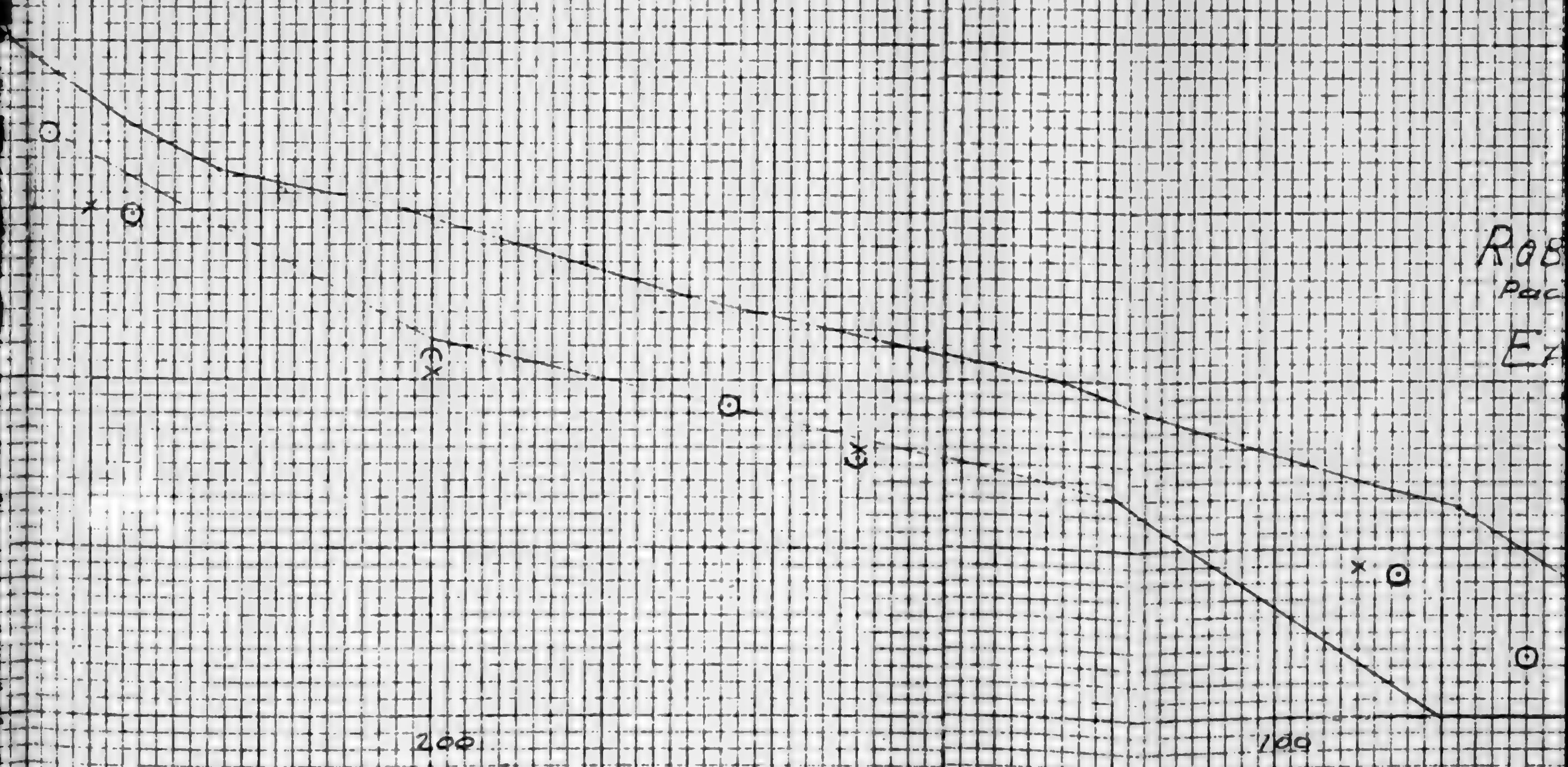
310'

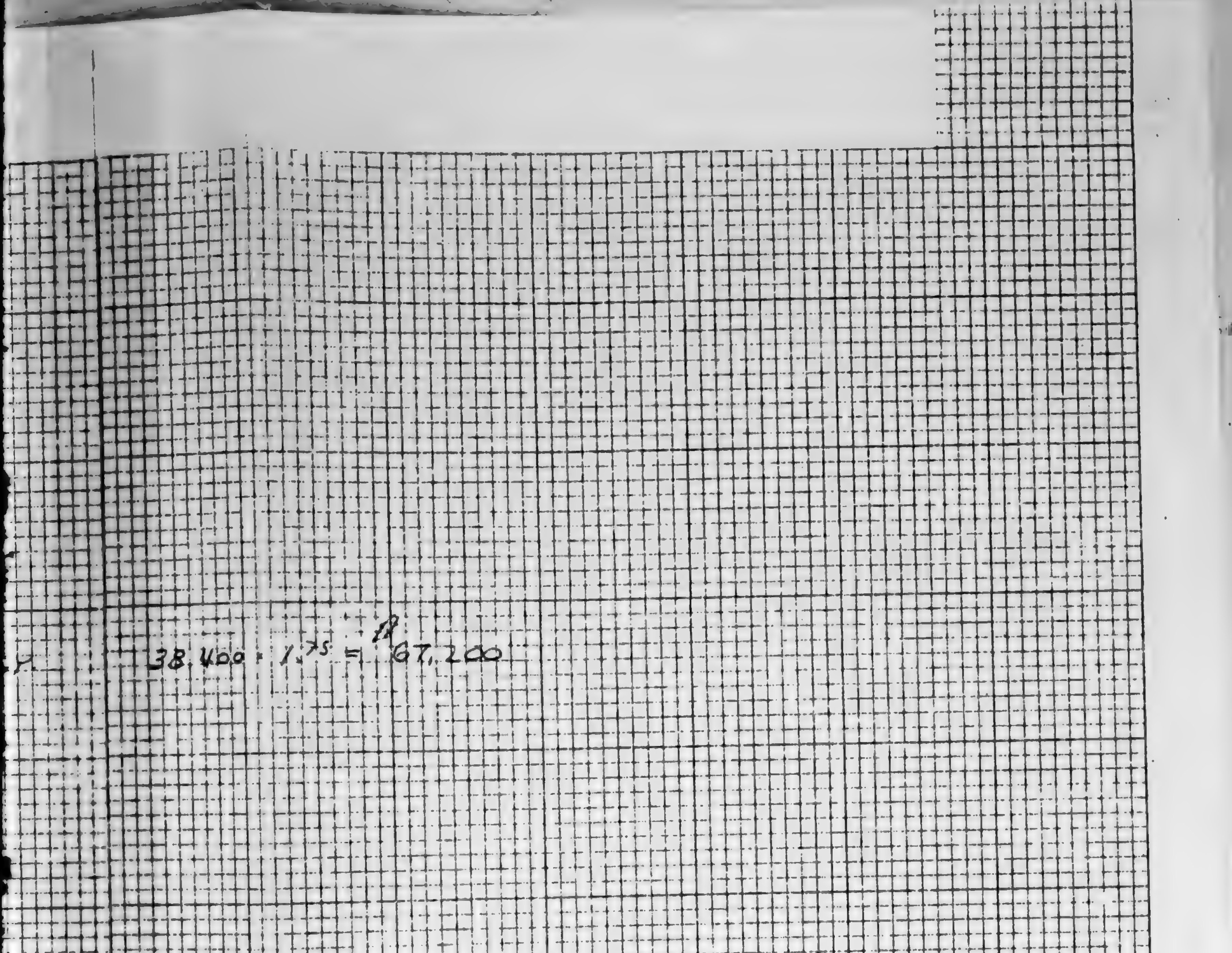
#/ft2

ROBERTS MOUNTAIN SECTION
Pacific Hwy 15 Douglas Co.
EAST SIDE CUT SLIDE
Shear Strength Existing
1" = 20 Ft
6-21-76


20
38
26
20
36
20
26
50
32
58
26
64
62
62
74
1.00
1.10
34
9.80" exc.
1040
300

$960' \times 20' \times 20' \times 270 \times \frac{1}{27} = 38.400$ C.Y. $38.400 \times 1.75 = {}^{B}67.200$





38,400 × 1.75 = 67,200

ROBERTS MOUNTAIN SECTION
Pacific Hwy I-5 Douglas Co.

EAST SIDE CUT SLIDE

Slide Excavation

1" = 20 FT.

6-24-76

1000
980
960
940
100
℄

FORM E-30

OREGON STATE HIGHWAY DIVISION
INTER-DEPARTMENT CORRESPONDENCE

Salem, Oregon
January 2, 1976

SUBJECT: Geophysical Investigation
Cut Slope Slides
Roberts Mountain
Pacific Highway I-5
Douglas County

To: F.W. Yarbrough
Soils & Geology Engineer

As requested the above investigation was recently completed. The results are shown on the accompanying sheets of drawings.

It is to be noted that:

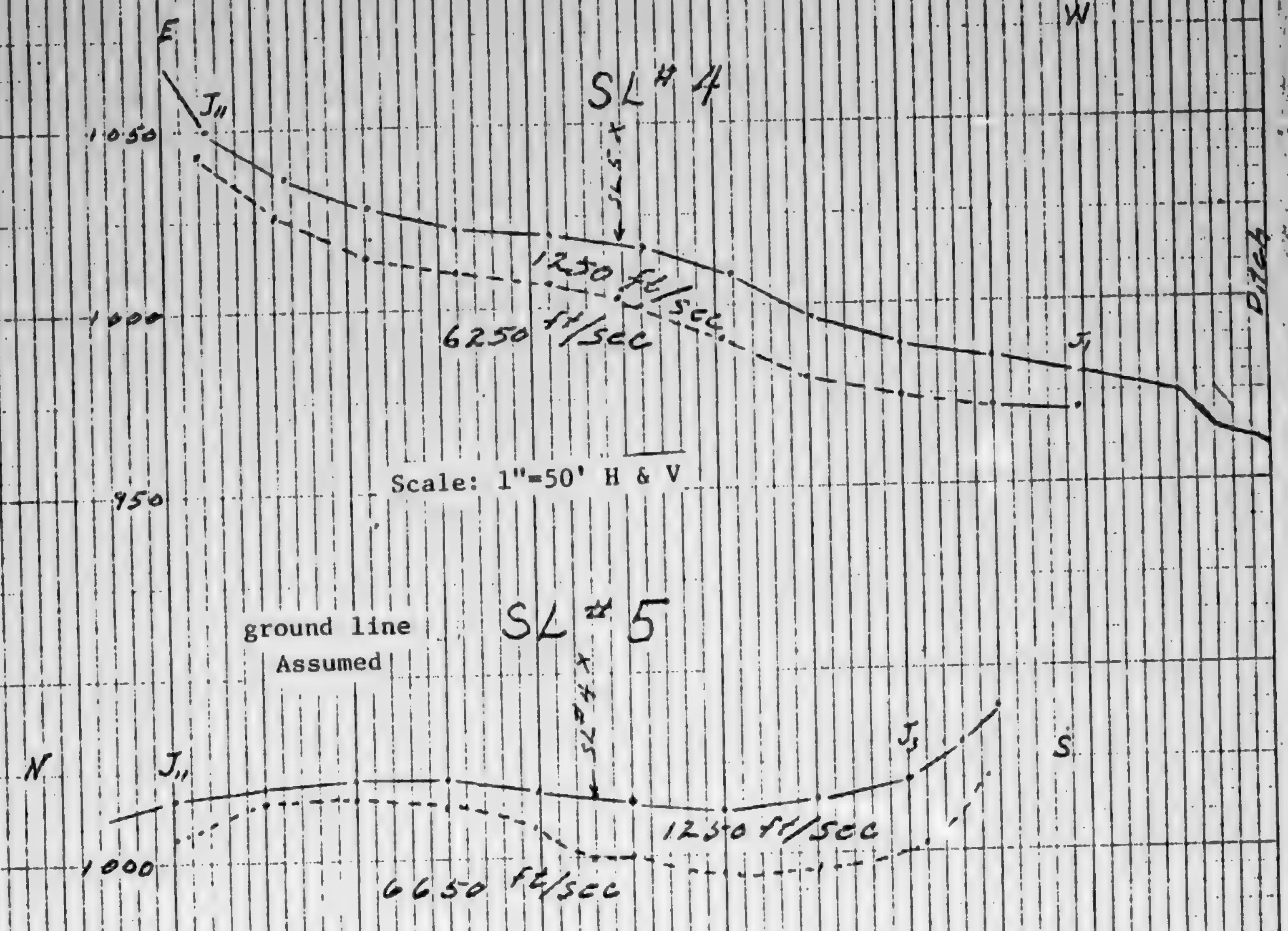
1. The rock is badly fractured, irregular lenses floating in incompetent material.
2. The base of rapid movement appears to be on a 2 1/2:1 slope on South Bound side while on the North Bound side the base of rapid movement appears to be on a 4:1 slope.
3. Tension cracks appear beyond the catch point of the designed slope.

William P Milne
William P. Milne
Geophysicist
John F. Demezas
John F. Demezas
Geophysicist

WPM:jmw
Attachment
cc: Victor D. Wolfe
Alfred Shirley
Elliott Parker

OREGON STATE HIGHWAY DIVISI

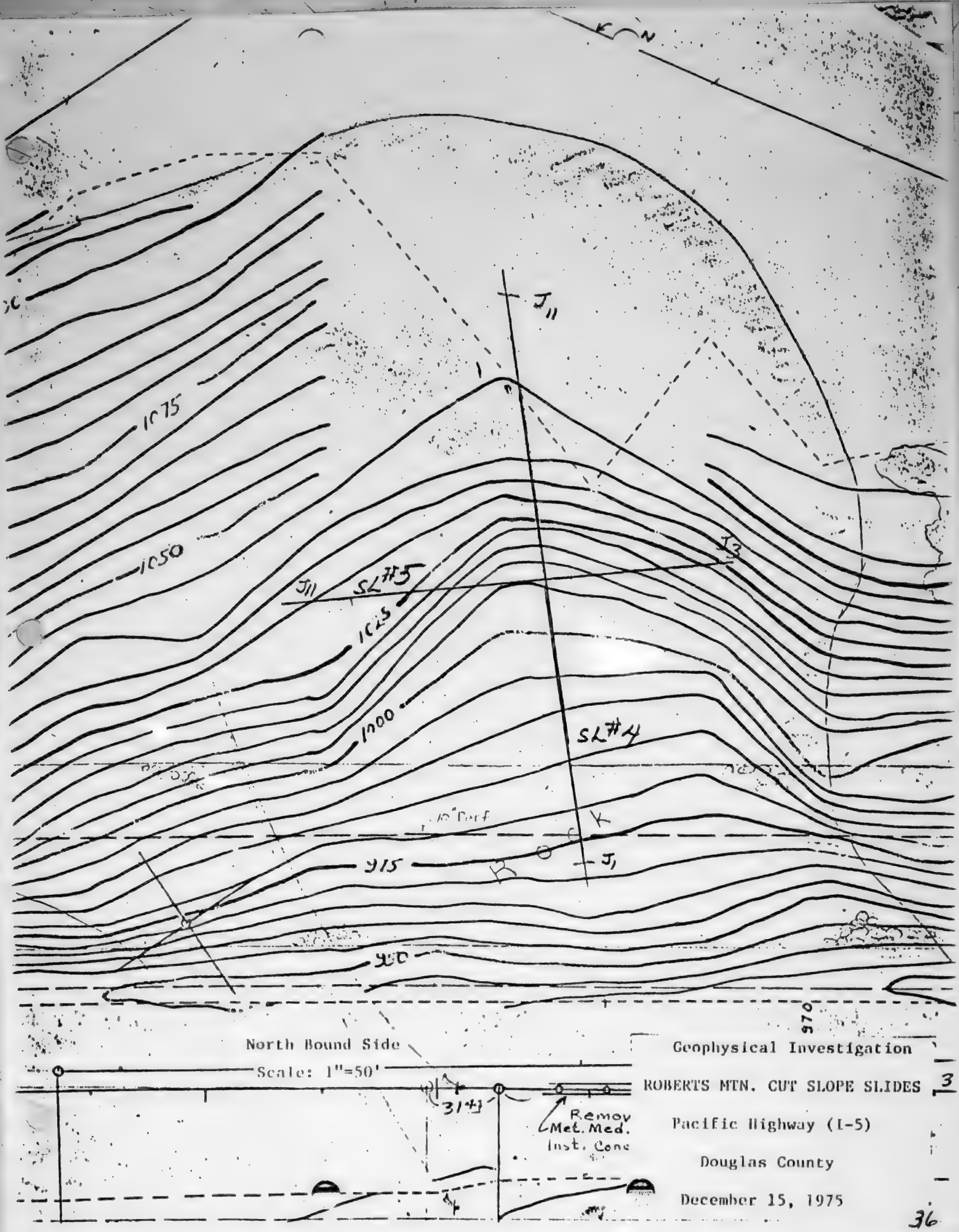
LOCATION SECTION



Scale: 1"=50' H & V

SEISMIC SECTIONS
North Bound Side

Geophysical Investigation
ROBERTS MTN. CUT SLOPE SLIDES
Pacific Highway (I-5)
Douglas County
December 15, 1975


K N
J11
1075
1050
J11
SL#5
J3
1025
1000
SL#4
10" Perf
K
R O C
J1
915
900
970
North Bound Side
Scale: 1"=50'
31+3
Remov
Met. Med.
Inst. Conc

Geophysical Investigation

ROBERTS MTN. CUT SLOPE SLIDES

Pacific Highway (I-5)

Douglas County

December 15, 1975

3

36

FORM E-30

OREGON STATE HIGHWAY DIVISION
INTER-DEPARTMENT CORRESPONDENCE
ROSEBURG, OREGON 97470

DATE January 19, 1976

TO Memo to the file

RECEIVED
FEB 13 1976
LOCATION
SECTION

FROM Elliott Parker
Regional Engineering Geologist
by Peter Bowers Peter Bowers
Engineering Geologist

REFERRED TO Yarbrough
By Location Engineer
R. J. [illegible] 2/17

SUBJECT Roberts Mountain Section
Pacific Highway
Eastside Slide -
Exploration Summary and Recommendations

A field inspection report was submitted on December 23, 1976. A determination was made that evaluation of the slide area would necessarily have to be accomplished using seismic, surface, and probe data.

Evaluation has essentially been completed using the previously determined exploration tools. The information gained should be of considerable assistance in the determination and implementation of corrective action.

SEISMIC DATA

The results of the seismic survey conducted on December 3, 1975 have been received in this office. Seismic sections show the slide material to have a maximum thickness of about 20 feet, with the base appearing to be on approximately a 4:1 slope grading irregularly to 2.5:1 from about elevation 1043 to the ditch level.

PROBE DATA

Ten Penetration Test Holes were put down using a portable hammer driven probe with a 1" cone point, 20 lb. hammer, and an 18" drop. This probe is made to correlate the blow count directly with that of 2" spoons using a 140 lb. hammer and a 30" drop. (See attached P-Hole log sheets.)

The slide debris is a heterogenous mixture of fines, sand, and rock fragments. The blow count indicates this by the irregular rate of penetration. All probe holes were started by pushing in very soft and loose material to depths ranging from 2 feet to 10 feet then the hammer was used to go to refusal. Refusal in most cases was probably on top of large rock fragments and not bedrock.

SURFACE DATA

No accurate contour map of the subject area was available and control lines for location purposes were established using a Brunton Compass, Abney, and cloth tape. Control Line A, bearing approximately S72°E, is near the middle of the slide proper and Control Line B intersects Control Line A at right angles through Station A-5 near the upper limit.

The slide movement currently consists of breaking off at the head of the steep scarp on the easterly and southeasterly sides and slow flowage and tumbling in the rest of the body. This type movement is essentially surficial and requires a certain amount of water present to activate. Ample water is apparently available at certain times of the year and this coupled with the poor drainage tends to not only activate but to increase the length of time the flow remains active. The perimeter of the slide area has the shape of a fan with the feed material being slowly funneled into the main body of the slide. (See enclosed Plan Map and Sections.)

CONCLUSION AND RECOMMENDATIONS

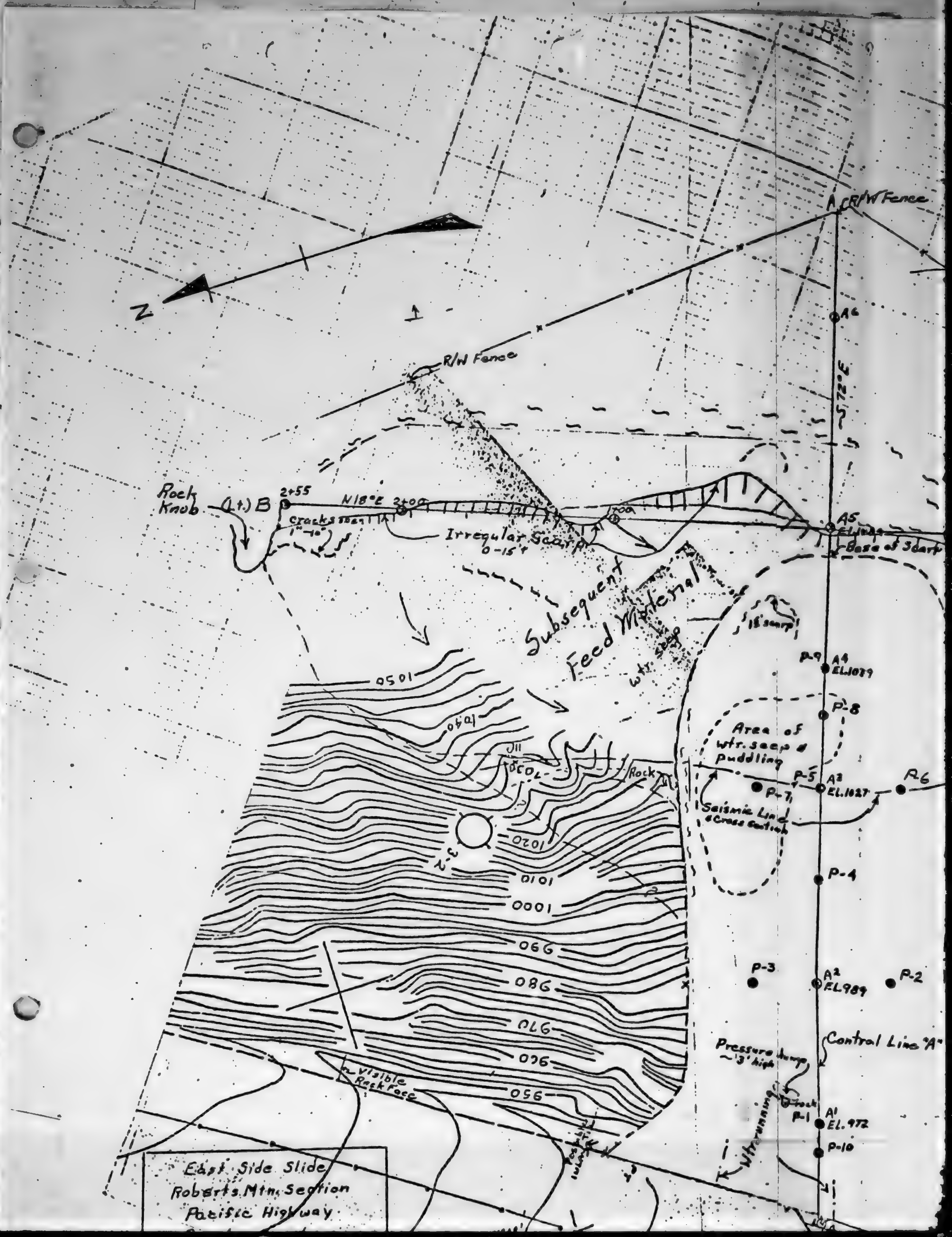
The problem area is believed to be, as previously noted, a debris slide in the upper portion developing into a mud flow as you advance toward the foot with movement mostly surficial.

No contour map of the subject area is available. Due to the relatively continuous slow expansion of the problem area and questionable scope of remedial action needed it is recommended an accurate survey map of the area be made.

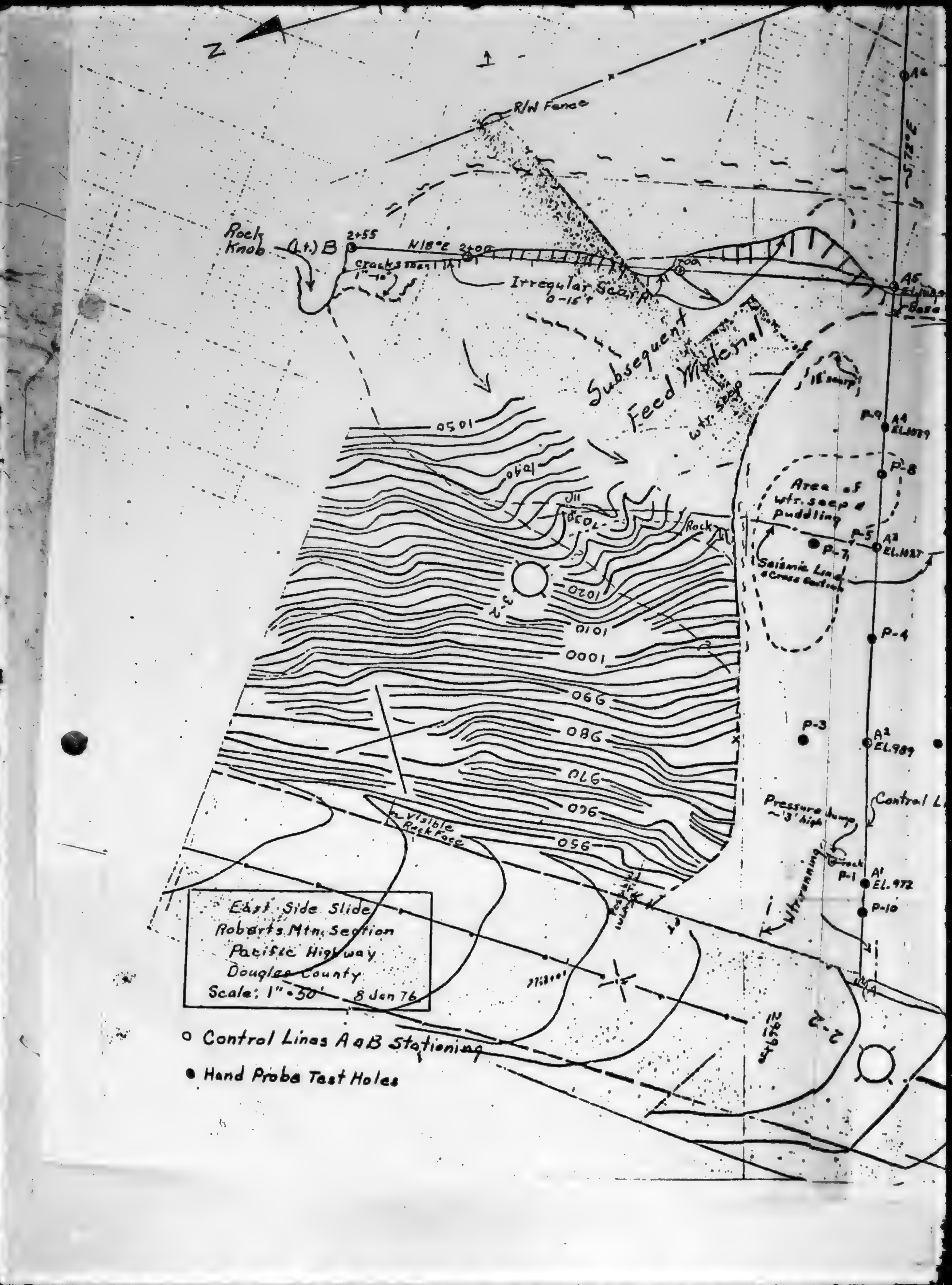
A study and integration of all available data indicates the following are needed to work toward stabilization:

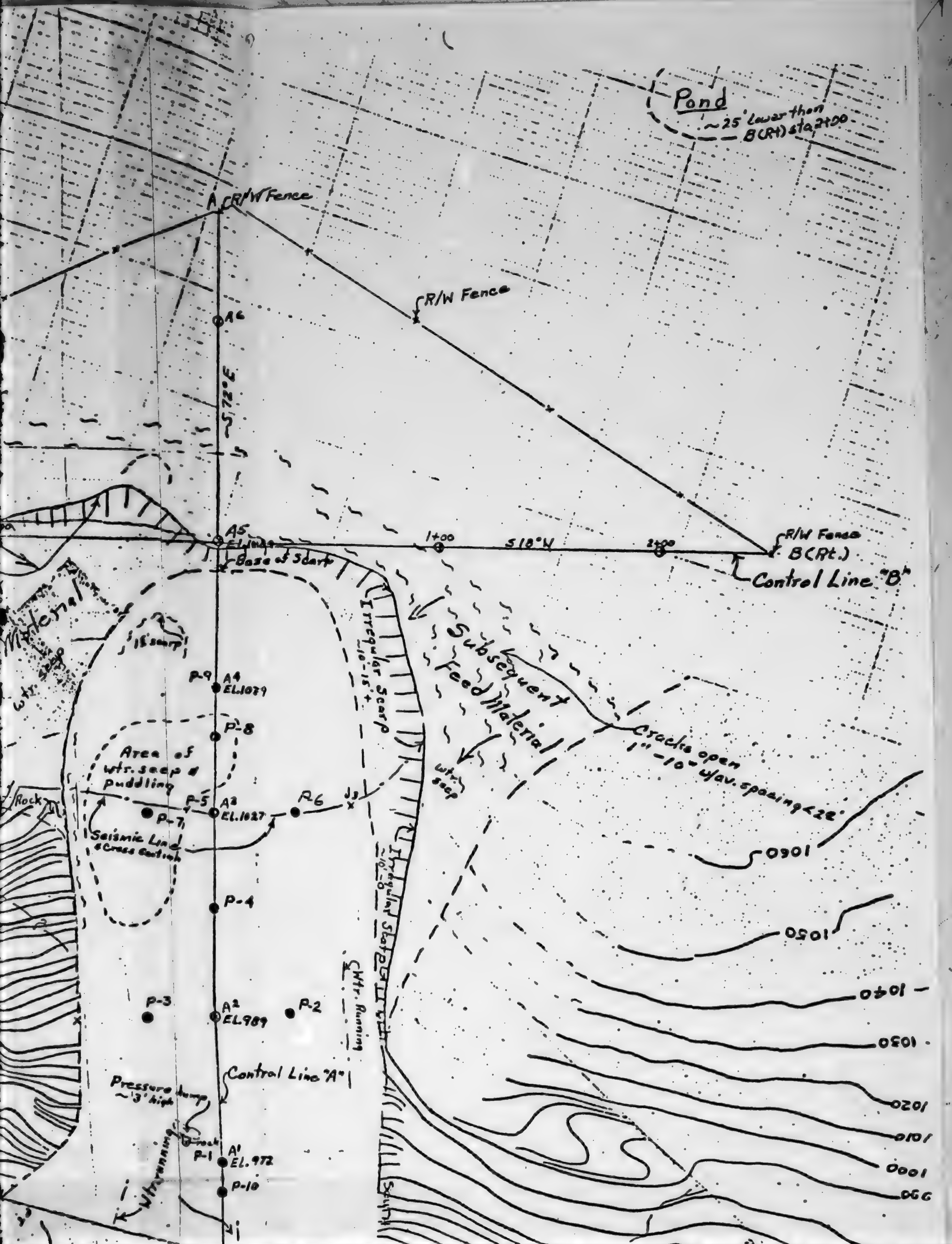
1. Recontouring of affected area.
2. Improved Drainage.
3. Rock Inlay and Blanket.
4. Mulching and Seeding.

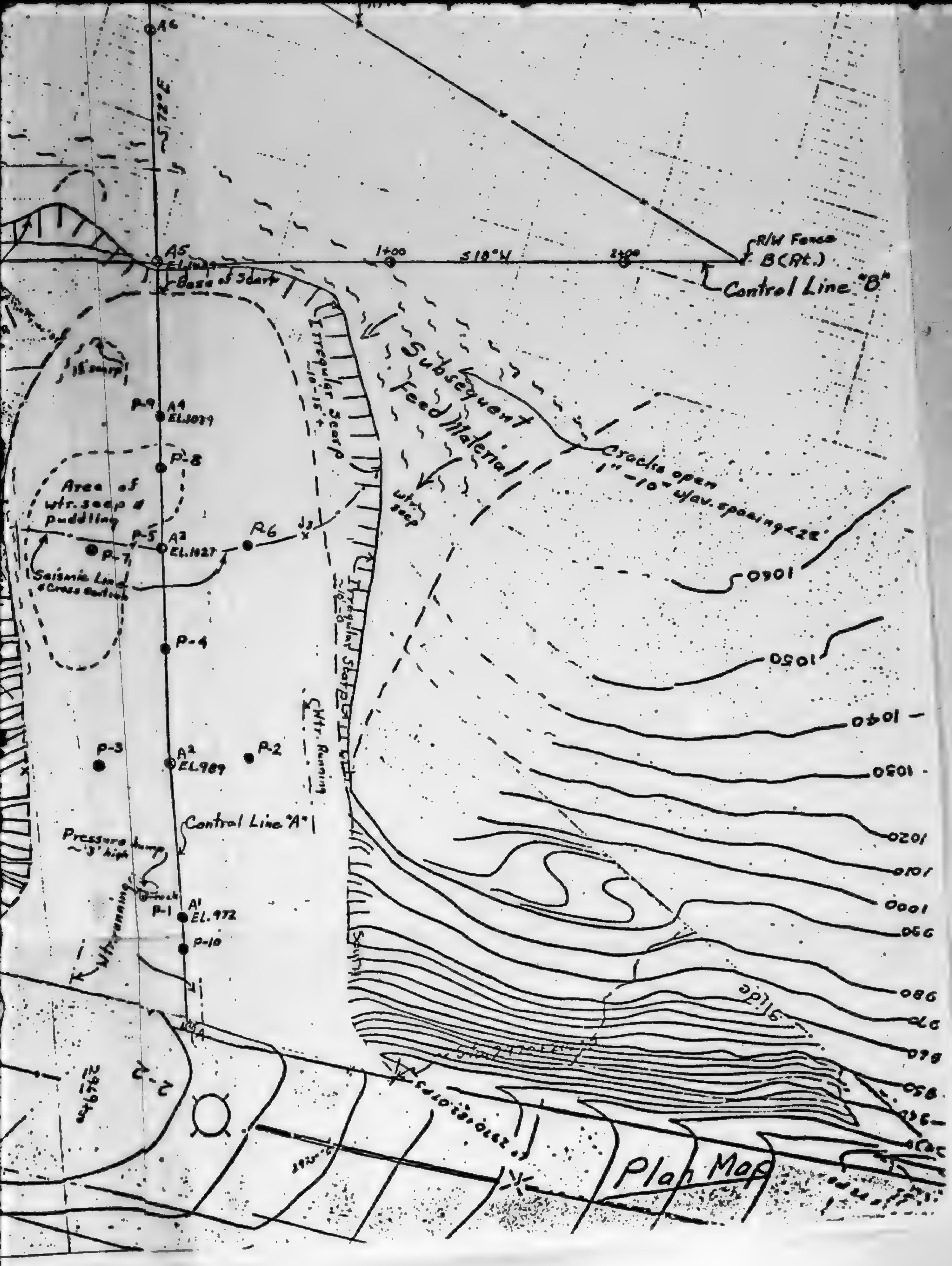
cc: C.T. Keasey
Frank Terpin
Al Bates


N
R/W Fence
R/W Fence
A6
S72°E
Rock Knob
(Lt.) B
2+55
N18°E
2+00
cracks
1"-40"
Irregular Scarp
0-15'
A5
EL.1049
Base of Scarp
Subsequent Feed Material
wtr. seep
15' scarp
P-9
A4
EL.1039
P-8
Area of wtr. seep & puddling
1050
1040
1030
Rock
P-5
A3
EL.1027
P-6
P-7
Seismic Line & Cross Section
1020
1010
1000
P-4
990
980
P-3
A2
EL.989
P-2
970
960
950
Pressure dumps ~3' high
Control Line "A"
rock
P-1
A1
EL.972
P-10
Wtr running
Visible Rock Face

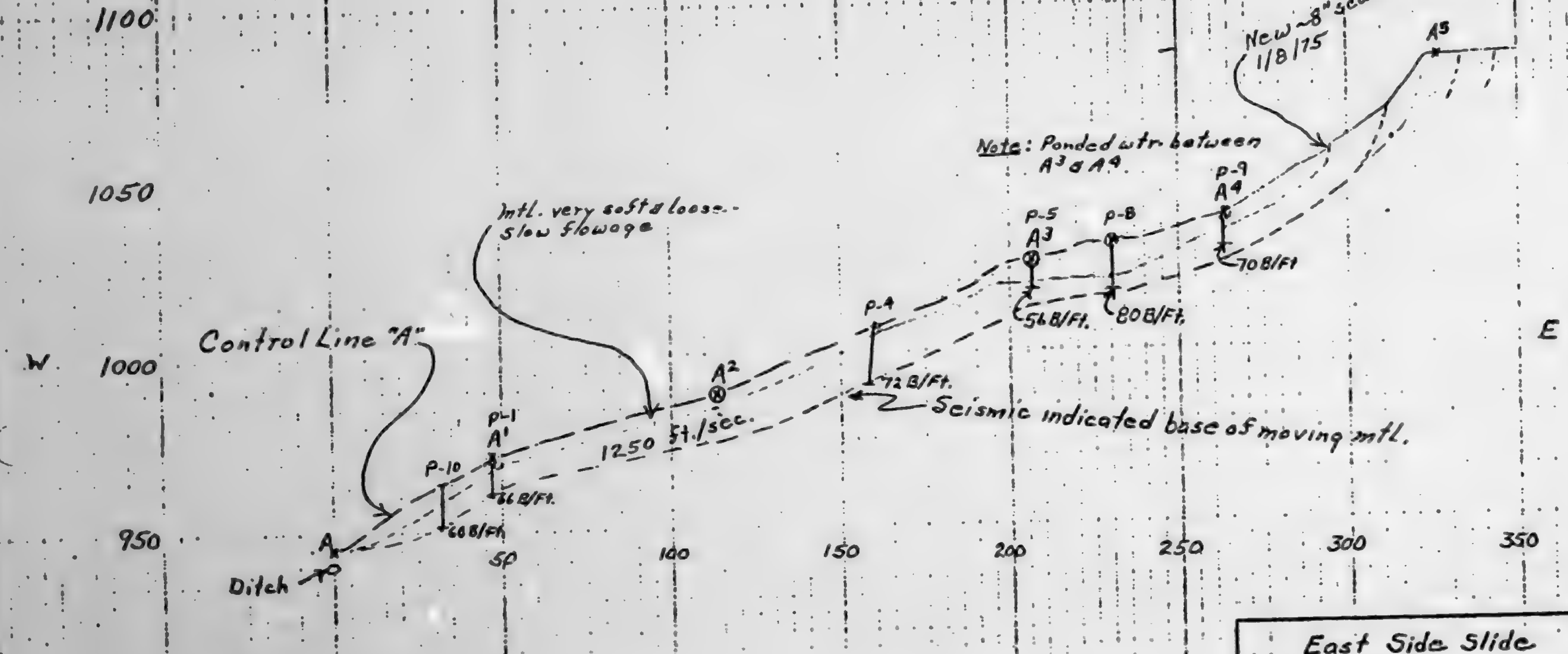
East Side Slide
Roberts Mtn. Section
Pacific Highway




Pond
~25' Lower than B(Rt) sta 2+00
A
R/W Fence
R/W Fence
A6
S 72° E
A5
EL.1042
Base of Scarp
1+00
S 18° W
2+00
R/W Fence
B(Rt.)
Control Line "B"
Material
wtr. seep
15' scarp
Irregular Scarp ~10-15'+
Subsequent Feed Material
Cracks open 1"-10" w/av. spacing < 28"
wtr. seep
P-9
A4
EL.1039
P-8
Area of wtr. seep & puddling
P-5
A3
EL.1027
P-6
J3
P-7
Rock
Seismic Line & Cross Section
Irregular Scarp ~10'-0
1060
1050
1040
1030
1020
1010
1000
990
P-4
P-3
A2
EL.989
P-2
Wtr. Running
Control Line "A"
Pressure bump ~3' high
rock
Wtr. running
P-1
A1
EL.972
P-10


A6
S 72° E
A5
EL.1049
Base of Scarp
1+00
S18°W
2+00
R/W Fence
B(Rt.)
Control Line "B"
15' scarp
Irregular Scarp 10-15'±
Subsequent Feed Material
Cracks open 1"-10" w/av. spacing<28'
P-9
A4
EL.1039
P-8
Area of wtr. seep & puddling
P-5
A3
EL.1027
P-6
J3
P-7
Seismic Line & Cross Section
wtr. seep
P-4
Irregular Scarp 10-0
Wtr. Running
P-3
A2
EL.989
P-2
Control Line "A"
Pressure bump ~3' high
rock
Wtr running
P-1
A1
EL.972
P-10
A
1060
1050
1040
1030
1020
1010
1000
990
980
970
960
950
940
930
Slide
2-2
Plan Map

Control Line "A" Profile Section

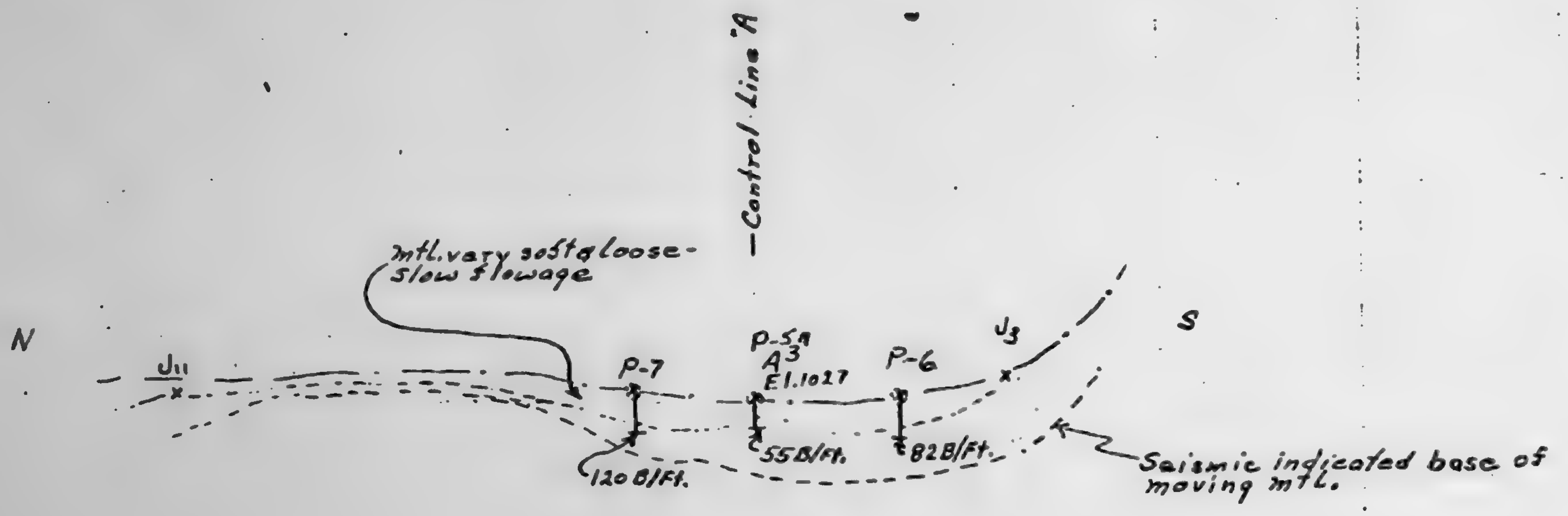

1100
1050
1000
950
W
E
New ~8" scarp
1/8/75
A5
Note: Ponded wtr. between A3 & A4.
P-9
A4
70B/Ft
P-5
A3
P-8
56B/Ft.
80B/Ft.
P-4
72B/Ft.
Seismic indicated base of moving mtl.
Mtl. very soft & loose-- slow flowage
A2
1250 ft./sec.
Control Line "A"
P-1
A1
56B/Ft.
P-10
60B/Ft.
A
Ditch
50
100
150
200
250
300
350

Hand Probe Holes w/ Depth & Blows/Foot @ Refusal.

Note: Control Profile Line "A" established using Abney, Brunton, & Cloth Tape, ~S72°E

East Side Slide
Roberts Mtn. Section
Pacific Highway
Douglas County
Scale: 1" = 50'   8 Jan 76

A³ Cross Section


-Control Line "A"
mtl. very soft & loose-slow flowage
N
S
J11
J3
P-7
P-5A
A³
El. 1027
P-6
120 B/Ft.
55 B/Ft.
82 B/Ft.
Seismic indicated base of moving mtl.

Seismic Section

Hand Probe Holes w/ Depth & Blows/Foot @ Refusal

East Side Slide
Roberts Mtn. Section
Pacific Highway
Douglas County
Scale: 1"=50'   15 Jan 76

Crew – BB, AM, & PB

Penetration Test w/Hand Probe:
(1" cone point, 20 lb. wt., & 18" drop – made to correlate w/Table for 140 lb. Hammer w/ 30" drop.)

Roberts Mtn. Section
Pacific Highway
Eastside Cut Slide (Sta. 2965+38 – 2970+20)

*P-Holes Located from Control Line "A"

P-1 (Loc. @ Sta A¹)

Depth	Blow Count	
$0^{0}-2^{5}$	Push	very soft & loose
$2^{5}-3^{0}$	4	soft & loose
$3^{0}-4^{0}$	8	"
$4^{0}-5^{0}$	7	"
$5^{0}-6^{0}$	16	med. compact
$6^{0}-7^{0}$	17	"
$7^{0}-8^{0}$	32	Compact
$8^{0}-9^{0}$	21	med. compact
$9^{0}-10^{0}$	19	"
$10^{0}-10^{5}$	33 - Refusal	very compact & Hard

P-2 (32' Rt. of Sta A²)

Depth	Blow Count	
$0^{0}-3^{0}$	Push	very soft & loose
$3^{0}-4^{0}$	2	Soft & loose
$4^{0}-5^{0}$	7	"
$5^{0}-6^{0}$	38	Compact
$6^{0}-7^{0}$	22	med. compact
$7^{0}-8^{0}$	21	"
$8^{0}-9^{0}$	50	very compact & Hard
$9^{0}-10^{0}$	36	Compact
$10^{0}-11^{0}$	54	very compact & Hard
$11^{0}-12^{0}$	34	Compact
$12^{0}-12^{5}$	46 - Refusal	v. compact & Hard

P-3 (30' Lt. of Sta A²)

Depth	Blow Count	
$0^{0}-4^{0}$	Push	very soft & loose.
$4^{0}-5^{0}$	17	med. compact - loose
$5^{0}-6^{0}$	15	Loose
$6^{0}-7^{0}$	28	med. compact
$7^{0}-8^{0}$	26	"
$8^{0}-9^{0}$	26	"
$9^{0}-10^{0}$	25	"
$10^{0}-11^{0}$	36	Compact
$11^{0}-12^{0}$	25	med. Compact
$12^{0}-13^{0}$	32	Compact
$13^{0}-14^{0}$	40	"

Hole stopped due to probe started working down hill.

Crew - BB, AM, & PB
Penetration Test w/Hand Probe
(1" cone point, 20lb. wt., & 18" drop-ma
to correlate w/Table for 140lb. Hammer
30" drop.)

Roberts Mtn. Section
Pacific Highway
Eastside Cut Slide

* P-Holes Located from Control Line "A".

P-4 (A^{2}+50' on Line)

Depth	Blow Count	
$0^{0}-2^{0}$	Push	very soft & loose
$2^{0}-3^{0}$	24	med. compact
$3^{0}-4^{0}$	15	Loose
$4^{0}-5^{0}$	13	"
$5^{0}-6^{0}$	19	med. compact
$6^{0}-7^{0}$	13	Loose
$7^{0}-8^{0}$	16	med. compact
$8^{0}-9^{0}$	19	"
$9^{0}-10^{0}$	17	"
$10^{0}-11^{0}$	28	"
$11^{0}-12^{0}$	36	compact
$12^{0}-13^{0}$	41	"
$13^{0}-14^{0}$	47	"
$14^{0}-15^{0}$	27	med. compact
$15^{0}-16^{0}$	54	very compact & Hard
$16^{0}-16^{8}$	48 Refusal	"

P-6 (38' Rt. of sta A^{3})

Depth	Blow Count	
$0^{0}-7^{5}$	Push	very soft & Loose
$7^{5}-8^{0}$	19	compact
$8^{0}-9^{0}$	31	"
$9^{0}-10^{0}$	60	very compact & Hard
$10^{0}-10^{5}$	41 Refusal	"

* Tool wet on btm. 2 feet.

P-5 (Loc. @ Sta. A^{3})

Depth	Blow Count	
$0^{0}-4^{0}$	Push	very soft & loose
$4^{0}-5^{0}$	17	med. compact
$5^{0}-6^{0}$	17	"
$6^{0}-7^{0}$	18	"
$7^{0}-7^{2}$	50	very compact & Hard

* Refusal - probably on rock frag.

P-7 (30' Lt. of Sta. A^{3}) El. +3

Depth	Blow Count	
$0^{0}-7^{5}$	Push	very soft & loose
$7^{5}-8^{0}$	11	med. compact
$8^{0}-9^{0}$	24	"
$9^{0}-10^{0}$	56	very compact & Har
$10^{0}-10^{3}$	40-Refusal	"

P-8 (A^{3}+25' on Line) El. +5^{0}

Depth	Blow Count	
$0^{0}-10^{0}$	Push	very soft & Loose
$10^{0}-11^{0}$	49	compact
$11^{0}-12^{0}$	15	Loose
$12^{0}-13^{0}$	23	med. compact
$13^{0}-13^{5}$	40-Refusal	very compact & Har

* Tool wet on btm. 5 feet.

Tuesday - 13 Jan 16
Crew BB, AM, & PB
Penetration Test w/ Hand Probe:
(1" cone point, 20 lb. wt., @18" drop - made to correlate w/ Table for 140 lb. Hamme 30" drop)

Roberts Mtn. Section
Pacific Highway
Eastside Cut Slide

* P-Holes located from Control Line "A"

P-9 (Loc. @ sta. A^4)

Depth	Blow Count	
$0^{\underline{0}}-3^{\underline{7}}$	Push	very soft & loose
$3^{\underline{7}}-4^{\underline{0}}$	7	med. compact
$4^{\underline{0}}-5^{\underline{0}}$	11	Loose
$5^{\underline{0}}-6^{\underline{0}}$	26	med. compact
$6^{\underline{0}}-7^{\underline{0}}$	24	"
$7^{\underline{0}}-8^{\underline{0}}$	14	Loose
$8^{\underline{0}}-8^{\underline{6}}$	42 - Refusal.	very compact & Hard

P-10 (15' back on line from sta. A')

Depth	Blow Count	
$0^{\underline{0}}-4^{\underline{5}}$	Push	very soft & loose
$4^{\underline{5}}-5^{\underline{0}}$	12 (on rock frag)	med. Comp
$5^{\underline{0}}-6^{\underline{0}}$	7	soft & loose
$6^{\underline{0}}-7^{\underline{0}}$	4	"
$7^{\underline{0}}-8^{\underline{0}}$	10	"
$8^{\underline{0}}-9^{\underline{0}}$	8	"
$9^{\underline{0}}-10^{\underline{0}}$	8	"
$10^{\underline{0}}-11^{\underline{0}}$	13	Loose
$11^{\underline{0}}-12^{\underline{0}}$	14	"
$12^{\underline{0}}-12^{\underline{7}}$	40 - Refusal -	V. compact & Hard

OREGON STATE HIGHWAY DEPARTMENT

SO[illegible]D GEOLOGICAL EXPLORATIO[illegible]

Construction Division

Project Shady Pt- Mytleck Highway Pacific Date 4-13, 1953

County Douglas Res. Engineer J. Rowland Prefix 10-1410-900

Exploration equipment used vertical Augur

Exploration area: Cut, depth .... ft. Embankment fonda.—Emb. ht. 100 ft.

Station P2 184+00 Lt. .... C. L. .... Rt. 100

Borrow—Quarry—Location 2981+25 . 60' Lt.

Hole location ....

Slide—Horizontal hole .... Vertical hole ....

Station .... Lt. .... C. L. .... Rt. ....

Hole No. 14

Indicate in Feet
Distance from ground surface to various soil and rock formations

Ground Surface Elevation	Sample Data H.D. Sheet No.	DESCRIBE SOIL, ROCK AND MOISTURE CONDITIONS DESCRIBE DRILLING RATE FOR POWER EQUIPMENT
0	A25928	Light brown silty clay containing rock fragments. The moisture content gradually increases with depth, ~~as well as~~ the hardness of the material gradually increases with depth also.
23	—	Refusal at 23'
		from 14 ft ~~to 23~~ broken rock was encountered. this gradually became harder. A fine grained, hard dark grey shale

NOTE: Prepare a sheet for each hole. Mail copies at end of day. Show zones for all samples taken. For horizontal holes indicate skew from center line by rough sketch. Show water zones and level of water in hole after waiting period.

This copy for Construction Engineer

Joseph W. Fields
Soils, Geologist or Driller

OREGON STATE HIGHWAY DEPARTMENT
SOIL AND GEOLOGICAL EXPLORATION [illegible]
Construction Division

Project Shady Pt- Myrtle Ck Highway Pacific Date 4-13, 1953
County Douglas Res. Engineer J. Rowland Prefix 10-1410-900
Exploration equipment used vertical Augur
Exploration area: Cut, depth 62 ft. Embankment fonda.—Emb. ht. ft.
Station P_2 174+00 Lt. 185 C. L. Rt.
Borrow—Quarry—Location 2972+40, 15 Lt.
Hole location
Slide—Horizontal hole Vertical hole
Station Lt. C. L. Rt.
Hole No. 13

Indicate in Feet Distance from ground surface to various soil and rock formations

Ground Surface Elevation	Sample Data H.D. Sheet No.	DESCRIBE SOIL, ROCK AND MOISTURE CONDITIONS DESCRIBE DRILLING RATE FOR POWER EQUIPMENT
0	A25927	Light brown silty clay firm drilling; below PL bag & bottle This clay contains small fragments of underlying rock.
13		finegrained hard rock; this rock is probably shale:
25		Refusal at 25'.
		dry hole

NOTE: Prepare a sheet for each hole. Mail copies at end of day. Show zones for all samples taken. For horizontal holes indicate skew from center line by rough sketch. Show water zones and level of water in hole after waiting period.

This copy for Construction Engineer

Joseph W. Fields
Soils, Geologist or Driller

OREGON STATE HIGHWAY DEPARTMENT
SO[illegible]D GEOLOGICAL EXPLORATION
Construction Division

Project Shady Pt-Myrtle ck Highway Pacific Date 4-13 1953
County Douglas Res. Engineer J. Rowland Prefix 10-1410-900
Exploration equipment used vertical Augur
Exploration area: Cut, depth 96 ft. Embankment fonda.—Emb. ht. .... ft.
Station PL 168+15 Lt. 4' C. L. .... Rt. ....
Borrow—Quarry—Location 2966+70 ℄
Hole location ....
Slide—Horizontal hole .... Vertical hole ....
Station .... Lt. .... C. L. .... Rt. ....
Hole No. 12

Indicate in Feet
Distance from ground surface to various soil and rock formations

Ground Surface Elevation	Sample Data H.D. Sheet No.	DESCRIBE SOIL, ROCK AND MOISTURE CONDITIONS DESCRIBE DRILLING RATE FOR POWER EQUIPMENT
0 – 15	A25926	Light brown silty Clay Containing small rock fragments. Firm drilling below PL bag & bottle
15 – 18	A25926	dark brown to grey sandy silt firm drilling; below PL bag & bottle
18 – 28	A25926	blue shale hard drilling from 22' to 28' below PL bag & bottle
28	— — —	Refusal at 28'

NOTE: Prepare a sheet for each hole. Mail copies at end of day. Show zones for all samples taken. For horizontal holes indicate skew from center line by rough sketch. Show water zones and level of water in hole after waiting period.

This copy for Construction Engineer

Joseph W. Fields
Soils, Geologist or Driller

OREGON STATE HIGHWAY DEPARTMENT
SOIL AND GEOLOGICAL EXPLORATION LOG
Construction Division

Project Shady Pt. Myrtle Ck Highway Pacific Date 4-13, 1953

County Douglas Res. Engineer J Rowland Prefix 10-1410-900

Exploration equipment used vertical Augur

Exploration area: Cut, depth 159 ft. Embankment fonda.—Emb. ht. ft.

Station P2 162+18 Lt. C. L. Rt. 300'

Borrow—Quarry—Location 2955+25, 200' Rt

Hole location

Slide—Horizontal hole Vertical hole

Station Lt. C. L. Rt.

Hole No. 11

Indicate in Feet
Distance from ground surface to various soil and rock formations

Ground Surface Elevation	Sample Data H.D. Sheet No.	DESCRIBE SOIL, ROCK AND MOISTURE CONDITIONS DESCRIBE DRILLING RATE FOR POWER EQUIPMENT
0	A25900	weathered sandstone firm. drilling 0-6; hard drilling from 6-12 below PL. sack & Jar
12		Refusal 12' dry hole

NOTE: Prepare a sheet for each hole. Mail copies at end of day. Show zones for all samples taken. For horizontal holes indicate skew from center line by rough sketch. Show water zones and level of water in hole after waiting period.

Joseph W. Fields
Soils, Geologist or Driller

This copy for Construction Engineer

48

REGON STATE HIGHWAY DEPART[illegible]NT
Materials Division

Laboratory Report

Project	Shady Point-Myrtle Creek	Prefix No.	10-1410
Highway	Pacific	County	Douglas
Contractor		F. A. Project No.	
Contract No.		Date reported	June 4, 1953
Submitted by	J. A. Rowland		

REPORT ON SAMPLE OF SOIL

Source of material	Hole #14, Sta. ~~P2-184, 100' Rt.~~		
Sampled at	Depth 0-10 2981+25, 60' Lt	Date received	April 20, 1953
To be used	Cut Section	Quantity represented	
Sampled by	Fields	Type of Material	Soil
Laboratory No.	305260	Sample No.	
Data Sheet No.	A-25928		

TEST RESULTS

SOIL ANALYSIS:

LL	42	%
PI	23	%
FME		%
SL		%
R		%
Cf		%
LS		%

Classification—Group CoSL

Sp. Gr. (Le Chatelier) 2.72

Sand Equivalent 6.6%

SIEVE ANALYSIS: WET

Ret. on	% Single Sieve
3/4	3.2
½	9.7
4	20.2
10	11.3
20	8.6
40	5.3
60	3.3
140	5.0
200	1.7
P200	31.7

24% [illegible]

HYDROMETER ANALYSIS:

	Passing No. 10	Total Sample
Particles larger than 2.0 mm.	0.0 %	44.5 %
Coarse sand, 2.0 to 0.25 mm.	31.0 %	17.2 %
Fine sand, 0.25 to 0.05 mm.	12.5 %	6.9 %
Silt, 0.05 to 0.005 mm.	25.0 %	13.9 %
Clay, smaller than 0.005 mm.	31.5 %	17.5 %
Colloids, smaller than 0.001 mm.	%	%

DENSITY DETERMINATION:

Dry Density, lbs/c. f.	% Moisture
110.9	12.4
116.9	14.5
111.0	17.7

TRIAXIAL SHEAR TEST:

Sample	Remolded	~~Undisturbed~~	
% Compaction	100	100	100
% Moisture	17.7	19.5	23.6
Depth Ratio Z/R	1.95	3.05	3.70
Pavement Thickness, Z	16	24	30
Angle of Friction, φ	5	3	2
Cohesion, C PSI	7.5	2	1.5
Remarks: R Value	30	15	11

10% EV w

RECOMMENDATIONS

Material as represented by this sample .... suitable for use.

NOTED
H. C. SMITH

TEST REPORT DISTRIBUTION:
Bureau of Public Roads
x Construction Engineer
Maintenance Engineer
Bridge Engineer
Requisition Office
x Division Engineer Edwards
x Resident Engineer Rowland
Dist. Maint, Supt.
Foreman
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x R. Webber
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Engineer of Materials

State Printing 89773

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Form E-80—10M—8-52

Not Charted

OREGON STATE HIGHWAY DEPARTMENT
Materials Division

Laboratory Report

Project	Shady Point-Myrtle Creek	Prefix No.	10-1410
Highway	Pacific	County	Douglas
Contractor		Contract No.	
		F. A. Project No.	
Submitted by	J. Rowland	Date reported	June 4, 1953

REPORT ON SAMPLE OF SOIL

Source of material	Hole #13, Sta. ~~P2 174~~ 135 Lt.		
Sampled at	Depth 0-25'		
To be used	Cut Section 2972+40, 15 Lt.	Date received	April 20, 1953
		Quantity represented	
Sampled by	Joseph W. Fields		
Laboratory No.	305278	Type of Material	Soil
Data Sheet No.	A-25927	Sample No.	1

TEST RESULTS

SOIL ANALYSIS:

LL	31	%
PI	12	%
FME		%
SL		%
R		%
Cf		%
LS		%

Classification—Group

Sp. Gr. (Le Chatelier) 2.69

Sand Equivalent 11.9%

WET SIEVE ANALYSIS:

Ret. on	% Single Sieve
3/4	1.8
1/2	3.9
4	10.4
10	12.9
20	8.1
40	8.0
60	5.1
140	7.2
200	2.1
P200	40.5

DENSITY DETERMINATION:

Dry Density, lbs/c. f. % Moisture

TRIAXIAL SHEAR TEST:

Sample	Remolded	Undisturbed
% Compaction		
% Moisture		
Depth Ratio Z/R		
Pavement Thickness, Z		
Angle of Friction, φ		
Cohesion, C		

Remarks:

Compares to Lab. No. 305256

HYDROMETER ANALYSIS:	Passing No. 10	Total Sample
Particles larger than 2.0 mm.	0.0 %	29.0 %
Coarse sand, 2.0 to 0.25 mm.	29.8 %	21.2 %
Fine sand, 0.25 to 0.05 mm.	21.7 %	15.4 %
Silt, 0.05 to 0.005 mm.	26.0 %	18.5 %
Clay, smaller than 0.005 mm.	22.5 %	15.9 %
Colloids, smaller than 0.001 mm.	%	%

RECOMMENDATIONS

Material as represented by this sample .... suitable for use.

NOTED
H. G. SMITH

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- Bridge Engineer
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Engineer of Materials

State Printing 50773

Form E-90—10M—6-53

OREGON STATE HIGHWAY DEPARTMENT
Materials Division

Laboratory Report

Project	Shady Point-Myrtle Creek	Prefix No.	10-1410
Highway	Pacific	County	Douglas
Contractor		F. A. Project No.	
		Contract No.	
Submitted by	J. A. Rowland	Date reported	June 4, 1953

REPORT ON SAMPLE OF SOIL

Source of material	Hole #12, Sta. ~~12 163+15, 4' Lt.~~ 2466+70, ℄		
Sampled at	Depth 0-15'	Date received	April 20, 1953
To be used	Cut Section	Quantity represented	
Sampled by	Fields	Type of Material	Soil
Laboratory No.	305257	Sample No.	
Data Sheet No.	A-25926		

TEST RESULTS

SOIL ANALYSIS:

LL	38	%
PI	23	%
FME		%
SL		%
R		%
Cf		%
LS		%

Classification—Group CL

Sp. Gr. (Le Chatelier) 2.66

Sand Equivalent 2.38%

SIEVE ANALYSIS: WET

Ret. on	% Single Sieve
3/4	1.6
½	.5
4	7.7
10	4.3
20	2.7
40	2.7
60	2.4
140	6.4
200	3.3
P200	68.4

DENSITY DETERMINATION:

Dry Density, lbs/c. f.	% Moisture
100.4	14.1
105.0	16.6
108.2	19.4
105.8	20.8

TRIAXIAL SHEAR TEST:

Sample	Remolded	Undisturbed	
% Compaction	100	100	100
% Moisture	20.8	22.9	27.7
Depth Ratio Z/R	1.85	2.75	3.35
Pavement Thickness, Z	15	22	27
Angle of Friction, φ	4	3	2
Cohesion, C PSI	10	4	3
Remarks: R Value	32	18	13

21½ BW

HYDROMETER ANALYSIS:

	Passing No. 10	Total Sample
Particles larger than 2.0 mm.	0.0 %	14.1 %
Coarse sand, 2.0 to 0.25 mm.	9.2 %	7.8 %
Fine sand, 0.25 to 0.05 mm.	17.8 %	15.3 %
Silt, 0.05 to 0.005 mm.	36.0 %	30.9 %
Clay, smaller than 0.005 mm.	37.0 %	31.9 %
Colloids, smaller than 0.001 mm.	%	%

RECOMMENDATIONS

Material as represented by this sample .... suitable for use.

NOTED
H. C. SMITH

TEST REPORT DISTRIBUTION:
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- x Files
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State Printing 59773

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Form E-80—10M—8-52

OREGON STATE HIGHWAY DEPARTMENT
Materials Division

Not Elastic

Laboratory Report

Project	Shady Point-Myrtle Creek	Prefix No.	10-1410
Highway	Pacific	County	Douglas
Contractor	Contract No.	F. A. Project No.	
Submitted by	J. A. Rowland	Date reported	June 4, 1953

REPORT ON SAMPLE OF SOIL

Source of material	Hole #12, Sta. P2 ~~163+15, 4' Lt.~~		
Sampled at	Depth 15'-18' 2966+70, ℄		
To be used	Cut Section	Date received	April 20, 1953
Sampled by	Fields	Quantity represented	
Laboratory No.	305258	Type of Material	Soil
Data Sheet No.	A-25926	Sample No.	2

TEST RESULTS

SOIL ANALYSIS:

LL	30	%
PI	18	%
FME		%
SL		%
R		%
Cf		%
LS		%

Classification—Group SCL

Sp. Gr. (Le Chatelier) 2.69

Sand Equivalent 5.3%

SIEVE ANALYSIS: WET

Ret. on	% Single Sieve
4	4.8
10	9.1
20	5.2
40	6.9
60	5.5
140	10.3
200	3.4
P200	54.8

DENSITY DETERMINATION:

Dry Density, lbs/c. f.	% Moisture

HYDROMETER ANALYSIS:

	Passing No. 10	Total Sample
Particles larger than 2.0 mm.	0.0 %	13.9 %
Coarse sand, 2.0 to 0.25 mm.	20.4 %	17.6 %
Fine sand, 0.25 to 0.05 mm.	22.6 %	19.5 %
Silt, 0.05 to 0.005 mm.	30.0 %	25.8 %
Clay, smaller than 0.005 mm.	27.0 %	23.2 %
Colloids, smaller than 0.001 mm.	%	%

TRIAXIAL SHEAR TEST:

Sample	Remolded	Undisturbed
% Compaction		
% Moisture		
Depth Ratio Z/R		
Pavement Thickness, Z		
Angle of Friction, φ		
Cohesion, C		

Remarks: Compares to Lab. No. 305276.

RECOMMENDATIONS

Material as represented by this sample .... suitable for use.

NOTED
H. G. SMITH

TEST REPORT DISTRIBUTION:

- Bureau of Public Roads
- x Construction Engineer
- Maintenance Engineer
- Bridge Engineer
- Requisition Office
- x Division Engineer Edwards
- x Resident Engineer Rowland
- Dist. Maint. Supt.
- Foreman
- x Files
- x R. Webber
- x Unger

Engineer of Materials

State Printing 59773

52

Form E-[illegible]—10M—[illegible]

Not Usable

OREGON STATE HIGHWAY DEPARTMENT
Materials Division

Laboratory Report

Project Shady Point-Myrtle Creek
Highway Pacific
Contractor
Contract No.
Submitted by J. A. Rowland
Prefix No. 10-1410
County Douglas
F. A. Project No.
Date reported June 4, 1953

REPORT ON SAMPLE OF SOIL

Source of material Hole #12, Sta. ~~P2 168+15, 4' Lt.~~ 2966+70, ℄
Sampled at Depth 18'-28'
To be used Cut Section
Sampled by Fields
Laboratory No. 305259
Data Sheet No. A-25926
Date received April 20, 1953
Quantity represented
Type of Material Soil
Sample No. 3

TEST RESULTS

SOIL ANALYSIS:

LL	25	%
PI	13	%
FME		%
SL		%
R		%
Cf		%
LS		%

Classification—Group ASL

Sp. Gr. (Le Chatelier) 2.72

Sand Equivalent 7.7%

SIEVE ANALYSIS: WET

Ret. on	% Single Sieve
3/4	2.1
½	1.2
4	5.2
10	6.6
20	6.3
40	8.5
60	6.6
140	12.1
200	3.7
P200	47.7

HYDROMETER ANALYSIS:

	Passing No. 10	Total Sample
Particles larger than 2.0 mm.	0.0 %	15.1 %
Coarse sand, 2.0 to 0.25 mm.	25.2 %	21.4 %
Fine sand, 0.25 to 0.05 mm.	24.8 %	21.1 %
Silt, 0.05 to 0.005 mm.	29.0 %	24.6 %
Clay, smaller than 0.005 mm.	21.0 %	17.8 %
Colloids, smaller than 0.001 mm.	%	%

DENSITY DETERMINATION:

Dry Density, lbs/c. f.	% Moisture

TRIAXIAL SHEAR TEST:

Sample	Remolded	Undisturbed
% Compaction		
% Moisture		
Depth Ratio Z/R		
Pavement Thickness, Z		
Angle of Friction, ϕ		
Cohesion, C		

Remarks: Compares to Lab. No. 304652.

RECOMMENDATIONS

NOTED
H. C. SMITH

Material as represented by this sample .... suitable for use.

TEST REPORT DISTRIBUTION:
Bureau of Public Roads
x Construction Engineer
Maintenance Engineer
Bridge Engineer
Requisition Office
x Division Engineer Edwards
x Resident Engineer Rowland
Dist. Maint. Supt.
Foreman
x Files
x R. Webber
x Unger

Engineer of Materials

State Printing [illegible]

53

Form E-[illegible]—10M—[illegible]

OREGON STATE HIGHWAY DEPARTMENT
Materials Division

Laboratory Report

Project	Shady Point-Myrtle Creek	Prefix No.	10-1410
Highway	Pacific	County	Douglas
Contractor		Contract No.	
		F. A. Project No.	
Submitted by	J. A. Rowland	Date reported	June 4, 1953

REPORT ON SAMPLE OF SOIL

Source of material	Hole #11, Sta. F2 ~~152+18, 300'~~ Rt.		
Sampled at	Depth 0-12' 2455+25, 200' Rt		
To be used	Cut Section	Date received	April 20, 1953
Sampled by	Fields	Quantity represented	
Laboratory No.	305256	Type of Material	Soil
Data Sheet No.	A-25900	Sample No.	1

TEST RESULTS

SOIL ANALYSIS:

LL	23	%
PI	10	%
FME		%
SL		%
R		%
Cf		%
LS		%

Classification—Group SL

Sp. Gr. (Le Chatelier) 2.66

Sand Equivalent 6.98%

SIEVE ANALYSIS: WET

Ret. on	% Single Sieve
4	10.5
10	13.6
20	7.7
40	6.1
60	5.3
140	11.4
200	3.9
P200	41.5

13% Rd

DENSITY DETERMINATION:

Dry Density, lbs/c. f.	% Moisture
113.8	10.5
120.9	12.9
116.3	15.4

TRIAXIAL SHEAR TEST:

Sample	Remolded	~~Undisturbed~~
% Compaction	100	100 *
% Moisture	15.4	17.0
Depth Ratio Z/R	2.40	3.05
Pavement Thickness, Z	20	24
Angle of Friction, ϕ	3	3
Cohesion, C PSI	6.5	3
Remarks: R-Value	22	15

*Too wet to run.

16" B & W

HYDROMETER ANALYSIS:

	Passing No. 10	Total Sample
Particles larger than 2.0 mm.	0.0 %	24.1 %
Coarse sand, 2.0 to 0.25 mm.	25.2 %	19.1 %
Fine sand, 0.25 to 0.05 mm.	25.8 %	19.6 %
Silt, 0.05 to 0.005 mm.	26.0 %	19.7 %
Clay, smaller than 0.005 mm.	23.0 %	17.5 %
Colloids, smaller than 0.001 mm.	%	%

RECOMMENDATIONS

Material as represented by this sample .... suitable for use.

NOTED
H. G. SMITH

TEST REPORT DISTRIBUTION:
Bureau of Public Roads
x Construction Engineer
Maintenance Engineer
Bridge Engineer
Requisition Office
x Division Engineer Edwards
x Resident Engineer Rowland
Dist. Maint. Supt.
Foreman
x Files
x R. Webber
x Unger

Engineer of Materials

State Printing 59773

SECTION C

WESTSIDE CUT SLIDE

Soils Engineers Stability Analysis...........55

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Directional Movement Graph...................75

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Region Geologist Slide Study Progress
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Accumulative Movement Graph
(13 Month Period)..........................87

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FORM 6-30

OREGON STATE HIGHWAY DIVISION
INTER-DEPARTMENT CORRESPONDENCE

Salem, Oregon
November 1, 1977

SUBJECT: Roberts Creek-Dillard Junction
Pacific Highway
Douglas County
Roberts Mountain Westside Slide

To: J. H. Versteeg
Head of Engineering

This is a report of analysis of stability of the Westside Slide at the subject section as you requested.

It was previously shown that the plan for a small inlay at the toe and some unloading at the top was harmful, due to the unloading effect at the toe.

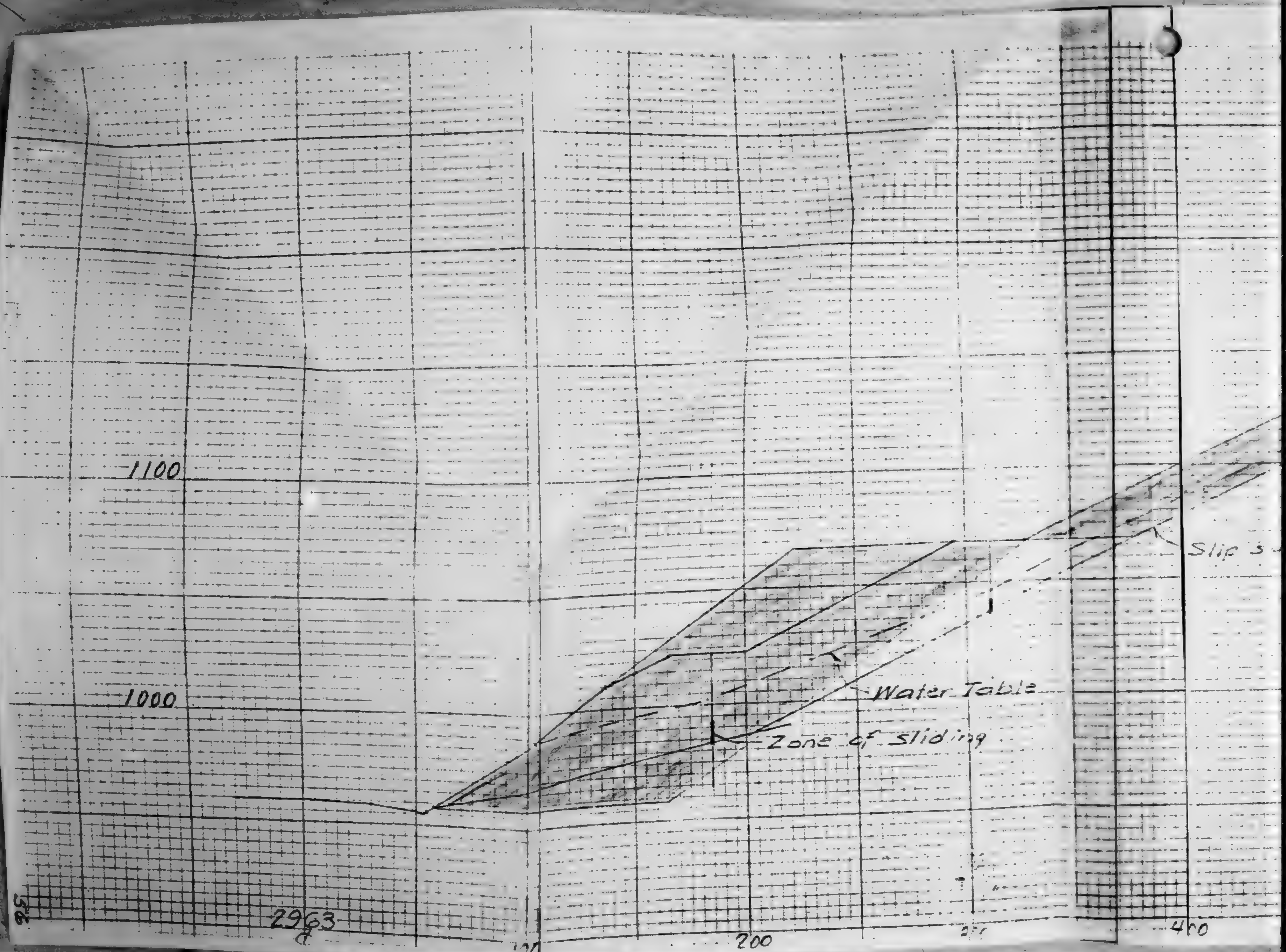
A plan of unloading only from the upper part of the slide would be slightly beneficial. Unloading of the slide mass down to the upper bench would increase the stability factor 2 percent by computer analysis or 5 percent by graphic analysis. This is small improvement, but any amount of unloading from the upper slide is of some benefit.

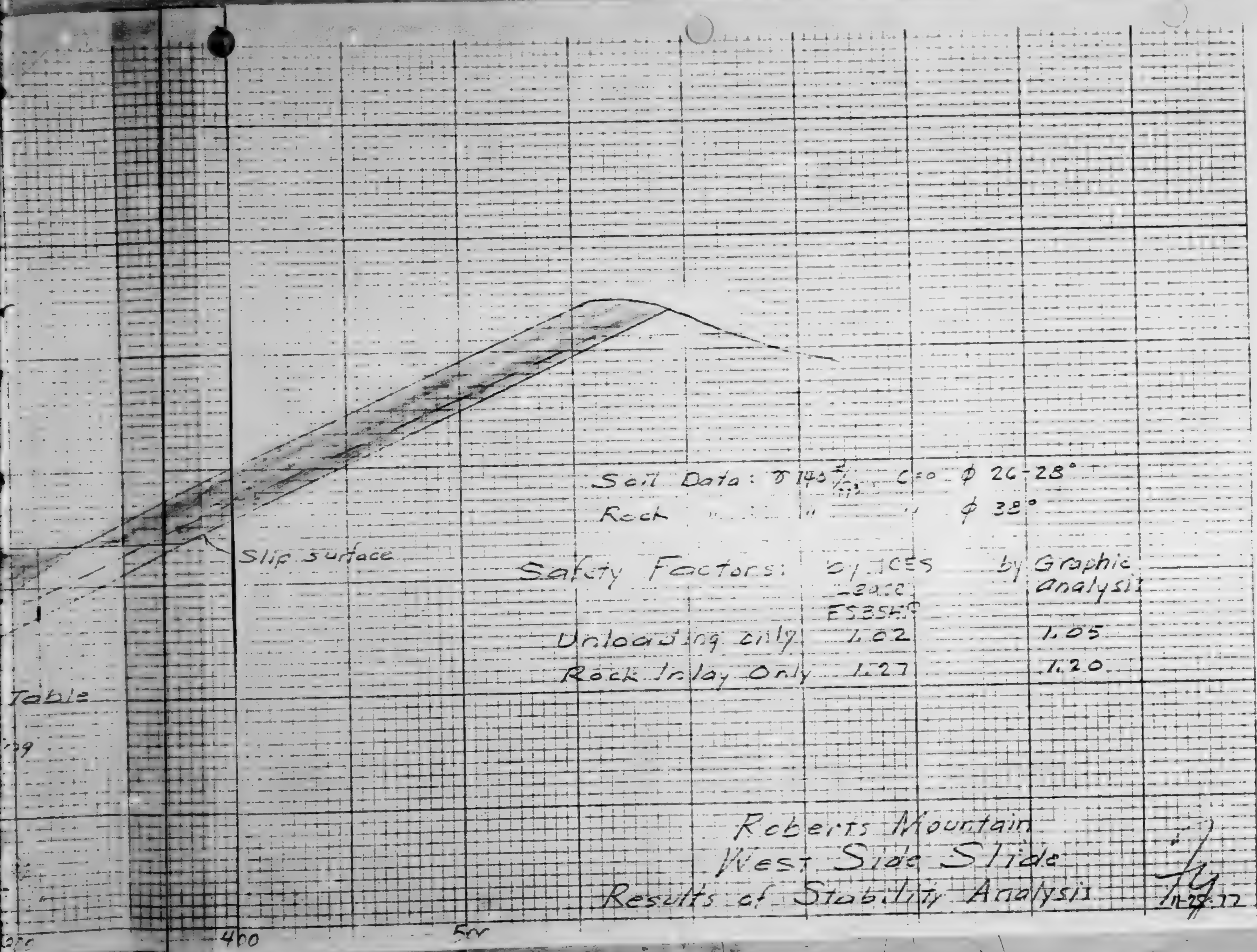
Also shown on the attached cross section and summary is a rock inlay which would be suitable. It needs to extend up to the upper bench to provide a suitable safety factor using the analysis approach previously discussed with the FHWA.

F. W. Yarbrough
Soils Engineer

FWY:af

cc: Frank Terpin


Water Table
Zone of sliding
Slip s
d


Slip surface
Table
400
500

Soil Data: γ 145 #/ft³ C=0 φ 26-28°
Rock " " " φ 38°

Safety Factors:	by ICES Lease ES3SH?	by Graphic analysis
Unloading only	1.02	1.05
Rock Inlay Only	1.27	1.20

Roberts Mountain
West Side Slide
Results of Stability Analysis

11-29-72

Existing Slide

```
                 PIEZ SURFACE NO.    2
                NO.  XCOORD  YCOORD
                 1     0.0    50.00
                 2    58.00   58.00
                 3   104.00   88.00
                 4   200.00  108.00
                 5   324.00  154.00
                 6   640.00  290.00

ORDERED LINE ARRAY                                              BNDS ARRAY

NO   PT   PT  SOIL                 X-LEFT     Y-LEFT    X-RIGHT    Y-RIGHT
 1    1    2    1                   50.00       0.0      58.00      58.00
 2    2    3    1                   58.00      58.00    137.00     110.00
 3    3    4    1                  137.00     110.00    166.00     122.00
 4    4    5    1                  166.00     122.00    200.00     122.00
 5    5    6    1                  200.00     122.00    295.00     168.00
 6    6    7    1                  295.00     168.00    328.00     168.00
 7    7    8    1                  328.00     168.00    566.00     275.00
 8    8    9    1                  566.00     275.00    700.00     250.00

SLOPE
7.250
0.658
0.414
0.0
0.484
0.0
0.450
-0.187

            NUMBER OF TOPLINES IS    8

 X= -663.50  Y= 2560.60  RAD= 2612.70  FSBSHP= 1.013  FSNRML= 1.013

soil 1 140 1280 0 2
SOIL 1 140 1280 0 2
do only -663.5  2560.6
DO ONLY -663.5  2560.6
**** INPUT ERROR 7.4 - REQUIRED DATA MISSING FOR THE FOLLOWING ALTERNATE I
**** R  ****
**** INPUT WARNING 7.7 - AN ERROR WAS DETECTED WHILE PROCESSING THIS COMMA

do only -663.5  2560.6   2612.7
DO ONLY -663.5  2560.6   2612.7
 X= -663.50  Y= 2560.60  RAD= 2612.70  FSBSHP= 0.998  FSNRML= 0.998

do only -802.6    2962.5    3033.7
DO ONLY -802.6    2962.5    3033.7
 X= -802.60  Y= 2962.50  RAD= 3033.70  FSBSHP= 1.141  FSNRML= 1.141

soil 1  140 0 26 2
SOIL 1  140 0 26 2
do only -663.5   2560.6    2612.7
DO ONLY -663.5   2560.6    2612.7
 X= -663.50  Y= 2560.60  RAD= 2612.70  FSBSHP= 0.918  FSNRML= 0.955

soil 1
do only -802.6   2962.5   3033.7
  DO ONLY -802.6   2962.5   3033.7
 X= -802.60  Y= 2962.50  RAD= 3033.70  FSBSHP= 0.974  FSNRML= 1.005

soil 1 140 0 28 2
SOIL 1 140 0 28 2
do only -663.5   2560.6    2612.7
DO ONLY -663.5   2560.6    2612.7
 X= -663.50  Y= 2560.60  RAD= 2612.70  FSBSHP= 1.001  FSNRML= 1.041

do only -802.6   2962.5    3033.7
DO ONLY -802.6   2962.5    3033.7
 X= -802.60  Y= 2962.50  RAD= 3033.70  FSBSHP= 1.062  FSNRML= 1.096
```

soil 1 140 1300 0 2

Shows shear stress

Shows friction strength

E

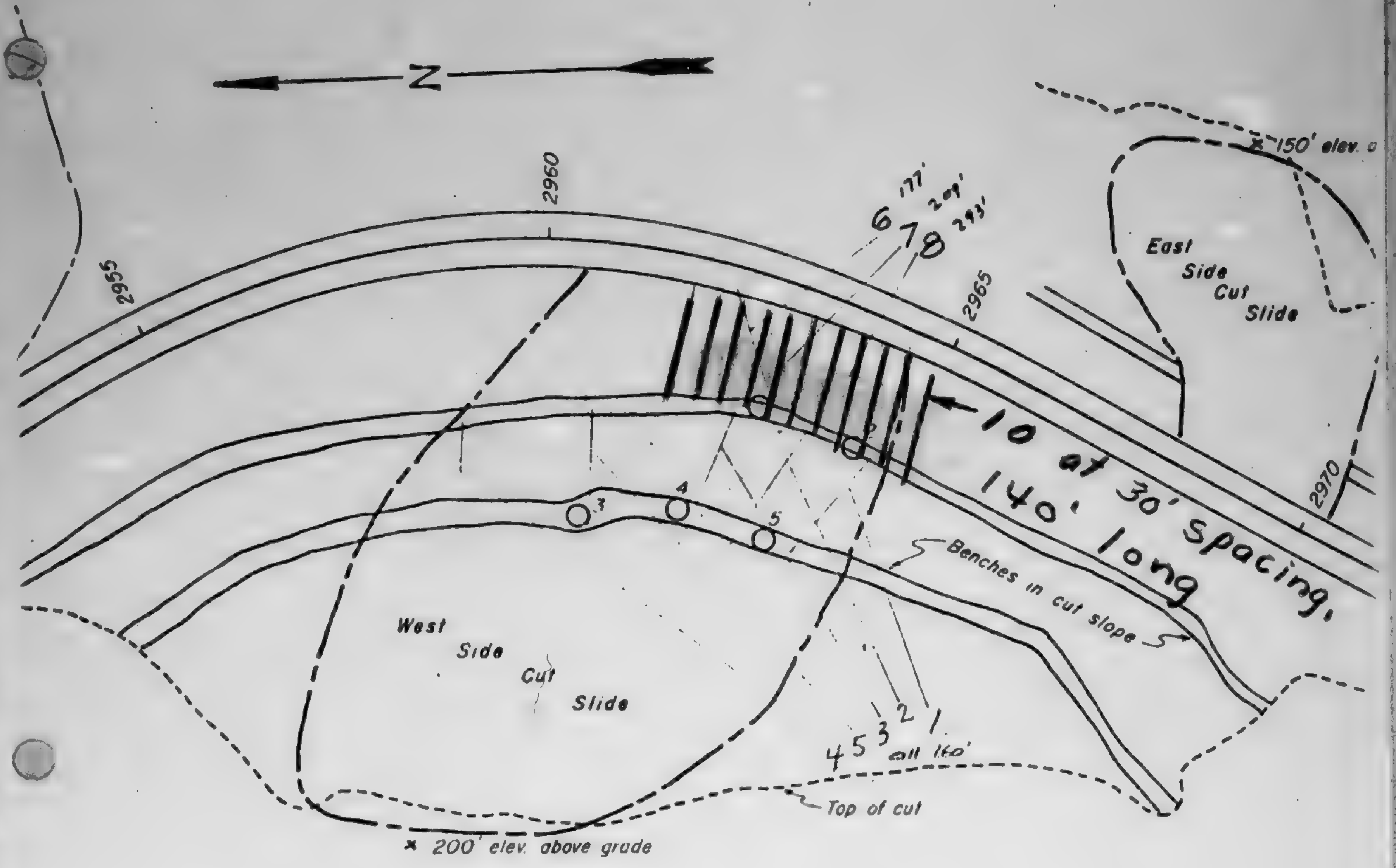
Unloaded to Upper B

With Rock Inlay

```
        PIEZ SURFACE NO.                                                   7.259
       NO.  XCOORD   YCOORD                                                0.653
         1     0.0    50.00                                                0.414
         2   58.00    58.00                                                0.0
         3  104.00    88.00                                                0.484
         4  200.00   108.00                                                0.0
         5  324.00   154.00                                                0.45
         6  640.00   290.00                                               -0.143

 ORDERED LINE ARRAY                                                BNDS ARRAY

 NO    PT    PT  SOIL                     X-LEFT     Y-LEFT    X-RIGHT    Y-RIGHT
  1     1     2    1                       50.00        0.0      58.00      58.00
  2     2     3    1                       58.00      58.00     137.00     110.00
  3     3     4    1                      137.00     110.00     166.00     122.00
  4     4     5    1                      166.00     122.00     200.00     122.00
  5     5     6    1                      200.00     122.00     295.00     168.00
  6     6     7    1                      295.00     168.00     380.00     168.00
  7     7     8    1                      380.00     168.00     595.00     265.00
  8     8     9    1                      595.00     265.00     700.00     250.00

          NUMBER OF TOPLINES IS    8

 X= -663.50  Y= 2560.60   RAD= 2612.70   FSBSHP= 1.017   FSNRML= 1.069

 do only -802.6     2962.5      3033.7
 DO ONLY -802.6     2962.5      3033.7
 X= -802.60  Y= 2962.50   RAD= 3033.70   FSBSHP= 1.131   FSNRML= 1.171

 soil 1 140 0 26 2
 SOIL 1 140 0 26 2

 soil 2 140 0 40 2
 SOIL 2 140 0 40 2

 do only  -663.5      2560.6      2612.7
 DO ONLY  -663.5      2560.6      2612.7

        PIEZOMETRIC SURFACE DAT
                                                                  SLOPE
        PIEZ SURFACE NO.                                           3.611
       NO.  XCOORD   YCOORD                                        0.660
         1   50.00      0.0                                        0.0
         2   68.00    65.00                                        0.444
         3  173.00    65.00                                       -0.289
         4  328.00   168.00                                        0.0
         5  567.00   274.00                                        0.665
         6  650.00   250.00

 ORDERED LINE ARRAY                                                BNDS ARRAY

 NO    PT    PT  SOIL                     X-LEFT     Y-LEFT    X-RIGHT    Y-RIGHT
  1     1     2    1                       50.00        0.0      68.00      65.00
  2     2     3    2                       68.00      65.00     224.00     168.00
  3     3     4    2                      224.00     168.00     328.00     168.00
  4     4     5    1                      328.00     168.00     567.00     274.00
  5     5     6    1                      567.00     274.00     650.00     250.00
  6     2     7    1                       68.00      65.00     173.00      65.00
  7     7     4    1                      173.00      65.00     328.00     168.00

          NUMBER OF TOPLINES IS    5

 X= -663.50        2560.60   RAD= 2612.70   FSBSHP= 1.275   FSNRML= 1.336
```

Soil 1 140 0 28 2

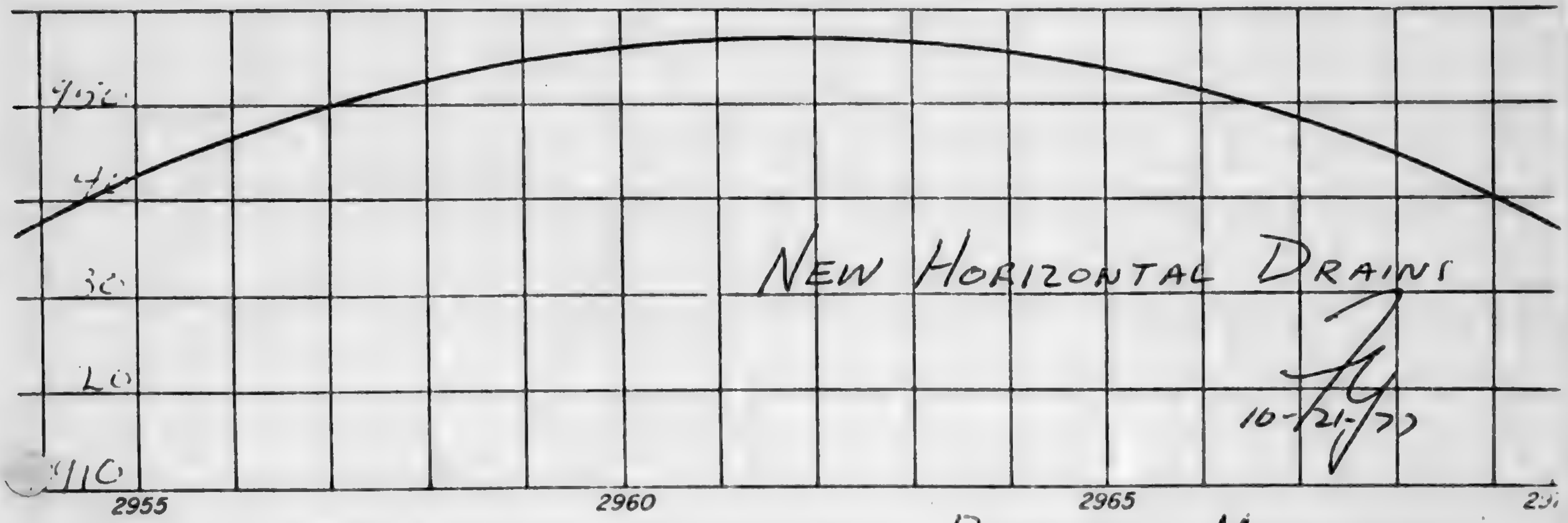
T 28 S, R 6 W, WM


Z
2955
2960
2965
2970
6 177'
7 209'
8 293'
10 at 30' Spacing, 140' long
1
2
3
4
5
Benches in cut slope
East Side Cut Slide
× 150' elev. a
West Side Cut Slide
4 5 3 2 1 all 160'
Top of cut
× 200' elev. above grade

PLAN
1" = 200 Ft.

○ Drill hole and slope indicator

New
Existing Horizontal drain hole.

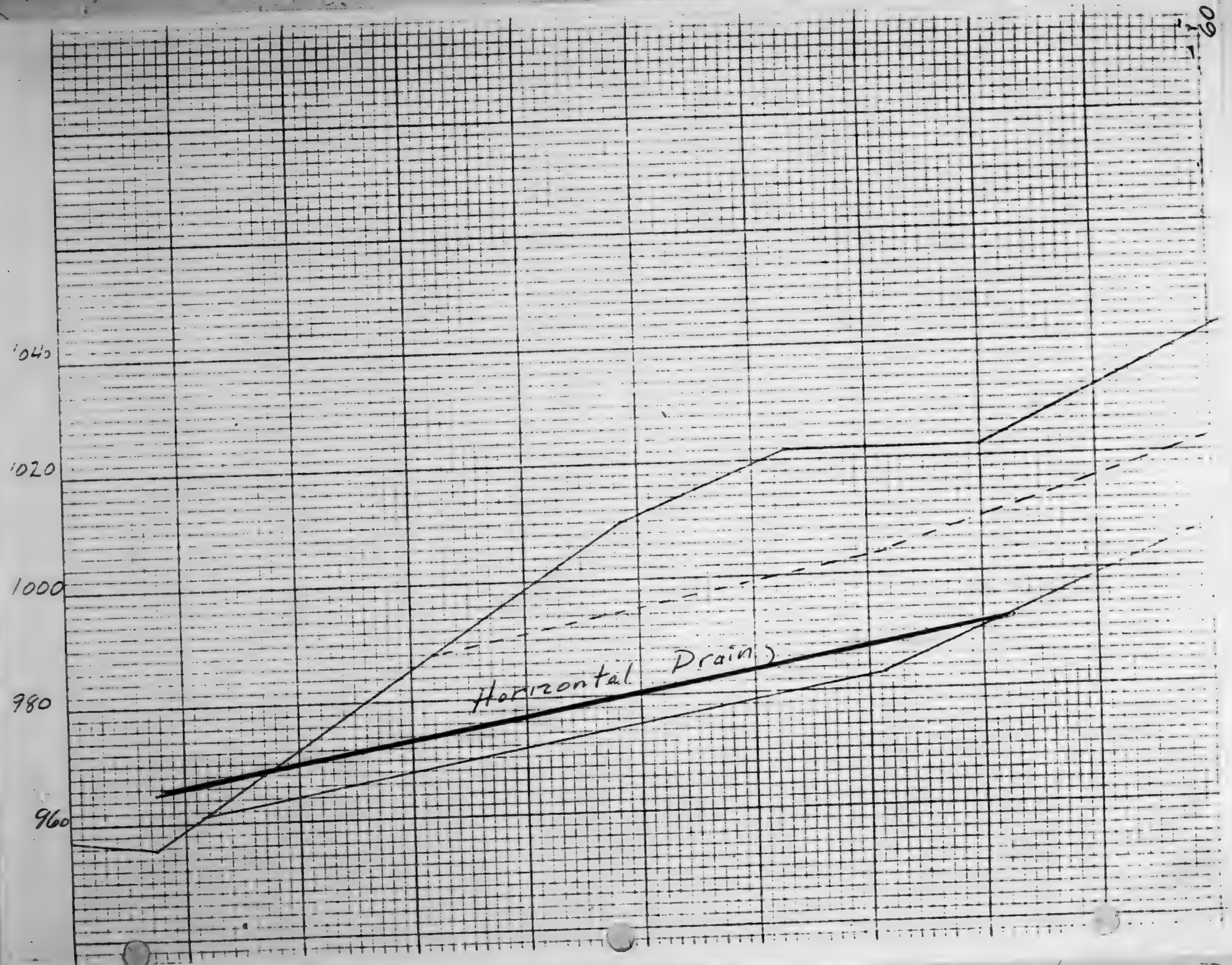


NEW HORIZONTAL DRAINS
10-21-77

PROFILE (Existing Pavement Surface)

ROBERTS MOUNTAIN
West Side Slide

5-/10


1040
1020
1000
980
960
Horizontal Drain
60

FORM 2-30

OREGON STATE HIGHWAY DIVISION

INTER-DEPARTMENT CORRESPONDENCE

Salem, Oregon
January 2, 1976

SUBJECT: Geophysical Investigation
Cut Slope Slides
Roberts Mountain
Pacific Highway I-5
Douglas County

To: F.W. Yarbrough
Soils & Geology Engineer

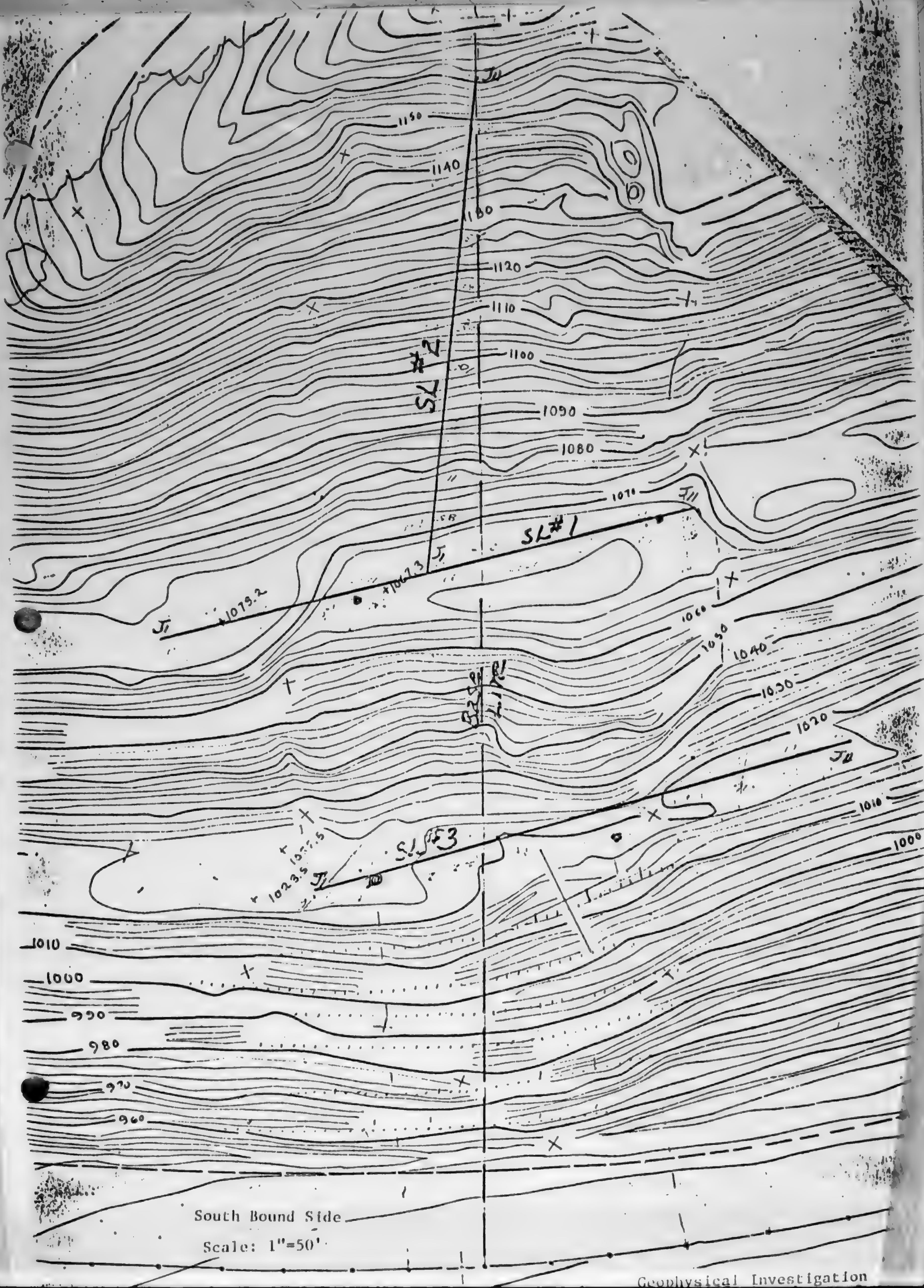
As requested the above investigation was recently completed. The results are shown on the accompanying sheets of drawings.

It is to be noted that:

1. The rock is badly fractured, irregular lenses floating in incompetent material.
2. The base of rapid movement appears to be on a 2 1/2:1 slope on South Bound side while on the North Bound side the base of rapid movement appears to be on a 4:1 slope.
3. Tension cracks appear beyond the catch point of the designed slope.

William P Milne
William P. Milne
Geophysicist
John F. Demezas
John F. Demezas
Geophysicist

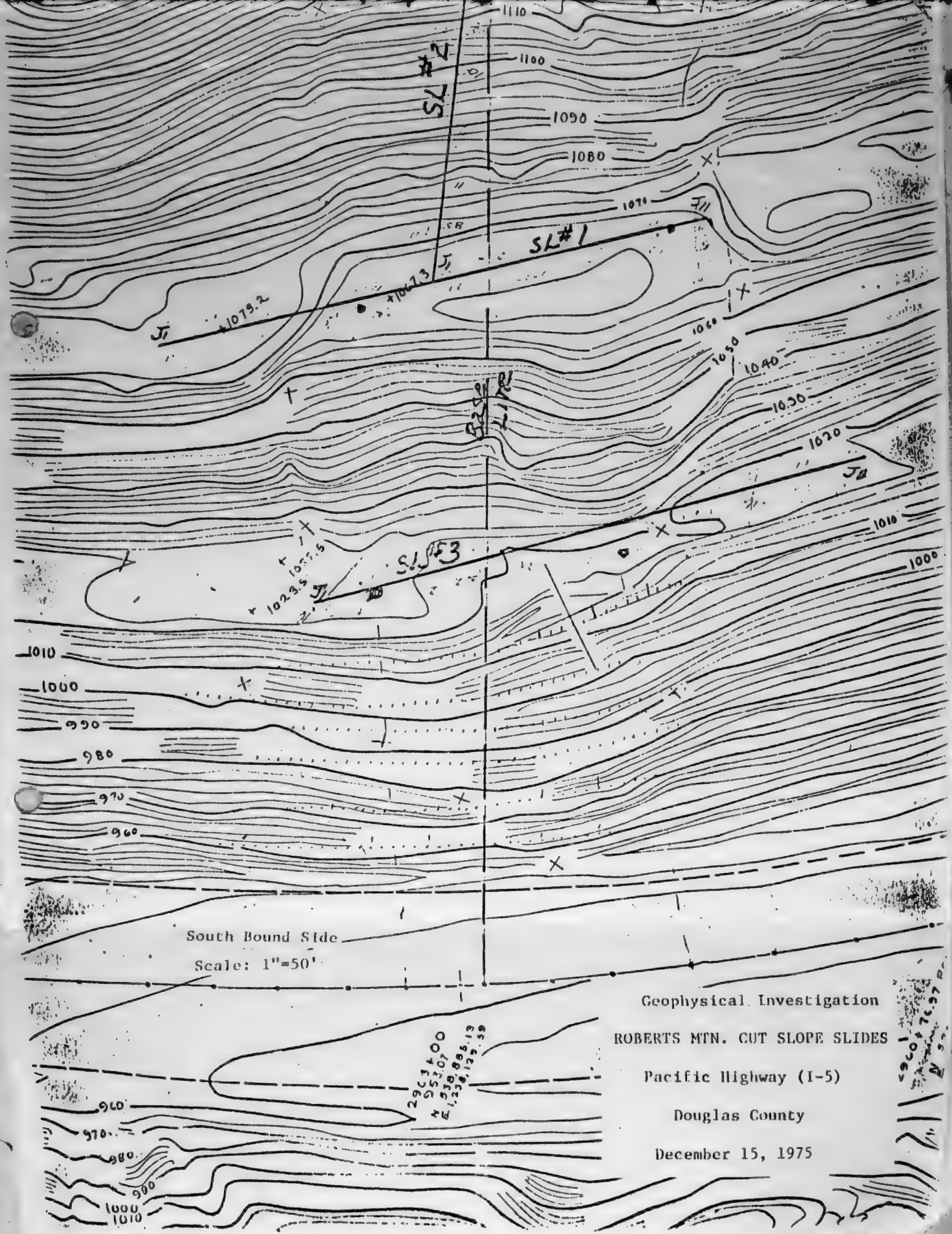
WPM:jmw
Attachment
cc: Victor D. Wolfe
Alfred Shirley
Elliott Parker


1150
1140
1130
1120
1110
1100
1090
1080
1070
1060
1050
1040
1030
1020
1010
1000
990
980
970
960
SL#2
SL#1
SL#3
J₁
J₁₁
1073.2
1067.3
1023.5
1033.5

South Bound Side

Scale: 1"=50'

Geophysical Investigation


1110
1100
SL#2
1090
1080
1070
J11
SL#1
J1
1079.2
1061.3
1060
1050
1040
1030
1020
J11
1010
1000
SL#3
J1
1022.5
1023.5
1010
1000
990
980
970
960
South Bound Side
Scale: 1"=50'
29C3+00
253.07
N 330,885.13
E 1,258,139.59
960
970
980
990
1000
1010

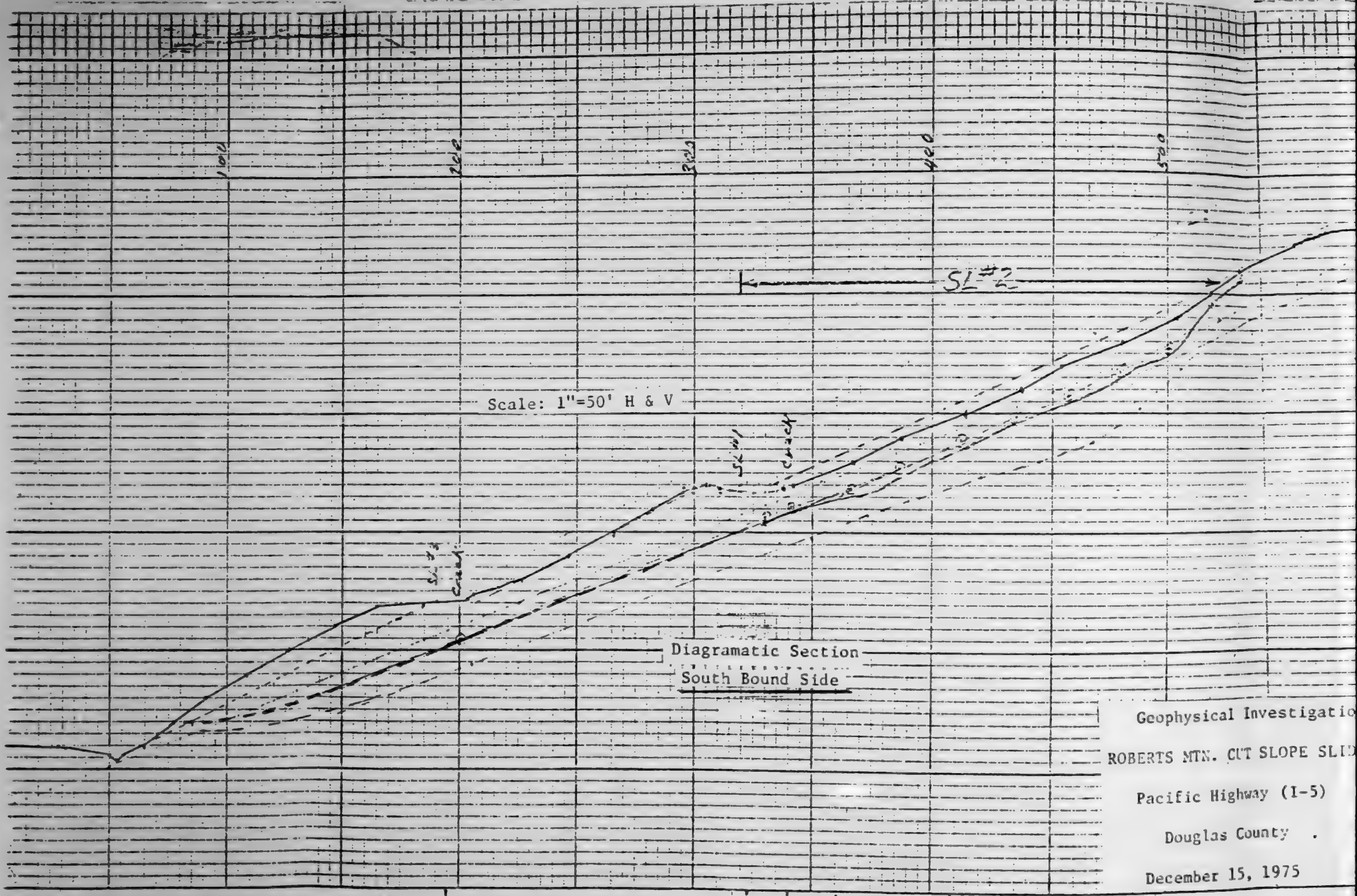
Geophysical Investigation

ROBERTS MTN. CUT SLOPE SLIDES

Pacific Highway (I-5)

Douglas County

December 15, 1975


100
200
300
400
500
SL#3
Crack
SL#1
Crack
SL#2

Scale: 1"=50' H & V

Diagramatic Section
South Bound Side

Geophysical Investigatio

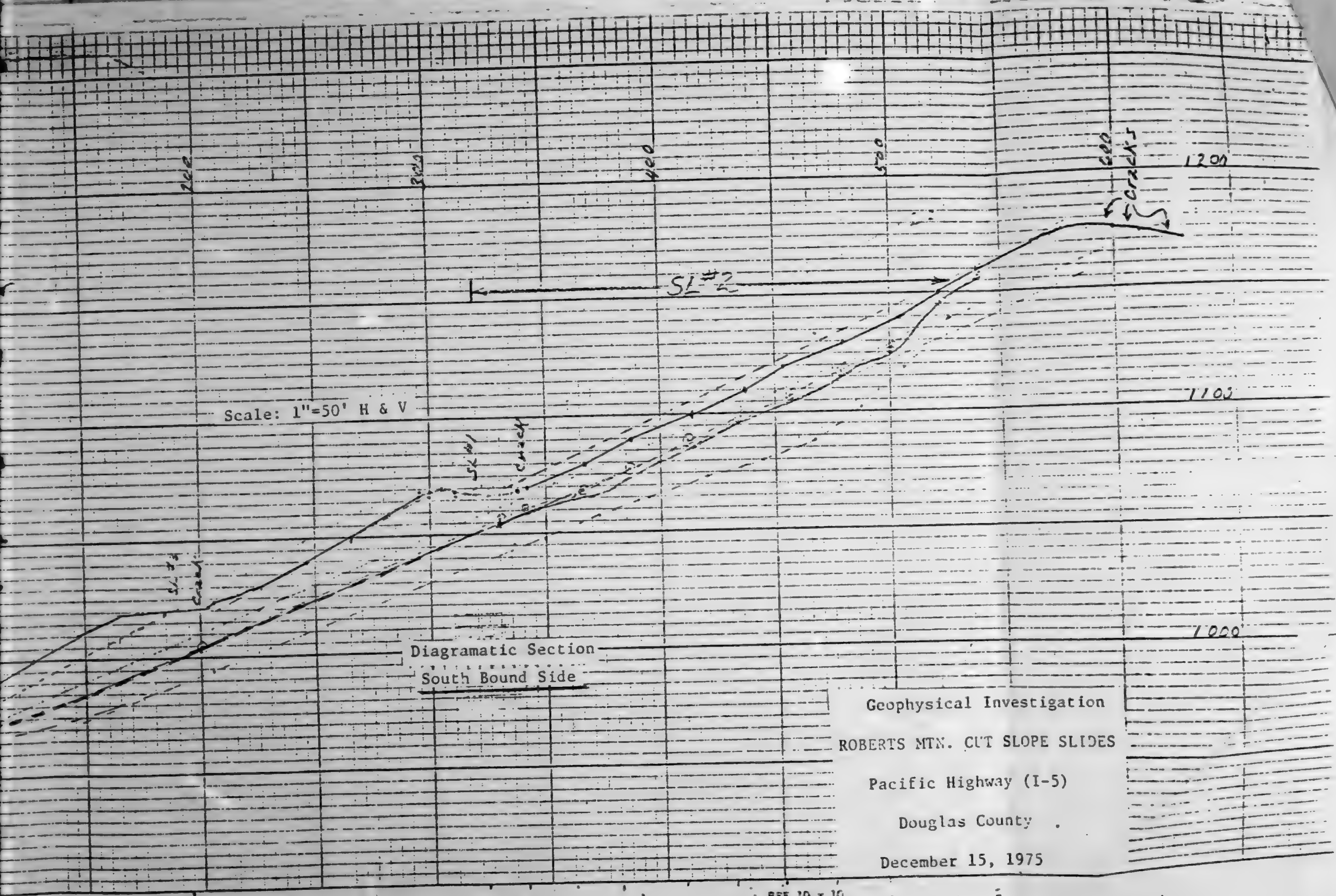
ROBERTS MTN. CUT SLOPE SLI

Pacific Highway (I-5)

Douglas County .

December 15, 1975

BEE 10 x 10


200
300
400
500
600
1200
1100
1000
SL#3
Crack
SL#1
Crack
SL#2
Cracks
BEE 10 x 10

Scale: 1"=50' H & V

Diagramatic Section
South Bound Side

Geophysical Investigation

ROBERTS MTN. CUT SLOPE SLIDES

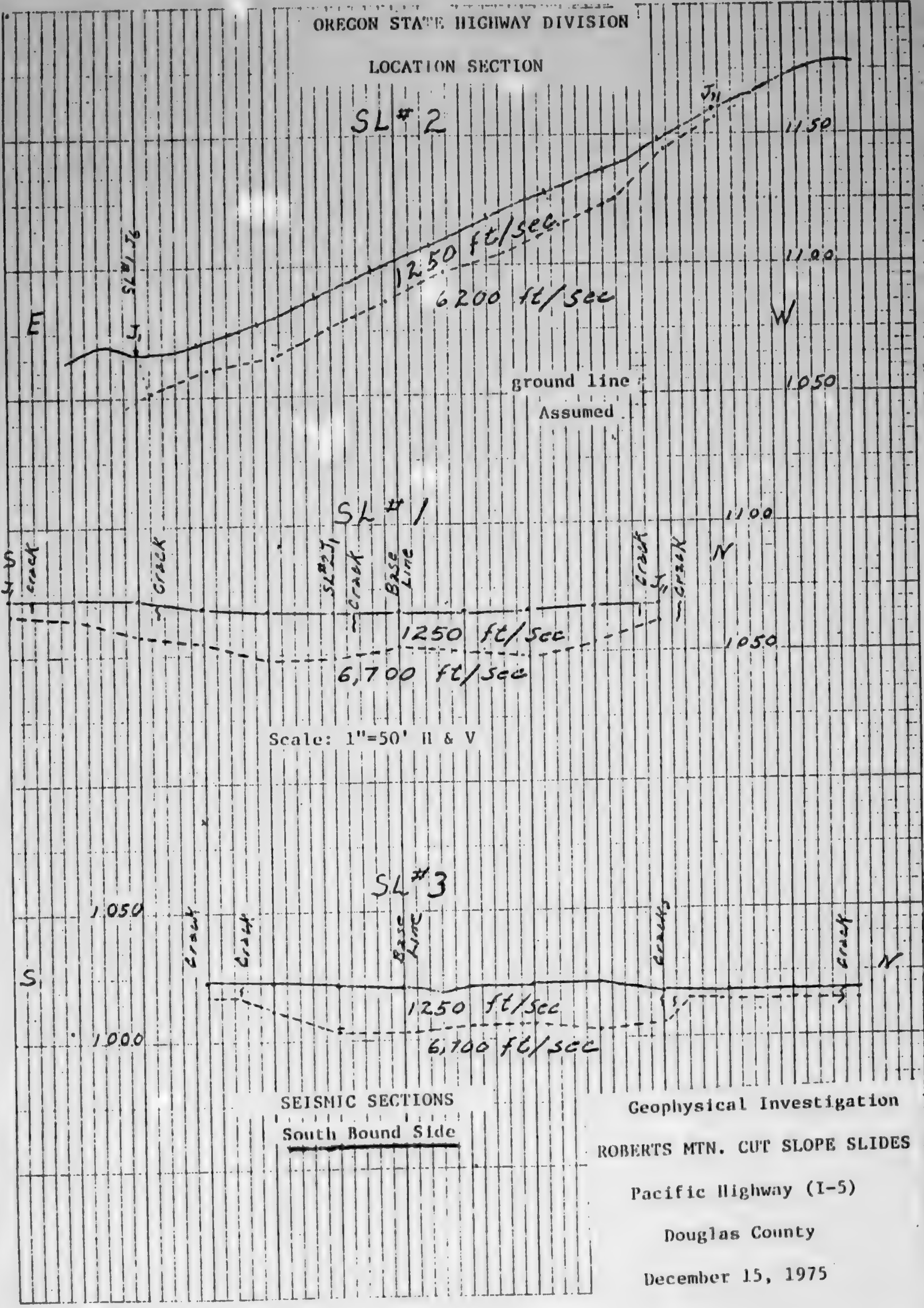
Pacific Highway (I-5)

Douglas County

December 15, 1975

OREGON STATE HIGHWAY DIVISION

LOCATION SECTION


SL#2
J11
1150
SL#1 J6
1250 ft/sec
1100
6200 ft/Sec
E
J1
W
ground line
Assumed
1050
SL#1
1100
S
crack
Crack
SL#2 J1
crack
Base Line
Crack
J11
Crack
N
1250 ft/Sec
1050
6,700 ft/sec
SL#3
1050
Crack
Crack
Base Line
Cracks
Crack
S
N
1250 ft/sec
1000
6,700 ft/sec

Scale: 1"=50' H & V

SEISMIC SECTIONS

South Bound Side

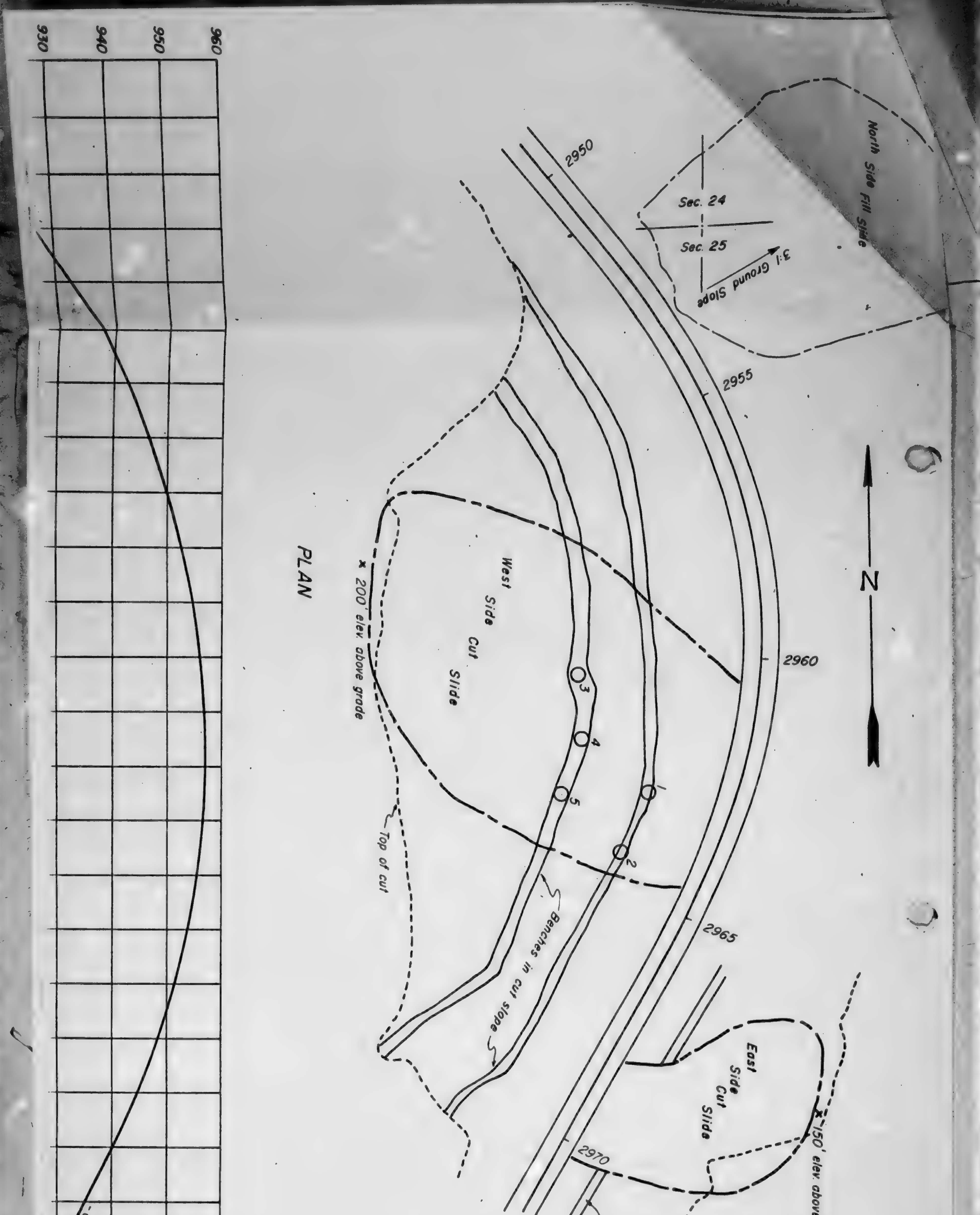
Geophysical Investigation

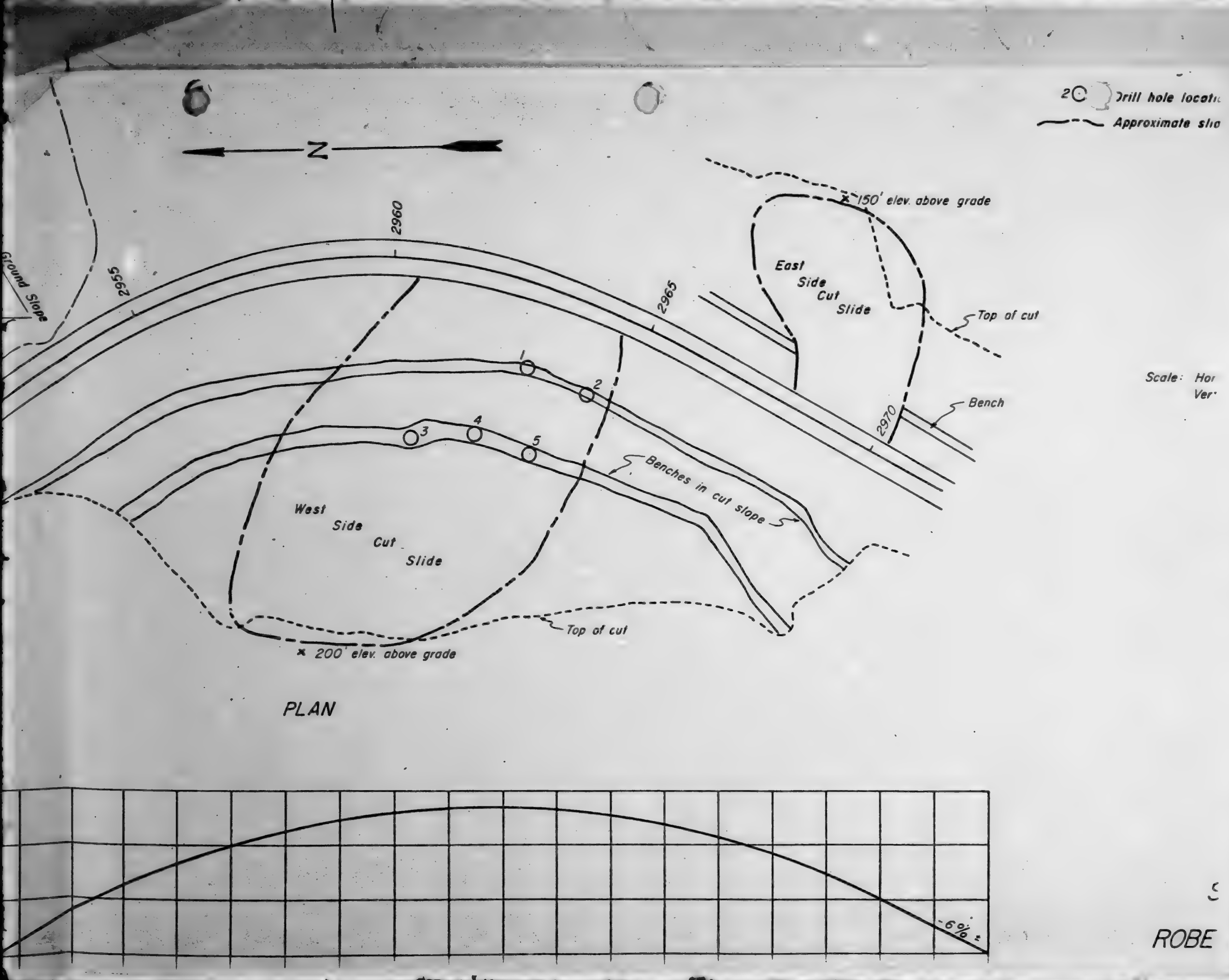
ROBERTS MTN. CUT SLOPE SLIDES

Pacific Highway (I-5)

Douglas County

December 15, 1975


PLAN
N
2950
2955
2960
2965
2970
Sec. 24
Sec. 25
3:1 Ground Slope
North Side Fill Slide
West Side Cut Slide
× 200' elev. above grade
Top of cut
Benches in cut slope
1
2
3
4
5
East Side Cut Slide
× 150' elev. above grade
Bench
Top of
930
940
950
960
-6%


2
Drill hole locati
Approximate sli
N
2955
2960
2965
2970
Ground Slope
× 150' elev. above grade
East Side Cut Slide
Top of cut
Bench
1
2
3
4
5
Benches in cut slope
West Side Cut Slide
Top of cut
× 200' elev. above grade
PLAN
-6%
Scale: Hor
Ver
ROBE

Hole No. 1-76 Sheet ___ of ___
Project Roberts Mtn. Sec. - Westside Cut Slide
Highway Pacific County Douglas
Location Sta 2963+00 (185' rt.) Prefix 610-1921-910
Purpose of Hole Slide Investigation & S.I. Installation
Driller Jensen Drlg. Logged by P. Bowers
Drill Cat mounted Core Drill Angle Vert.
Casing HQ Core HQ - Wireline
Drive Sampler OD — ID — Hammer Wt — Fall —
Undisturbed Sampler —

Graphic Log
- Decomposed rock (hand crushable)
- Mixed decomposed and weathered rock
- Weathered rock (color, hardness, strength, etc., modified by weather
- X Zone of fragmental core
- Mixed weathered and fresh rock
- Bedding dip
- Slickensides
- Joint

NOTES

Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fing
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type	Blows	Inches	N Value Recovered / Sampled	% Recovery	Water Level	% Moisture	Depth
		Run (0 – 4^{8})		58/22	38			
			Run 2 (4^{8} – 7^{6})	34/34	100			
		Run 3 (7^{6} – 12^{6})		60/60	100			10
			Run 4 (12^{6} – 17^{6})	60/60	100	→		
		Run 5 (17^{6} – 22^{6})		60/46	77			19^{2} 20
			Run 6 (22^{6} – 26^{8})	50/36	72			22^{5}
		Run 7 (26^{8} – 32^{6})		70/40	57			26^{8} 28^{3} 30
34^{6}			Run 8 (32^{6} – 37^{6})	60/34	57			32^{6} 36^{4}
		Run 9 (37^{6} – 42^{6})		60/60	100			38^{3} 40 40^{2}
			Run 10 (42^{6} – 45^{8})	38/30	79			43^{2} 45^{2}
		Run 11 (45^{8} – 47^{9})		20/10	50			46^{8}
			Run 12 (47^{9} – 52^{6})	62/37	60			49^{0} 50
		Run 13 (52^{6} – 57^{6})		60/60	100			53^{2}
		60^{0}	Run 14 (57^{6} – 60^{0})	29/19	66			57^{5} 59^{0} 60

Description	Remarks	Date
Siltstone, gry., gry-brn., fine grained, vari. wea., soft-mod. hd., closely spaced intersect. irreg. incipient. fracs., av. spac. <1", healed w/mostly calcite - weak hand breaks easy. Est. 50% moldable to fines [illegible] to 4^{8}, scatt. brn-blk. fissil shale - soft. *5^{2} - 5^{5}, intersect. ~45° fracs w/rust stn.	(Otter Point Formation) *Est. 50% molds to sandy silt to 4^{8}, Core Loss zone. *Core drills fragmental to 6^{2} *D.W.R. gray, 100% *Core drills fragmental to 6^{4}	2 Ma
gray, sandy, mod. hd. w/scatt. soft. *breaks easy by hand along min. seams & splinters in part w/wedge shapes	*Core drills max 1^{3}, av. < 0^{6} to 12^{6} & av < 0^{4} to 19^{2}	3 Mar
Shale, dk. gry., brittle, soft, streaks of sandy siltstone, scatt. slks on fresh breaks, random, *Core Loss zone	*D.W.R. Last temp. @ 20^{6} then gry, 50%	
Siltstone, gry., soft, breaks w/fingers, scatt. compression slks. *Core Loss zone	*Core drills fragmental to 26^{8}	
sandy, mod. hd.	*Core drills max 0^{7}, av. < 0^{5} to 28^{6}	
Shale, gry, brn-blk., fissil, soft, w/scatt. gry., sandy siltstone, soft. *fissil sh. v. shiny *Core Loss zone	**Drill dropped fast 28^{6} - 29^{6} *Core drills fragmental to 36^{4}	
Siltstone, gry, seamy, sandy w/irreg. dk. brn. clayey streaks, mod. hd. - soft. *Core Loss zone		
Sandstone, gry, med. gr., black specks & brn-blk sh inclusions, soft-mod hd, seamy	*Core drills max 0^{2}, av < 0^{4} to 38^{3}	
Siltstone, soft, healed brecciated zone	*Core drills fragmental to 39^{6}	
Sandstone, gry, silty, intersect. wht. & dk. seams w/scatt. norm. slks on 20° - irreg. vert. dk seams mod. hd.	*Core drills max 0^{5} av < 0^{3} to 43^{2}	
Shale, brn-blk, soft, fissil on ~45° lower contact		
Sandstone & Siltstone w/irreg. compression slks		
Shale, brn-blk, fissil, soft		
Sandstone & siltstone w/sh. seams & irreg. compression slks, 1" irreg. vert. frac. w/brn-blk fissil sh. filling. *Core Loss zone	*Core drills max. ~0^{7}, av. fragmental to 53^{2}	4 Mar
Shale, soft, brn-blk., fissil, w/scatt. harder frags. & thin gry. med. grained sandstone laminae. *Core Loss zone.		
Sandstone, gry, med. gr., mod. hd w/soft seams, grn. serpentitic sh. 53^{8} - $54^{1/2}$, soft. *drill breaks mostly on ~30° pyritic gry seams	*Core drills max 0^{2}, av < 0^{4} to 59^{0}	
Siltstone & brn-blk. sh., soft		
Sandstone, gry, med. gr., mod hd, seamy	*Core drills max 0^{3}, av. fragmental	
Shale, gry-blk, fissil, soft w/scatt. seamy sandstone		
Bottom of Hole 60^{0}	*W.L. @ 13^{0} @ 1:30 PM on 3/4/ W.L. @ 36^{0} on 5 Mar 76 W.L. @ 23^{0} on 10 Mar 76	3/4/
*Slope Indicator tubing run to bottom w/3^{0}' stick up for a total of 63^{0}' - packed w/6½ sacks of p-gravel - cap made & put on. (Tubing square w/1½" I.D.)		
*Most rock drilled has the appearance of being brecciated		

ndisturbed Sampler ___ —

Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fing
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
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Elevation	Sample Type	Blows	Inches	N Value	Recovered / Sampled	% Recovery	Water Level	% Moisture
		Run	4^{2}		58/22	38		
		7^{6}	Run 2		34/34	100		
		Run 3	12^{6}		60/60	100	→	
		17^{6}	Run 4		60/60	100		
		Run 5	22^{6}		60/46	77		
		26^{9}	Run 6		50/36	72		
		Run 7	32^{6}		70/40	57		
34^{6}		37^{6}	Run 8		60/34	57		
Box #4		Run 9	42^{6}		60/60	100		
		45^{8}	Run 10		38/30	79		
7^{4}		Run 11	47^{4}		20/10	50		
Box #5		52^{6}	Run 12		62/37	60		
		Run 13	57^{6}		60/60	100		
#6 X5		60^{0}	Run 14		29/19	66		

Depth	Description	Remarks	Date
	Siltstone, gry., gry-brn., fine grained, vari. wea., soft-mod. hd., closely spaced intersect. irreg. incipient. fracs., av. spac. <1", healed w/mostly calcite - weak bond breaks easy est. 50% moldable to fines & sands. to 4^{2}, scatt. brn-blk. fissil shale - soft.	(Otter Point Formation) * Est. 50% molds to sandy silt to 4^{2}, Core Loss zone. * core drills fragmental to 4^{2} * D.W.R. gray, 100%	2 Ma
10	* 5^{2} - 5^{5}, intersect. ~45° fracs w/rust stn.	* Core drills fragmental to 6^{4}	
	gray, sandy, mod. hd. w/scatt. soft. * breaks easy by hand along min. seams & splinters in part w/wedge shapes	* Core drills max 1^{3}, av. < 0^{6} to 12^{6} & av <0^{4} to 19^{2}	3 Mar
19^{2} 20	Shale, dk. gry., brittle, soft, streaks of sandy siltstone, scatt. slks on fresh breaks, random, * Core Loss zone	* D.W.R. Lost temp. @ 20^{6} then gry, 50%	
22^{6}	Siltstone, gry., soft, breaks w/fingers, scatt. compression slks. * Core Loss zone	* Core drills fragmental to 26^{9}	
26^{9}	sandy, mod. hd.	* Core drills max 0^{7}, av. <0^{5} to 28^{6}	
28^{3} 30	Shale, gry, brn-blk., fissil, soft, w/scatt. gry., sandy siltstone, soft. * fissil sh. v. shiny * Core Loss zone	* Drill dropped fast 28^{6} - 29^{6} * Core drills fragmental to 36^{9}	
32^{6}	Siltstone, gry, seamy, sandy w/irreg. dk. brn. clayey streaks, mod. hd. - soft. * Core Loss zone		
36^{9}	Sandstone, gry, med. gr., black specks & brn-blk sh inclusions, soft-mod hd., seamy	* Core drills max 0^{7}, av <0^{4} to 38^{3}	
38^{3} 40	Siltstone, soft, healed brecciated zone	* Core drills fragmental to 39^{6}	
40^{2}	Sandstone, gry, silty, intersect. wht. & dk. seams w/scatt. norm. slks on 20° - irreg. vert. dk seams mod. hd.	* Core drills max 0^{5} av <0^{3} to 43^{0}	
43^{2}	Shale, brn-blk, soft, fissil on ~45° lower contact. Sandstone & Siltstone w/irreg. compression slks		
45^{3}	Shale, brn-blk, fissil, soft.	* Core drills max. ~0^{7}, av. fragmental to 53^{2}	
45^{8}	Sandstone & siltstone w/sh. seams & irreg. compression slks, 1" irreg. vert. frac. w/brn-blk fissil sh. filling. * Core Loss zone		4 Mar
49^{0} 50	Shale, soft, brn-blk., fissil, w/scatt. harder frags. & thin gry. med. grained sandstone laminae. * Core Loss zone.		
53^{2}	Sandstone, gry, med. gr., mod. hd w/soft seams, grn. serpentitic sh. 53^{8} - $54^{1/2}$, soft. * drill breaks mostly on ~30° pyritic gry seams	* Core drills max 0^{1}, av <0^{1} to 57^{2}	
57^{6}	Siltstone & brn-blk. sh., soft		
59^{0} 60	Sandstone, gry, med. gr., mod hd, seamy Shale, gry-blk, fissil, soft w/scatt. seamy sandstone	* Core drills max 0^{3}, av. fragmental	
	Bottom of Hole 60^{0}	* W.L. @ 13^{0} @ 1:30 PM on W.L. @ 36^{0} on 5 Mar 76 W.L. @ 23^{0} on 10 Mar 76	3/41

* Slope Indicator tubing run to bottom w/3^{0}' stick up for a total of 63^{0}' - packed w/6½ sacks of p-gravel - cap made & put on. (Tubing square w/ 1½" I.D.)

* Most rock drilled has the appearance of being brecciated and rehealed w/mostly calcitic & chloritic or serpentitic fillings which in most fracs is a weak binder.

* Core losses believed due to wash and grind.

* It appears the mtl. drilled is a heterogeneous mixture as there seems to be a lack of distinct bedding.

Hole No. 2-76 Sheet ___ of ___
Project Roberts Mtn. - Westside Cut Slide
Highway Pacific County Douglas
Location Sta. 2964+25 (185' rt) Prefix 610-1921-910
Purpose of Hole Slide Investigation & S.I. Installation
Driller Jensen Drlg. Logged by P. Bowers
Drill Cat mounted Core Drill Angle Vert.
Casing H.Q. Core H.Q. Wireline
Drive Sampler OD — ID — Hammer Wt — Fall —
Undisturbed Sampler —

]	Decomposed rock (hand crushable)
]	Mixed decomposed and weathered rock
]	Weathered rock (color, hardness, strength, etc., modified by weath
X	Zone of fragmental core
]	Mixed weathered and fresh rock
/	Bedding dip
/	Slickensides
/	- Joint

NOTES

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Elevation	Sample Type	Blows	Inches	N Value	Recovered / Sampled	% Recovery	Water Level	% Moisture	Depth	Graphic Log	Description	Remarks	Da
		Run 1			82/10	12				X X X	Overburden & Siltstone, gry., soft-mod hd., vari. wea., closely spaced intersect. calcitic healed fracs. and interbedded irreg soft fissil shale seams and stringers.	(Otter Point Formation) * D.W.R., gry., 100%	5M.
	6^{0}									X	*Wea. along open cracks.	* D.W.R. 50%	
	Run 2				76/14	18			10	X X X	* open cracks in siltstone & shale as above - drill wtr. coming out around drill loc. & @ 2 spots ~15' above the Hwy.	** Core drills fragmental * D.W.R. 25%	
		13^{1}											
		Run 3			60/14	23				X X	* scatt. dk. gry. sandy clay w/ Speedy M.C. 11%, 0^{0}-6^{0}, - moist		
	18^{1}												
	Run 4				60/1	1.6			20	X X X	* Poor core recovery due to water pressure and inner barrel not locking in place and partial lost circulation		
		23^{1}											
		Run 5			60/0	0				No Recovery	* Loss due to wash and grind w/ recovered frags. being rolled & redrilled	* Wtr. boiling up bet. drill & inside ditch * D.W.R. 50%	
Port 1	28^{1}												
	Run 6	30^{2}			25/2	8			30	X			
	33^{1}	Run 7			35/7	21				X	* partial lost circ. - poor core recovery.	* Prior to drlg. pipe pulled up a little - hole making wtr.	8M. W.L. @ 8.
	Run 8	3			38/10	25				X X		* Blocking off - unable to hold circulation - DWR, 25%	
		Run 9			76/17	22			40	X X X	* gry., seamy, siltstone, mod. hd. & dk. gry. fissil shale, soft. * Siltstone has sandy lenses.	* Wtr. flowing back through drill pipe when broken to remove inner barrel - breaking out @ surface periodically @ various places.	
	42^{6}												
	Run 10				58/17	29				X X			
		47^{9}											
		Run 11			89/8	9			50	X X X X	* as above w/ probable increase in soft fissil shales responsible for low core recovery.		9M. W.L.
2	54^{8}												
	Run 12				62/12	19				X X X		* D.W.R. ~10%-25%	
									60	X	* Bottom samp. dk. gry-brn. soft fissil sh.		

Bottom of Hole 60^{0}

*W.L. @ G.L. @ 4 PM
W.L. @ G.L. @ 8 Am 10 Mar 76
@ 13 @ 3:30 PM 10 Mar 76

*Installed 63^{0}' of Slope Indicator square steel tubing, 1½" I.D., 5 sections 12' long & 1 section 3' long. Put on cap & lock. - S.U. 3^{7}

* Hole bridged - used only 2 sacks of p-gravel - unable to

Drive Sampler OD — ID — Hammer Wt — Fall —

Undisturbed Sampler —

∫ Slickensides

- Joint

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Elevation	Sample Type	Blows	Inches	N Value	Recovered/Sampled	% Recovery	Water Level	% Moisture	Depth	Graphic Log	Description	Remarks	Da
			Run 1		82/10	12				X X X	Over burden & Siltstone, gry., soft-mod hd., vari. wea., closely spaced intersect. calcitic healed fracs. and interbedded irreg. soft fissil shale seams and stringers.	(Otter Point Formation) * D.W.R., gry., 100%	5M.
		6^{2}								X	*Wea. along open cracks.	* D.W.R. 50%	
		Run 2			76/14	18			10	X X X	*open cracks in siltstone & shale as above - drill wtr. coming out around drill loc. & @ 2 spots ~15' above the Hwy.	** Core drills fragmental * D.W.R. 25%	
			13^{1} Run 3		64/14	23				X X	*scatt. dk. gry. sandy clayey/Speedy M.C. 11%, 0^{0}-6^{2}, -moist		
		18^{1} Run 4			60/1	1.6			20	X X X	*Poor core recovery due to water pressure and inner barrel not locking in place and partial lost circulation.		
			23^{1} Run 5		60/0	0				No Recovery	*Loss due to wash and grind w/recovered frags. being rolled & redrilled.	*Wtr. boiling up bet. drill & inside ditch * D.W.R. 50%	
		28^{1} Run 6			25/2	8			30	X			
			30^{2} Run 7		35/7	21				X	* partial lost circ. - poor core recov'y.	*Prior to drlg. pipe pulled up a little - hole making wtr.	8M. W.L. @ 8.
					38/10	25				X X		*Blocking off - unable to hold circulation - DWR, 25%	
					76/17	22			40	X X X	*gry., seamy, siltstone, mod. hd. & dk. gry. fissil shale, soft. *Siltstone has sandy lenses.	*Wtr. flowing back through drill pipe when broken to remove inner barrel - breaking out @ surface periodically @ various places.	
					58/17	29				X X			9M. W.L.@
					59/8	9			50	X X X X X	*as above w/probable increase in soft fissil shales responsible for low core recovery.	*D.W.R. ~10%-25%	
					62/12	19			60	X X	*Bottom samp. dk. gry-brn. soft fissil sh.		
											Bottom of Hole 60^{0}	*W.L. @ G.L. @ 4 PM W.L. @ G.L. @ 8 AM 10 Mar 76 @ 1^{7} @ 3:30 PM 10 Mar 76	
											*Installed 63^{0}' of Slope Indicator square steel tubing, 5 sections 12' long & 1 section 3' long. Put on cap & lock. - S.U. 3^{7}	1½" I.D.	
											*Hole bridged - used only 2 sacks of p-gravel - unable to work down.		
											*Drlg. info. indicates open fracture zone probably extends to ~30' - poor surf. drainage - cat tails in ditch along uphill side of bench ~10' from hole.		

ole No. 3-76　Sheet 1 of 1
roject Roberts Mtn. - Westside Cut Slide
ighway Pacific　County Douglas
ocation Sta. 2960+35 (~330' rt.)　Prefix 610-1921-910
urpose of Hole Slide Investigation & S.I. Installation
riller Jensen Drlg.　Logged by P. Bowers
rill Cat mounted Core Drill　Angle Vert.
asing -　Core H.Q. Wireline
Drive Sampler OD —　ID —　Hammer Wt —　Fall —
ndisturbed Sampler —

Decomposed rock (hand crushable)
Mixed decomposed and weathered rock
Weathered rock (color, hardness, strength, etc., modified by weat
X Zone of fragmental core
Mixed weathered and fresh rock
Bedding dip
Slickensides
Joint

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Elevation	Sample Type	Blows / Inches	N Value	Recovered / Sampled	% Recovery	Water Level	% Moisture
		Run 1		41/24	59		
	3^{4} Run 2	6^{3}		35/35	100		
	9^{9}	Run 3		43/43	100		
	Run 4	12^{5}		31/16	51		
	17^{5}	Run 5		60/16	27		
	Run 6	21^{7}		50/24	48		
	26^{9}	Run 7		62/58	94		
	Run 8	32^{1}		66/41	62		
	37^{6}	Run 9		56/49	88		
	Run 10	42^{1}		60/60	100		
	47^{5}	Run 11		61/61	100		
	Run 12	52^{5}		60/56	93		
	57^{5}	Run 13		60/54	90		
	Run 14	60^{0}		30/30	100		

Depth	Description	Remarks	Da
	Sandstone, gray, silty, random intersecting closely spaced wht. min. seams to ¼" thick, some open w/ ¼" stn. peat, mod. hd. w/ scatt. soft, some spheroidal fracs.	*Otter Point Formation	15 Mar
	*irreg. vert. frac. 3^{9}–6^{2}, w/ intersect. fracs. & scatt. irreg slks.	*D.W.R gry, =100% *Core drills fragmental w/ elongated wedges.	
10	*increase in silty nature		
12^{5}	Shale, gry-brn., fissil, soft w/ thin silty sandstones & siltstone mod. hd. *Scatt. random slks.	*Core drills fragmental *D.W.R 10%–50%, gry to gry-brn.	
18^{5} 20	Shale & siltstone w/ dk. sh. seams		
21^{2}	Sandstone, silty, seamy, mod. hd.. *Soft gry-brn. fissil sh. 23^{5}–24^{0}	*Drill dropped fast 23^{0}–24^{0}	
	*Slks, norm. @ 24^{0}, 24^{5}, & 25^{0}, fracs. open.	*Core drills max 0^{8}', av. <0^{6}' *D.W.R., erratic 40% -80%	16 Mar
29^{3} 30	Shale, gry-brn., soft, fissil, w/ scatt. thin mod. hd. siltstone w/ gry-brn. clay seams & scatt slks	*Core drills fragmental.	
34^{5}	Sandstone silty, seamy, mod. hd. *wht. & dk. random irreg. intersect. fracs. *gry-brn., soft, fissil shale 37^{9}–38^{1}' & 39^{2}–39^{4}'	*Core drills max 1^{3}', av. <0^{5}	
40	*Slks. on ~60° black shiny coated irreg frac. @ 40^{0}		
50	*gry-brn. soft fissil shale 49^{4}–49^{6} w/ slks on ~20° frac. *Shale, gry-brn., soft, 50^{0}–50^{5}		
60	*irreg. vert. sh. seam 58^{0}–59^{5}, ¼" to 2" in width		
	Bottom of Hole 60^{0}	16 Mar 76	

*Installed 63^{0}' of 1½" I.D. Slope Indicator square tubing, 2 sacks p-gravel packing & a 3^{0} stick-up.

*Entire section has been badly fracture & rehealed.

ndisturbed Sampler

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Elevation	Sample Type	Blows / Inches	N Value	Recovered / Sampled	% Recovery	Water Level	% Moisture	Depth	Graphic Log	Description	Remarks	Da
		Run 1		41/24	59					Sandstone, gray, silty, random intersecting closely spaced wht. min. seams to 1/4" thick, some open w/ 1/4" stn. penet., mod. hd. w/ scatt. soft, some spheroidal fracs.	*Otter Point Formation *D.W.R gry, ≈100%	15 Mar
	3^{4} Run 2	6^{3}		35/35	100					*irreg. vert. frac. 3^{8}-6^{3}, w/ intersect. fracs. & scatt. irreg slks.	*Core drills fragmental w/ elongated wedges.	
		Run 3		43/43	100			10		*increase in silty nature		
	9^{9} Run 4	12^{5}		31/16	51			12^{5}				
		Run 5		60/16	27					Shale, gry-brn., fissil, soft w/ thin silty sandstones & siltstone mod. hd. *Scatt. random slks.	*Core drills fragmental *D.W.R. 10%-50%, gry to gry-brn.	
	17^{5} Run 6	21^{7}		50/24	48			18^{5} 20		Shale & siltstone w/ dk. sh. seams		
		Run 7		62/58	94			21^{7}		Sandstone, silty, seamy, mod. hd.. *Soft gry-brn. fissil sh. 23^{5}-24^{0} *Slks, norm. @ 24^{0}, 24^{5}, & 25^{0}, fracs. open.	*Drill dropped fast 23^{0}-24^{0} *Core drills max 0^{8}, av. <0^{6} *D.W.R., erratic 40% -80%	16 Mar
	26^{9} Run 8	32^{1}		66/41	62			29^{3} 30		Shale, gry-brn., soft, fissil, w/ scatt. thin mod. hd. siltstone w/ gry-brn. clay seams & scatt slks	*Core drills fragmental.	
		Run 9		56/49	88			34^{5}		Sandstone silty, seamy, mod. hd. *Wht. & dk. random irreg. intersect. fracs. *gry-brn., soft, fissil shale 37^{9}-38^{1} & 39^{3}-39^{4}	*Core drills max 1^{3}, av. <0^{5}	
	37^{5} Run 10	42^{4}		60/60	100			40		*Slks. on ~60° black shiny coated irreg frac. @ 40^{0}		
		Run 11		61/61	100							
	47^{5} Run 12	52^{5}		60/56	93			50		*gry-brn. soft fissil shale 49^{3}-49^{6} w/ slks on ~20° frac. *Shale, gry-brn., soft, 50^{0}-50^{5}		
		Run 13		60/54	90							
	57^{5} Run 14	60^{0}		30/30	100			60		*irreg. vert. sh. seam 58^{0}-59^{0}, 1/4" to 2" in width		
										Bottom of Hole 60^{0}	16 Mar 76	

*Installed 63^{0}' of 1½" I.D. Slope Indicator square tubing, 2 sacks p-gravel packing & a 3^{0} stick-up.

*Entire section has been badly fracture & re-healed.

ole No. 4-76 Sheet 1 of 1
roject Roberts Mtn. Sec.-Westside Cut Slide
ighway Pacific County Douglas
ocation ~Sta 2962+00 (330' Rt.) Prefix 610-1921-910
urpose of Hole Slide Investigation & S.I. Installation
riller Jensen Drlg. Logged by P. Bowers
rill Cat mounted Core Drill Angle Vert.
asing - Core H.Q. Wireline
rive Sampler OD - ID - Hammer Wt - Fall -
ndisturbed Sampler -

Decomposed rock (hand crushable)
Mixed decomposed and weathered rock
Weathered rock (color, hardness, strength, etc., modified by weath
X Zone of fragmental core
Mixed weathered and fresh rock
/ Bedding dip
ʃ Slickensides
- Joint

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Elevation	Sample Type	Blows / Inches	N Value	Recovered / Sampled	% Recovery	Water Level	% Moisture	Depth	Graphic Log	Description	Remarks	Da
	4^{4}	Run 1		53/46	87					Sandstone, gray, mottled, silty, mod. hd. w/scatt. soft along open fracs. w/stn. penet. to ¼" - closely spaced irreg. random intersect. wht. & dk. min. seams av. spacing <1". *Est. 80-90% fresh.	Otter Point Formation *D.W.R., gry, 0-100%	10 Mr
	Run 2	7^{6}		40/40	100						*D.W.R., none, lost @ ~5^{0}'	11 Mr
	12^{6}	Run 3		60/60	100			8^{6} 10	x	Increase in high angle & irreg. vert. open fracs, some w/plastic gry. fines coating	*Core drills max. 0^{8}', av. <0^{5}' to 11^{0} then fragmental to 14^{6} & max 0^{8}', av <0^{3}' to 17^{2}' w/ scatt. fragmental zones.	
	Run 4	17^{2}		55/55	100			12^{5}	x x x s x s x	as above w/scatt. slks. & grooves		
	22^{9}	Run 5		62/60	97			20 22^{0}	s s		*Core drills max 1^{3}, av <0^{6} to 22^{0}	
	Run 6	27^{3}		59/30	51				x x x	Shale, gry-brn, soft, fissil, scatt. mod. hd. sandstone & siltstone gravel sized frags., pyritic, scatt. random slks.	*Core drills fragmental. *Drill dropped fast 23^{4}-26^{4} (Possible slip zone)	
	30^{7}	Run 7		36/36	100			26^{4} 30	s	Sandstone, silty, seamy as above, mod. hd. *irreg. shiny black coated irreg. ~70° frac w/ horiz. slks @ 27^{0}	*Core Drills max 0^{7} av <0^{5}'	
	Run 8	37^{5}		86/29	34				x x x x	Shale, gry-brn, soft, fissil, w/silty sandstone frags., random compression slks.	*Core drills mostly fragmental.	
	42^{6}	Run 9		61/41	67			40 42^{0}		w/alternating silty sandstone layers to 0^{6} thick, mod. hd.		
	Run 10	47^{3}		56/43	77			44^{8}	s x	Sandstone, silty, seamy as above, mod. hd. Shale, gry-brn, soft, fissil, scatt. mod. hd., siltstone & sandstone, scatt. slks.	*Core drills max. 0^{7}, av <0^{5}' *Core drills fragmental.	12 Mr
	51^{4}	Run 11		49/40	82			47^{0} 50	s	Sandstone, gry, silty, seamy w/scatt. fissil shale stringers, soft to mod. hd., scatt. slks		
	Run 12	54^{8}		41/41	100			51^{7}	s	Shale, gry-brn, soft, fissil, & silty seamy sandstone, mod. hd., scatt. irreg slks. in shale & on irreg vert. fracs *Old shear zone 52^{7}-54^{8}		
	58^{3}	Run 13		41/41	100			54^{8}	70° s s	Sandstone, silty, seamy as above w/ irreg. shale seams & stringers or lenses in ~3^{0}' zone w/~dip 70° w/irreg slks.		
	Run 14	60^{0}		22/22	100			60				

Bottom of Hole 60^{0}

*Installed 63^{0} of Slope Indicator 1½" I.D. square steel tubing w/ 3^{0} stick-up. (5 sections 12' long & 1 section 3' long) Put on cap & Lock - Took initial reading 15 Mar 76.

disturbed Sampler —

Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fingernail
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type	Blows	Inches	N Value	Recovered / Sampled	% Recovery	Water Level	% Moisture
			Run1 ↓ 4^{5}		53/46	87		
		Run2 ↓	7^{6}		40/40	100		
			Run3 ↓		60/60	100		
		12^{6} Run4 ↓	17^{2}		55/55	100		
			Run5 ↓		62/60	97		
		22^{5} Run6 ↓	27^{2}		59/30	51		
			Run7 ↓		36/36	100		
		30^{2} Run8 ↓	37^{5}		86/29	34		
			Run9 ↓		61/41	67		
		42^{6} Run10 ↓	47^{2}		56/43	77		
			Run11 ↓		49/40	82		
		51^{4} Run12 ↓	54^{8}		41/41	100		
			Run13 ↓		41/41	100		
		58^{3} Run14	60^{0}		22/22	100		

Depth	Description	Remarks	Da
8^{5} 10	Sandstone, gray, mottled, silty, mod. hd. w/scatt. soft along open fracs. w/stn. penet. to ¼" - closely spaced irreg. random intersect. wht. & dk. min. seams av. spacing <1". *Est. 80-90% fresh. Increase in high angle & irreg. vert. open fracs, some w/plastic gry fines coating	Otter Point Formation *D.W.R. gry, 0-100% *D.W.R., none, lost @ ~5^{0} *Core drills max 0^{2}, av <0^{5} to 11^{0} then fragmental to 14^{5}, & max 0^{2}, av <0^{1} to 17^{2} w/ scatt. fragmental zones.	10Mr 11Mr
12^{6} 20	as above w/scatt. slks. & grooves	*Core drills max 1^{3}, av <0^{6} to 22^{0}	
22^{0}	Shale, gry-brn, soft, fissil, scatt. mod. hd. sandstone & siltstone gravel sized frags., pyritic, scatt. random slks.	*Core drills fragmental. *Drill dropped fast 23^{4}-26^{4}. (Possible slip zone)	
26^{4}	Sandstone, silty, seamy as above, mod. hd. *irreg. shiny black coated irreg. ~70° frac w/ horiz. slks @ 27^{0}.	*Core Drills max 0^{7}, av <0^{5}	
30 40	Shale, gry-brn, soft, fissil, w/silty sandstone frags., random compression slks. w/alternating silty sandstone layers to 0^{6} thick, mod. hd.	*Core drills mostly fragmental.	
42^{0}	Sandstone, silty, seamy as above, mod. hd.	*Core drills max. 0^{7}, av <0^{5}	12Mr
44^{8}	Shale, gry-brn, soft, fissil, scatt. mod. hd., siltstone & sandstone, scatt. slks.	*Core drills fragmental.	
47^{0} 50	Sandstone, gry, silty, seamy w/scatt. fissil shale stringers, soft to mod. hd., scatt. slks.		
51^{5}	Shale, gry-brn, soft, fissil, & silty seamy sandstone, mod. hd., scatt. irreg slks. in shale & on irreg vert. fracs *Old shear zone 52^{7}-54^{8}		
54^{8}	Sandstone, silty, seamy as above w/ irreg. shale seams & stringers or lenses in ~2" zone w/ ~dip 70° w/irreg slks.		
60			

Bottom of Hole 60^{0}

*Installed 63^{0} of Slope Indicator 1½" I.D. square steel tubing w/ 3^{0} stick-up. (5 sections 12' long & 1 section 3' long) Piton cap & Lock - Took initial reading 15 Mar 76.

*~3 sacks p-gravel used as back-fill.

*Entire section badly broken and rehealed w/ calcitic and scatt. shaley fillings w/poor binding power.

Hole No. 5-76 Sheet 1 of 1
Project Roberts Mtn. - Westside Cut Slide
Highway Pacific County Douglas
Location Sta. 263+70 (305' rt.) Prefix 610-1921-910
Purpose of Hole Slide Investigation & S.I. Installation
Driller Jensen Drlg. Logged by P. Bowers
Drill Cat-mounted Core-Drill Angle Vert.
Casing Core H.Q. Wireline
Drive Sampler OD – ID – Hammer Wt – Fall –
Undisturbed Sampler –

Decomposed rock (hand crushable)
Mixed decomposed and weathered rock
Weathered rock (color, hardness, strength, etc., modified by weath
X Zone of fragmental core
Mixed weathered and fresh rock
Bedding dip
Slickensides
– Joint

NOTES

Soft	– can be scratched with fingernail
Mod Hard	– can be scratched with knife, not by fingernail
Hard	– difficult to scratch with knife
Very Hard	– cannot be scratch with knife

Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type	Blows	Inches	N Value	Recovered/Sampled	% Recovery	Water Level	% Moisture	Depth	Graphic Log	Description	Remarks	Da
	Run1				76/31	41			1^{0} 3^{0} 5^{9}		Loose Rock & soil. Sandstone, gry, silty, seamy w/wht. & dk. seams, scatt. irreg. slks, "old Shear Zone", mod hd-soft. Shale, gry-brn, soft, fissil w/scatt. gry. clayseams & mod. hd. gravel sz. siltstone frags.	Otter Point Formation *D.W.R., gry., 120%	17M
		6^{3} Run2			61/58	95			10 11^{9}	45	Sandstone, gry, silty, seamy w/closely spaced intersect. random wht. & dk. seams. ~~mod. hd. w/scatt.~~ soft. fissil shales; scatt. slks as indicated.	*Core drills mostly fragmental.	
	11^{9} Run3				62/62	100					Sandstone as above, decrease in gry-brn. fissil shales. *scatt slks & grooves on irreg. fracs.	*Core drills max 1^{4}, av<0^{4}	
		16^{6} Run4			56/36	64			18^{5} 20		Shale & Sandstone layers to ~1^{0} thick soft to mod. hd., w/scatt. slks. *Shales, gry-brn, soft, fissil – SS mod hd silty	*D.W.R. Lost @ 18^{5} *Core drills fragmental	
	21^{3} Run5				44/44	100			22^{4} 24^{3}		Shale, gry-brn. fissil, soft w/mod. hd. sandstone frags.		
		25^{9} Run6			41/41	100					Sandstone, gry, silty, seamy, w/irreg brn.-blk. shale inclusions, scatt. irreg. slks.	*Core drills max. 0^{8}, av<0^{4}.	18 M W.L Su
	Run7				41/41	100			27^{9} 30		Shale, gry-brn, fissil, soft & brecciated healed sandstone, soft to mod. hd. (Old Shear Zone?)		
		Run8			67/60	90			31^{9} 36^{9}	38° 64°	Sandstone, gry, silty, seamy as above mod. hd. w/scatt. soft. *Slks w/~rake 10° on ~20° frac @ 33^{5} & ~60° frac @ 34^{5}.		
	Run9				67/14	21			40		Shale, gry-brn, soft, fissil w/scatt. mod. hd. siltstone & sandstone gravel sz. frags.	*Core drills fragmental	
		Run10			60/29	48					*High core loss zone due to wash & grind.		
	Run11				58/24	41			50			*D.W.R. <10%, coming up around drillsite @ different places.	
		Run12			44/24	41					*52^{8}–55^{1} fissil orientation from ~20° to almost vert.		
	Run13				59/38	64			60				

Bottom of Hole 60^{0} 18 Mar 76.

*Installed 63^{0} Slope Indicator
[illegible] on bottom with
3^{0} Stick-up.

Undisturbed Sampler —

NOTES

Soft – can be scratched with fingernail
Mod Hard – can be scratched with knife, not by fingernail
Hard – difficult to scratch with knife
Very Hard – cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type	Blows / Inches	N Value	Recovered / Sampled	% Recovery	Water Level	% Moisture
		Run1 (to 6^{3})		76/31	41		
		Run2 (6^{3}–11^{9})		61/58	95		
		Run3 (11^{9}–16^{6})		62/62	100		
		Run4 (16^{6}–21^{3})		56/36	64		
		Run5 (21^{3}–25^{9})		44/44	100		
		Run6		41/41	100		
		Run7		41/41	100		
		Run8		67/60	90		
		Run9		67/14	21		
		Run10		60/29	48		
		Run11		58/24	41		
		Run12		44/24	41		
		Run13		59/38	64		

Depth	Description	Remarks	Da
1^{2}	Loose Rock & soil.	Otter Point Formation	17M
3^{0}	Sandstone, gry, silty, seamy w/wht. & dk. seams, scatt. irreg. slks, "old Shear zone", mod hd-soft.		
	Shale, gry-brn, soft, fissil w/scatt. gry clayseams & mod. hd. gravel sz. siltstone frags.	*D.W.R., gry, 100%	
5^{9}	Sandstone, gry, silty, seamy w/closely spaced intersect. random wht. & dk. seams. mod. hd. – scatt. soft. fissil shales, scatt. slks as indicated.	*Core drills mostly fragmental.	
7^{0}			
11^{9}	Sandstone as above, decrease in gry-brn. fissil shales. *scatt slks & grooves on irreg. fracs.	*Core drills max 1^{9}', av<0^{4}'	
18^{6}	Shale & Sandstone layers to ~1" thick soft to mod. hd., w/scatt. slks. *Shales, gry-brn, soft, fissil – SS mod hd silty	*D.W.R., Lost @ 18^{6} *Core drills fragmental	
20			
22^{1}	Shale, gry-brn. fissil, soft w/mod. hd. sandstone frags.		
24^{3}	Sandstone, gry, silty, seamy, w/irreg brn.-blk. shale inclusions, scatt. irreg. slks.	*Core drills max. 0^{8}', av<0^{4}'.	18 M W.L Su
27^{9}	Shale, gry-brn, fissil, soft & brecciated healed sandstone, soft to mod. hd. (Old Shear Zone?)		
30			
31^{9}	Sandstone, gry, silty, seamy as above mod. hd. w/scatt. soft. *Slks w/~rake 10° on ~20° frac @ 33^{5} & ~60° frac @ 36^{3}.		
36^{9}	Shale, gry-brn, soft, fissil w/scatt. mod. hd. siltstone & sandstone gravel sz. frags.	*Core drills fragmental	
40	*High core loss zone due to wash & grind.	*D.W.R. <10%, coming up around drill site @ different places.	
50	*52^{8}–55^{1} fissil orientation from ~20° to almost vert.		
60			

Bottom of Hole 60^{0} 18 Mar 76

*Installed 63^{3}' Slope Indicator
[illegible] on bottom with
3^{0}' Stick-up.

FORM E-30

OREGON STATE HIGHWAY DIVISION
INTER-DEPARTMENT CORRESPONDENCE
ROSEBURG, OREGON 97470

REGISTERED GEOLOGIST
ELLIOTT PARKER
No. [illegible]
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

DATE October 5, 1976

TO MEMO to the file

FROM ELLIOTT PARKER
REGION 3 ENGINEERING GEOLOGIST
by Peter W. Bowers, Jr. Peter W. Bowers, Jr.
Engineering Geologist

SUBJECT Pacific Highway Douglas County
Shady Interchange-Dillard Junction Section
Roberts Mountain Westside Cut Slide
PROGRESS REPORT

On March 17,1972, Elliott Parker submitted a report to the Region Engineer on a preliminary inspection. The installation of Slope Indicator Tubes and Horizontal Drains was recommended. (Recommendation - Items #2 & #3)

A Seismic Survey was requested and subsequently completed on January 2, 1976.

Installation of five (5) Slope Indicator Tubes was completed on March 19,1976 and a Drilling Activity Summary submitted on April 19,1976 followed by a Material Exploration Evaluation on May 10,1976.

The drilling and installation of five(5) Horizontal Drains along the lower bench was completed on August 6,1976.

This Progress Report is a summary to date of a continued program of data gathering and evaluation. The information is being gathered in the form of slope indicator readings and water level fluctuations.

SLOPE INDICATOR DATA

Slope indicator readings have been recorded and evaluated for significant adjustments when obtained. The readings to date on Tubes No's. 2, 3, and 5 have shown no apparent significant changes. Tubes No's. 1 and 4 currently show a definite slow progressive movement at depths that appear to correlate readily with available seismic and sample data. (Enclosure #1)

Graphs have been made using the tube orientation and initial reading as a base in an attempt to show the direction and magnitude of the movement. (Enclosure #2) Tubes No's. 1 and 4 are located near the major slide crack on the surface along the northerly side of the slide area, with Tubes No's. 2 and 5 being about 125 feet southerly and Tube No. 3 about 125 feet northerly.

The current data evaluation indicates a slow progressive movement along and adjacent to the major surface crack near Tubes No's. 1 and 4 with a subsequent irregular horizontal rotational adjustment possibly occuring in the areas of Tube No's. 2 and 5.

A survey map has been requested on which the Slope Indicator Holes will be accurately located. This will then make it possible to position the major slide cracks and after adding Slope Indicator directional movement data obtain a better understanding of the progressive nature of the slide.

WATER LEVEL FLUCTUATIONS

Water levels have been recorded and put on graphs. (Enclosure #3) An effort was made to acquire readings immediately after rains to observe the effect on the water levels. The graphs show a rapid raising of the water level in the slope tube holes indicating essentially a direct connection with surface water.

The completion dates of the 5 Horizontal Drains drilled and installed in the cut bank of the lower bench are marked on the graphs. (Enclosure 4) The 3 northerly Horizontal Drains started out initially flowing a very thin stream of water. This very light initial flow which might have been expected to last only a short while has been essentially continuous. After some of the recorded rainy periods the flows were checked and found to have slightly increased.

CONCLUSIONS

The complex lithology consists of an irregular series and mixture of sandstone, siltstones, and shales of varied thickness and competency which are considered to be a part of the Otter Point Formation. The Otter Point Formation is described as a unit highly disordered as a result of extensive deformation during or shortly following deposition. (State of Oregon, Dept. of Geol. &Min. Industries, Bull. 75) The members of this unit as encountered in drilling the slope tube holes are not sufficiently uniform and continuous to enable the construction of a meaningful profile section. An integrated profile section using Slope Indicator, Seismic, and Sample data has been prepared. (Enclosure #5)

Slope Tube readings to date indicate a more rapid progressive movement adjacent to the major crack located northerly of Tubes No. 1 and 4 with probable subsequent adjustment elsewhere. Directional movement graphs appear to indicate a possible continual rotational movement of adjustment toeward. A continued program of monitoring the Slope Tubes should detect any change in location or rate of adjustment.

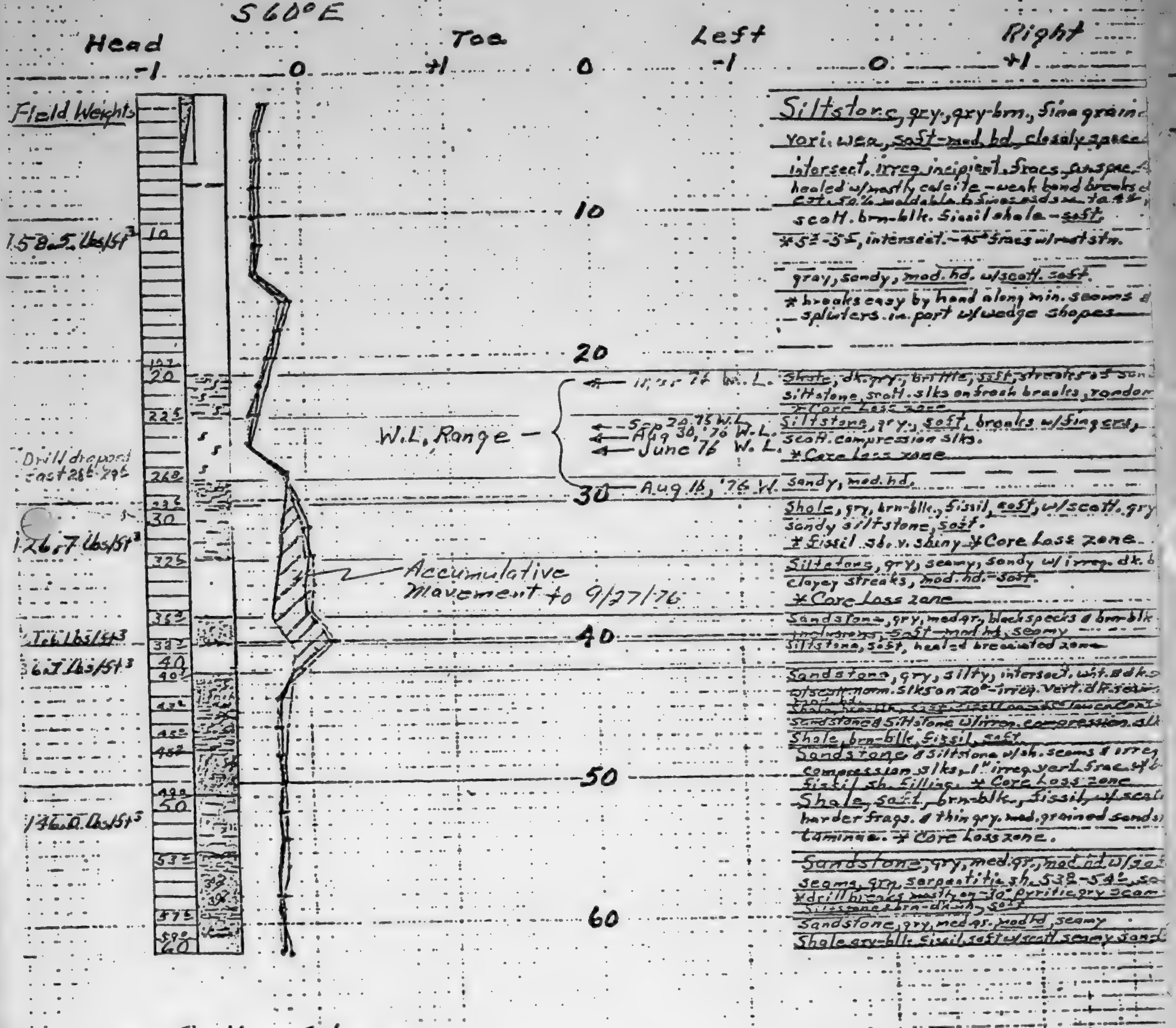
Water Level Fluctuation graphs indicate the need to seal open cracks. The direct affect of the horizontal drains on the water levels in the Slope Tubes is inconclusive at this time. Unimpeded movement of water through the problem area is desirable. The rate of drop after the drilling of the horizontal drains appears to have increased in all tubes as all graphs have essentially the same characteristics. (Due to the short monitoring period this increased rate of drop could also be partly a seasonal fluctuation.) The rapid build up of water levels after rains indicate probable constant high water levels during the rainy season even though there will probably be an increased flow from the currently installed drains. Closely spaced additional Horizontal Drains would in all probability aid in reducing water damage by moving trapped surface water through the problem area.

c.c. F. [illegible]
R. [illegible]
J. I. W[illegible]
A. B[illegible]

Roberts Mtn.-Westside Cut Slide

Scale: Horizontal = Inch
Vertical = Feet

S.U.3²



—— Reading of June 76
—— Initial Reading Flat 3/10/76
▨ Indicated Accumulative Adjustment
—— Reading of 8/16/76
—— Reading of 8/30/76
6/28/76
- - - Reading of 9/27/76

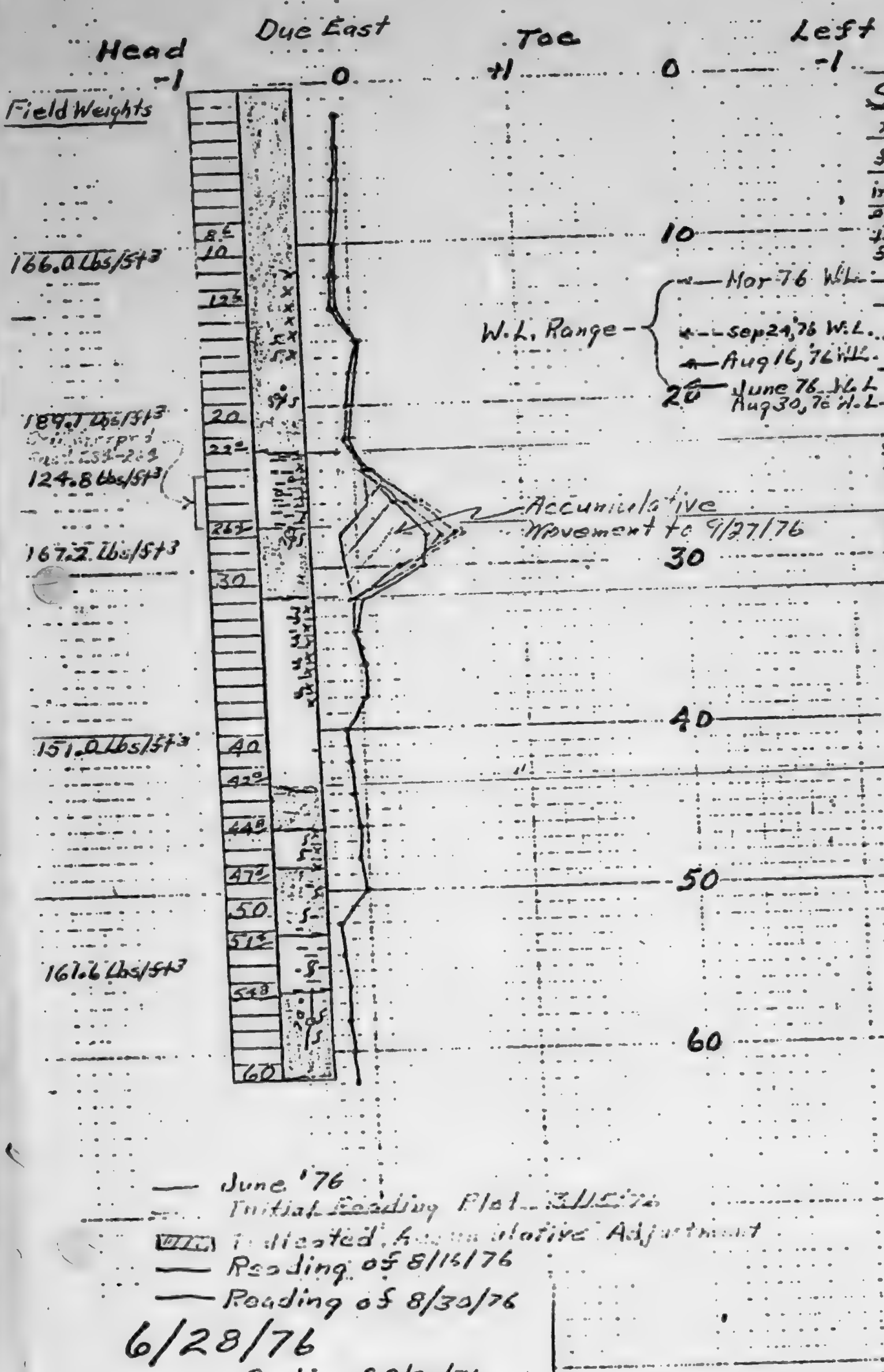
Encl. 1

Tube #1
Lower Bench

Roberts Mtn.-Westside Cut Slide

le: Horizontal = Inch
rtical = Feet

S.U. 29



Sandstone, gray, mottled, silty, mod. hd. w/scatt. soft along open fracs. w/stn. penet. to ½" - closely spaced irreg. random intersect. wht. & dk. min. seams avg. spacing <1". #Est. 80-90% fresh. increase in high angled irreg. vert. open fracs, some w/plastic gry fines coating

as above w/scatt. slks & groove

Shale, gry-brn, soft, fissil, scatt. mod. hd. sandstone & siltstone gravel sized frags, pyritic, scatt. random slks.

Sandstone, silty, seamy as above, mod. hd. # irreg. shiny black coated irreg. ~70° frac w/ horiz. slks @ 27'.

Shale, gry-brn, soft, fissil, w/silty sandst. frags., random compression slks.

w/alternating silty sandstone layers to 2" thick, mod. hd.

Sandstone, silty, seamy as above, mod. hd.

Shale, gry-brn, soft, fissil, scatt. mod. hd. siltstone & sandstone, scatt. slks.

Sandstone, gry, silty, seamy w/scatt. fissil shale stringers, soft to mod. hd., scatt. slk

Shale, gry-brn, soft, fissil, & silty seamy sandstone, mod. hd. scatt. irreg. slks. in shale on irreg. vert. fracs # Old shear zone 52'

Sandstone, silty, seamy as above w/ irreg. shale seams & stringers or lenses in ~3'. zone w/~dip 70° w/irreg slks.

— June '76 Initial Reading Plot 3/15/76

▨ Indicated Accumulative Adjustment

— Reading of 8/16/76

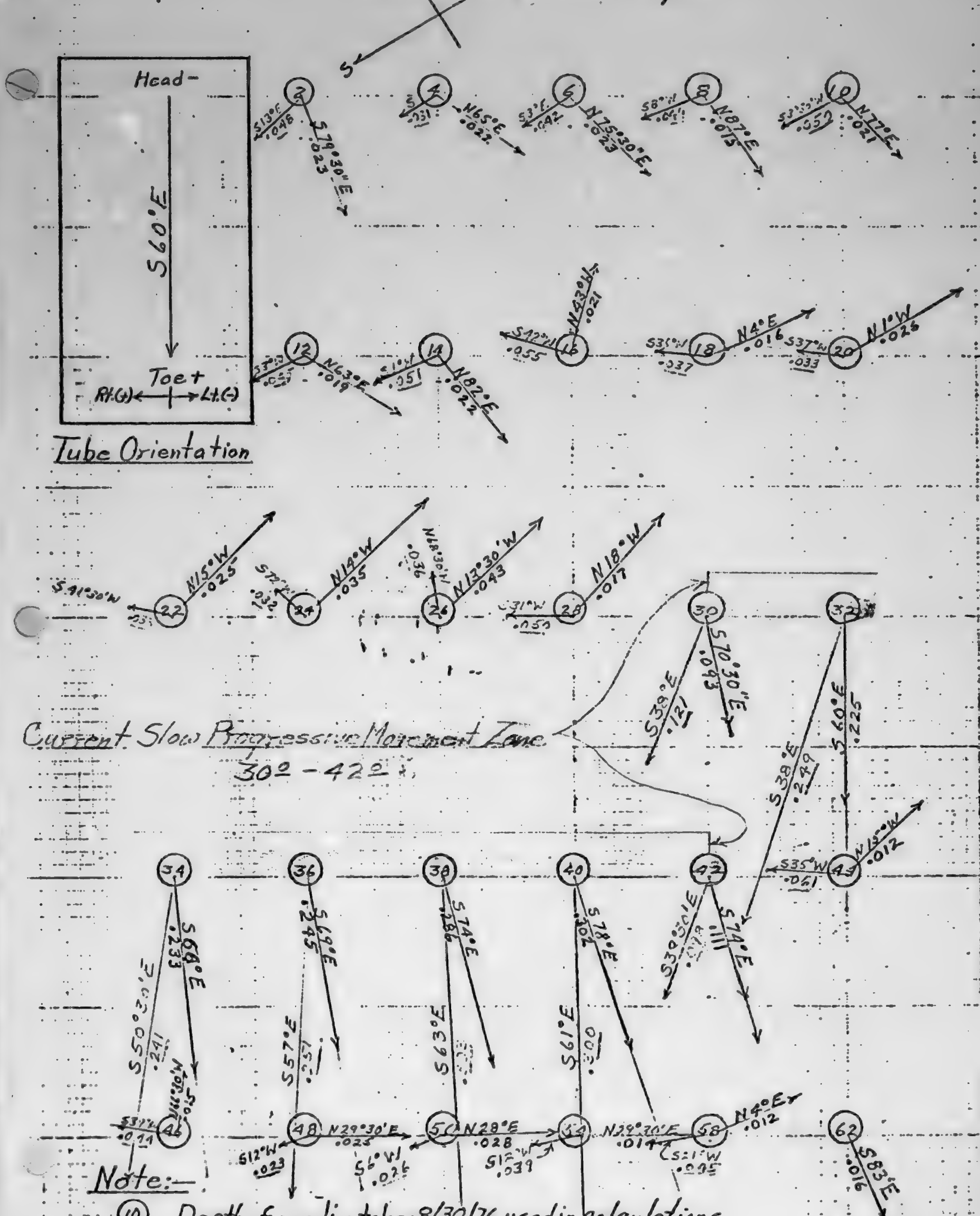
— Reading of 8/30/76

6/28/76

-- Reading of 9/27/76

Tube #4
Upper Bench

Roberts Mtn.-Westside Cut Slide
Directional Movement Graphs


N
S
Head-
S60°E
Toe+
Rt.(+)
Lt.(-)
Tube Orientation
2
S13°E .048
S79°30'E .023
4
.031
N65°E .022
6
S3°E .042
N75°30'E .023
8
S8°W .041
N87°E .015
10
S3°30'W .052
N77°E .021
12
.055
N63°E .019
14
S10°W .051
N82°E .022
16
S42°W .055
N43°W .021
18
S35°W .037
N4°E .016
20
S37°W .033
N1°W .025
22
S41°30'W .031
N15°W .025
24
S72°W .032
N14°W .035
26
N18°30'W .036
N13°30'W .043
28
S31°W .050
N18°W .017
30
S39°E .121
S70°30'E .043
32
S38°E .249
S60°E .225
Current Slow Progressive Movement Zone
30° - 42°
34
S68°E .233
S50°30'E .241
36
S69°E .245
S57°E .251
38
S74°E .286
S63°E
40
S78°E .302
S61°E .300
42
S74°E .111
S39°30'E .179
43
S35°W .061
N15°W .012
46
S37°W .011
N38°30'W .015
48
N29°30'E .025
S12°W .023
50
N28°E .028
S6°W .026
54
S12°W .039
N29°30'E .014
58
N4°E .012
S21°W .025
62
S83°E .016

Note:–

⑩ Depth of reading taken 8/30/76 used in calculations.
" " " " 9/21/76 " " "

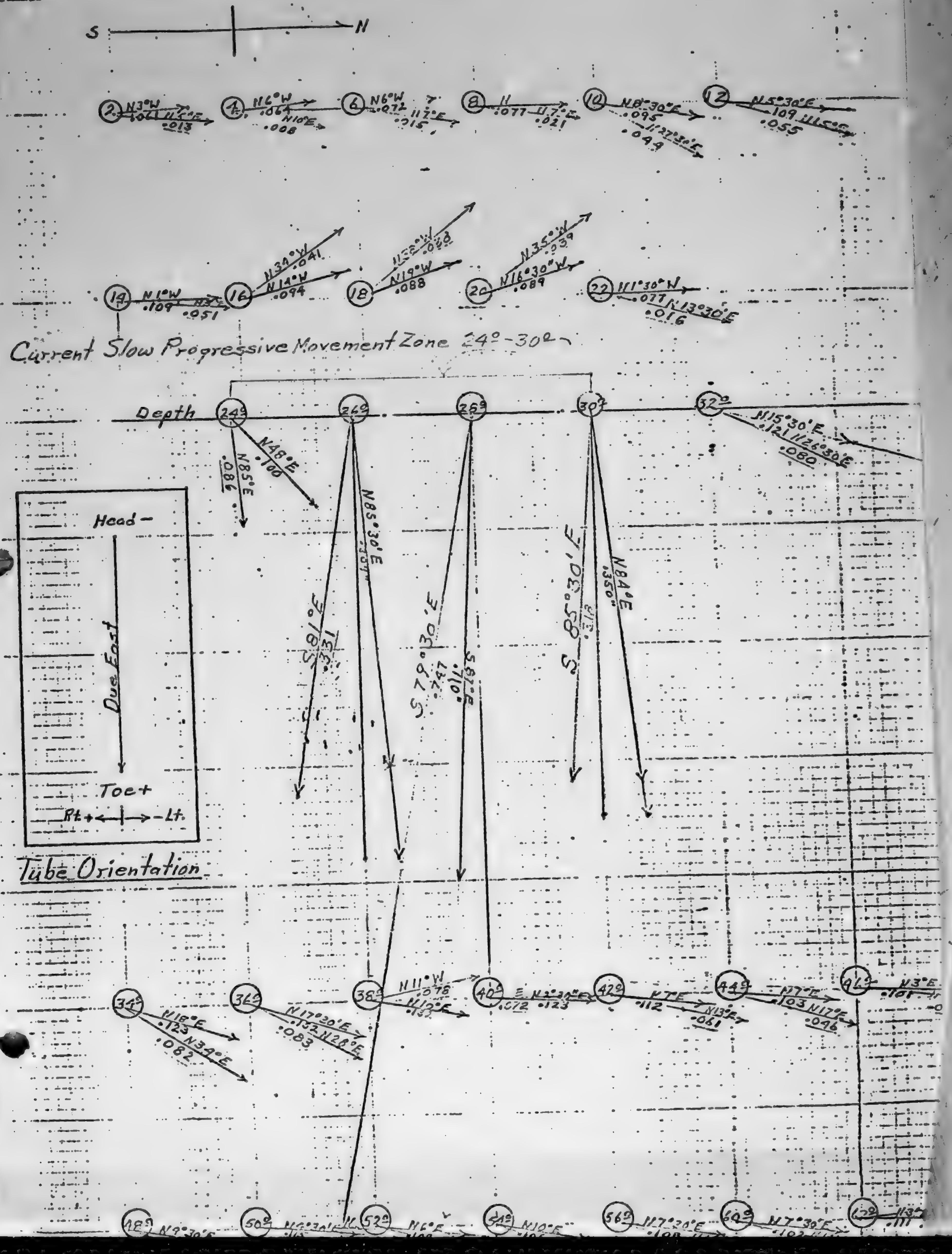
N10°E ← Bearing
→ Movement direction
.1 ← Indicated [illegible]

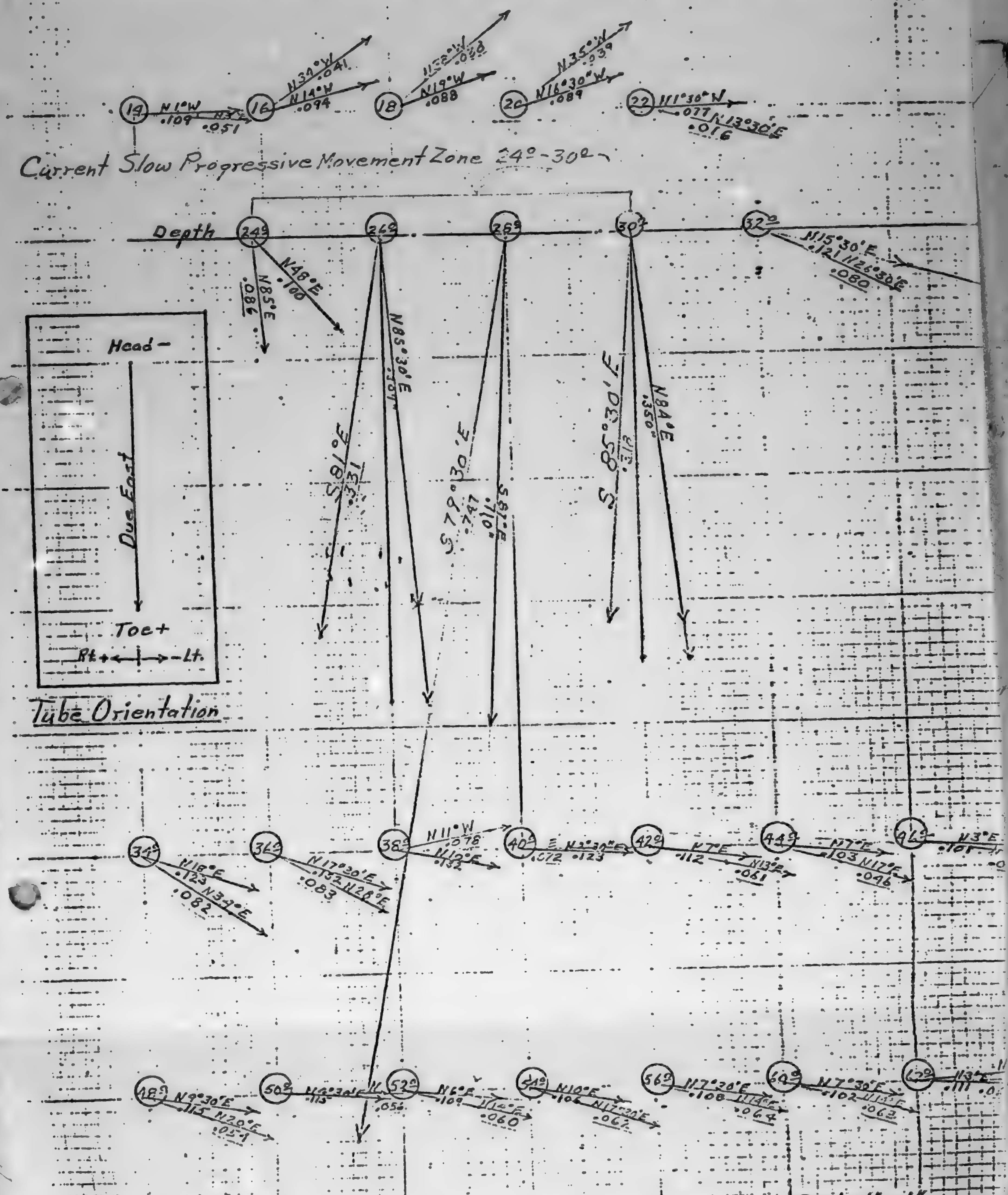
S.I. Tube #1
Scale: 1" = 0.1"

74A

[illegible] Westside Cut Slide

Directional Movement Graphs


S
N
2
N3°W
.061
N5°E
.013
4
N6°W
.064
N10°E
.008
6
N6°W
.072
N7°E
.015
8
N
.077
N7°E
.021
10
N8°30'E
.095
N27°30'E
.049
12
N5°30'E
.109
N15°E
.055
14
N1°W
.109
N3°E
.051
16
N34°W
.041
N14°W
.094
18
N38°W
.088
N19°W
.088
20
N35°W
.039
N16°30'W
.089
22
N1°30'W
.077
N13°30'E
.016
Current Slow Progressive Movement Zone 24°-30°
Depth
24°
N48°E
.100
N85°E
.086
26°
S81°E
.331
N85°30'E
.304
28°
S79°30'E
.747
S81°E
.710
30°
S85°30'E
.318
N84°E
.350
32°
N15°30'E
.121
N26°30'E
.080
Head -
Due East
Toe +
Rt. +
- Lt.
Tube Orientation
34°
N18°E
.123
N34°E
.082
36°
N17°30'E
.132
N28°E
.083
38°
N11°W
.078
N12°E
.132
40°
E
.072
N2°30'E
.123
42°
N7°E
.112
N13°E
.061
44°
N7°E
.103
N17°E
.096
46°
N3°E
.101
48°
N9°30'E
50°
N6°30'E
52°
N6°E
54°
N10°E
56°
N7°30'E
.108
60°
N7°30'E
62°
N3°E
.111


14
N1°W
.109
N3°E
.051
16
N34°W
.041
N14°W
.094
18
N52°W
.038
N19°W
.088
20
N35°W
.039
N16°30'W
.089
22
N11°30'W
.077
N13°30'E
.016
Current Slow Progressive Movement Zone 24º-30º
Depth
24º
N48°E
.100
N85°E
.086
26º
N85°30'E
.304
S81°E
.331
28º
S79°30'E
.747
S81°E
.710
30º
S85°30'E
.318
N84°E
.350
32º
N15°30'E
.121
N26°30'E
.080
Head-
Due East
Toe+
Rt.+ -Lt.
Tube Orientation
34º
N18°E
.123
N34°E
.082
36º
N17°30'E
.132
N28°E
.083
38º
N11°W
.078
N12°E
.132
40º
E
.072
N2°30'E
.123
42º
N7°E
.112
N13°E
.061
44º
N7°E
.103
N17°E
.046
46º
N3°E
.101
48º
N9°30'E
.115
N20°E
.051
50º
N4°30'E
.115
N
.056
52º
N6°E
.109
N14°E
.060
54º
N10°E
.106
N17°30'E
.062
56º
N7°30'E
.108
N14°E
.064
60º
N7°30'E
.102
N13°E
.063
62º
N3°E
.111
Scale: 1" = .1"

S. I. Tube #4

Note:-

⑩ Depth of reading taken 8/30/76 used in calculations.
" " " " 9/27/76 " " "

N10°E ← Bearing
.1 → Movement Direction

Encl. 3

Notes: [illegible]

Roberts Mtn. - Westside Cut Slide

S.I. #1 (Lower Bench) S.U. 3^{2}			S.I. #2 (Lower Bench) S.U. 3^{5}		
W.L.	Date		W.L.	Date	
22^{0}	3/10/76		4^{0}	3/10/76	
23^{0}	3/15/76		6^{0}	3/15/76	
20^{0}	4/9/76		10^{0}	4/9/76	
21^{0}	4/21/76		12^{0}	4/21/76	
22^{0}	5/11/76		16^{0}	5/11/76	
25^{0}	5/28/76	Rainy Weekend	18^{0}	5/28/76	
20^{8}	6/3/76		13^{7}	6/3/76	
20^{8}	6/4/76		13^{8}	6/4/76	
21^{0}	6/7/76		13^{9}	6/7/76	H.D.#1-76 Completed
21^{2}	6/8/76	Rain overnite	14^{0}	6/8/76	
20^{3}	6/9/76		14^{0}	6/9/76	
20^{3}	6/10/76		14^{1}	6/10/76	
20^{7}	6/11/76		14^{5}	6/11/76	
21^{3}	6/14/76		14^{7}	6/14/76	H.D.#2-76 Completed
21^{3}	6/15/76		14^{8}	6/15/76	
21^{4}	6/16/76		14^{8}	6/16/76	
21^{6}	6/17/76		14^{9}	6/17/76	H.D.#3-76 Completed
22^{2}	6/21/76		15^{1}	6/21/76	
22^{5}	6/23/76		15^{4}	6/23/76	
22^{7}	6/24/76		15^{4}	6/24/76	H.D. #4-76 Completed.
23^{8}	6/28/76		16^{5}	6/28/76	
28^{0}	7/6/76	Rain wkend 7/11/76	20^{5}	7/6/76	
24^{8}	7/12/76		16^{7}	7/12/76	
25^{4}	7/20/76		17^{1}	7/20/76	
26^{0}	7/27/76		17^{1}	7/27/76	
26^{6}	8/6/76		17^{9}	8/6/76	H.D. #5-76 Completed 8/
26^{7}	8/10/76	Rain 8/13 thru 8/16	18^{1}	8/10/76	
25^{1}	8/16/76		18^{0}	8/16/76	
26^{0}	8/30/76		22^{0}	8/30/76	

23	5/15/76		6	5/15/76	
20^{0}	4/9/76		10^{0}	4/9/76	
21^{0}	4/21/76		12^{0}	4/21/76	
22^{0}	5/11/76		16^{0}	5/11/76	
25^{0}	5/28/76	Rainy Weekend	18^{0}	5/28/76	
20^{8}	6/3/76		13^{7}	6/3/76	
20^{8}	6/4/76		13^{8}	6/4/76	
21^{0}	6/7/76		13^{9}	6/7/76	H.D.#1-76
21^{2}	6/8/76	Rain overnite	14^{0}	6/8/76	Completed
20^{3}	6/9/76		14^{0}	6/9/76	
20^{3}	6/10/76		14^{1}	6/10/76	
20^{7}	6/11/76		14^{5}	6/11/76	
21^{2}	6/14/76		14^{7}	6/14/76	H.D.#2-76
21^{3}	6/15/76		14^{8}	6/15/76	Completed
21^{4}	6/16/76		14^{8}	6/16/76	
21^{6}	6/17/76		14^{9}	6/17/76	H.D.#3-76
22^{2}	6/21/76		15^{1}	6/21/76	Completed
22^{5}	6/23/76		15^{4}	6/23/76	
22^{7}	6/24/76		15^{4}	6/29/76	H.D.#4-76
23^{8}	6/28/76		16^{5}	6/28/76	Completed.
28^{0}	7/6/76	Rain wk end 7/11/76	20^{5}	7/6/76	
24^{8}	7/12/76		16^{7}	7/12/76	
25^{4}	7/20/76		17^{1}	7/20/76	
26^{0}	7/27/76		17^{1}	7/27/76	
26^{6}	8/6/76		17^{9}	8/6/76	H.D.#5-76
26^{7}	8/10/76	— Rain 8/13 thru 8/16 —	18^{1}	8/10/76	Completed 8/1
25^{1}	8/16/76		18^{0}	8/16/76	
26^{0}	8/30/76	-Rain 9/5 & 9/6	22^{0}	8/30/76	
24^{5}	9/13/76	-Rain 9/16	[illegible] 19^{0}	9/13/76	-Rain 9/5 & 9/6
24^{6}	9/17/76		19^{1}	9/17/76	-Rain 9/16
25^{1}	9/24/76		19^{1}	9/24/76	

Water Levels

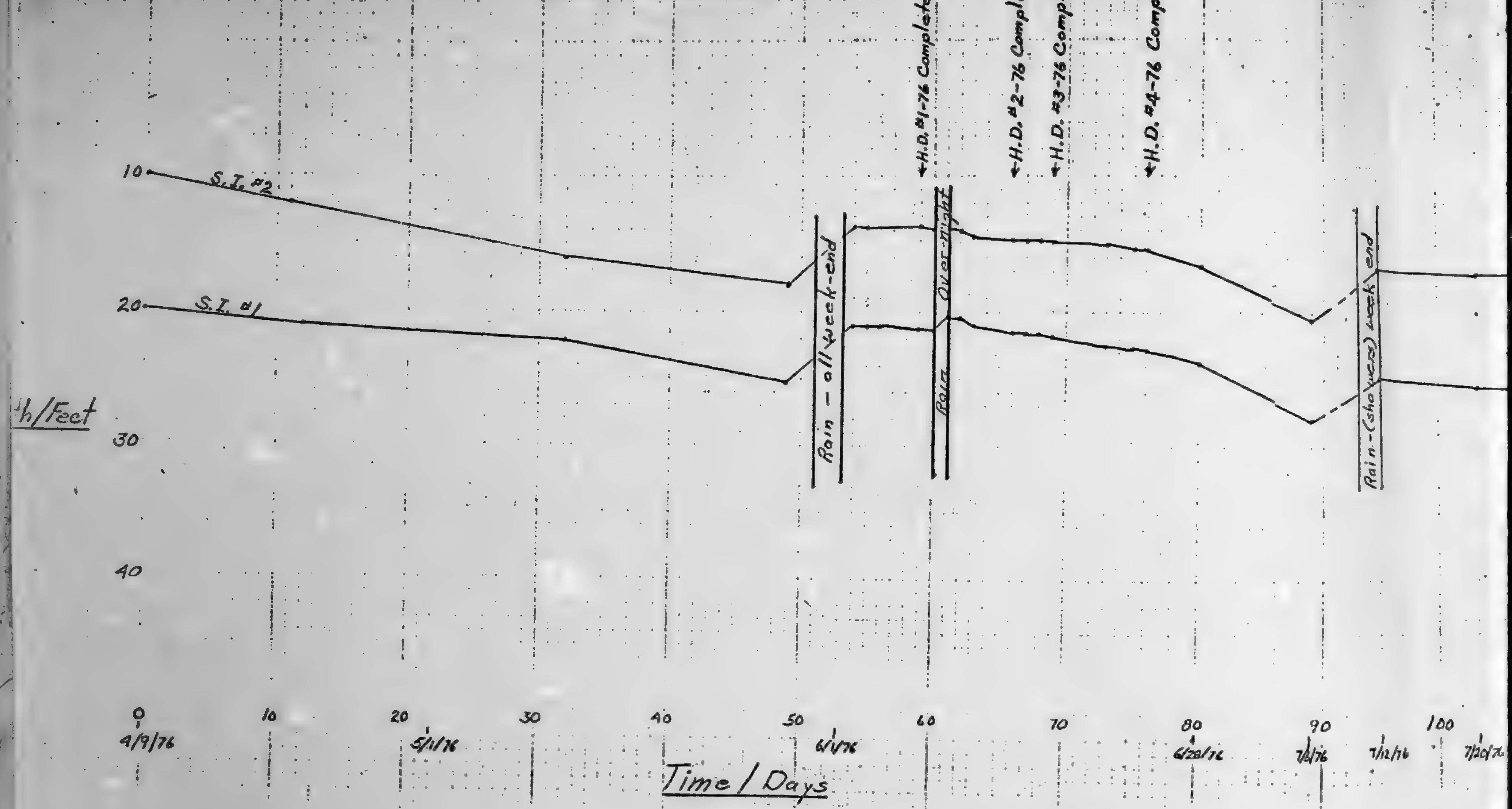
Roberts Mtn.-Westside Cut Slide

S.I. # 3 (Upper Bench)	S.U. $2^{\underline{8}}$	S.I. #4 (Upper Bench)	S.U. $2^{\underline{9}}$	S.I. #5 (Upper Bench)	S.U. $3^{\underline{2}}$
W.L.	Date	W.L.	Date	W.L.	Date
$25^{\underline{0}}$	4/5/76	$13^{\underline{0}}$	3/15/76	$19^{\underline{0}}$	4/5/76
$22^{\underline{0}}$	4/9/76	$16^{\underline{0}}$	4/9/76	$22^{\underline{0}}$	4/9/76
$22^{\underline{0}}$	4/21/76	$16^{\underline{0}}$	4/21/76	$29^{\underline{0}}$	4/21/76
$24^{\underline{0}}$	5/11/76	$17^{\underline{0}}$	5/11/76	$32^{\underline{0}}$	5/11/76
$24^{\underline{0}}$	5/28/76 Rainy week-end	$18^{\underline{0}}$	5/28/76 Rainy Week-end	$34^{\underline{0}}$	5/28/76
$20^{\underline{2}}$	6/3/76	$14^{\underline{4}}$	6/3/76	$30^{\underline{0}}$	6/3/76
$20^{\underline{2}}$	6/4/76	$14^{\underline{6}}$	6/4/76	$30^{\underline{0}}$	6/4/76
$20^{\underline{2}}$	6/7/76	$14^{\underline{6}}$	6/7/76	$30^{\underline{2}}$	6/7/76 H.D.#1-7 Complete
$20^{\underline{2}}$	6/8/76	$14^{\underline{9}}$	6/8/76	$30^{\underline{3}}$	6/8/76
$[illegible]0^{\underline{2}}$	6/9/76 Rain Over-nite	$14^{\underline{9}}$	6/9/76 Rain Over-nite	$30^{\underline{3}}$	6/9/76
$20^{\underline{2}}$	6/10/76	$15^{\underline{0}}$	6/10/76	$30^{\underline{4}}$	6/10/76
$20^{\underline{2}}$	6/11/76	$15^{\underline{1}}$	6/11/76	$30^{\underline{5}}$	6/11/76
$20^{\underline{3}}$	6/14/76	$15^{\underline{3}}$	6/14/76	$30^{\underline{8}}$	6/14/76 H.D.#2- Compl
$20^{\underline{3}}$	6/15/76	$15^{\underline{3}}$	6/15/76	$30^{\underline{8}}$	6/15/76
$20^{\underline{3}}$	6/16/76	$15^{\underline{3}}$	6/16/76	$30^{\underline{8}}$	6/16/76
$20^{\underline{3}}$	6/17/76	$15^{\underline{4}}$	6/17/76	$30^{\underline{9}}$	6/17/76 H.D.# Comple
$20^{\underline{3}}$	6/21/76	$15^{\underline{6}}$	6/21/76	$31^{\underline{0}}$	6/21/76
$20^{\underline{3}}$	6/23/76	$15^{\underline{7}}$	6/23/76	$31^{\underline{2}}$	6/23/76
$20^{\underline{3}}$	6/24/76	$15^{\underline{6}}$	6/24/76	$31^{\underline{3}}$	6/24/76 H.D.#1 Comple
$21^{\underline{2}}$	6/28/76	$16^{\underline{6}}$	6/28/76	$31^{\underline{8}}$	6/28/76
$23^{\underline{7}}$	7/6/76	$19^{\underline{6}}$	7/6/76	$35^{\underline{7}}$	7/6/76
$20^{\underline{8}}$	7/12/76 Rain-wk end of 7/11/76	$16^{\underline{5}}$	7/12/76 Rain wk end 7/11/76	$32^{\underline{4}}$	7/12/76
$[illegible]^{\underline{9}}$	7/20/76	$16^{\underline{7}}$	7/20/76	$32^{\underline{7}}$	7/20/76
$20^{\underline{9}}$	7/27/76	$16^{\underline{8}}$	7/27/76	$32^{\underline{8}}$	7/27/76
$21^{\underline{0}}$	8/6/76	$17^{\underline{0}}$	8/6/76	$33^{\underline{1}}$	8/6/76 HD#5- Comple
$21^{\underline{1}}$	8/10/76	$17^{\underline{0}}$	8/10/76	$33^{\underline{2}}$	8/10/76
Rain 8/13 thru 8/16					
$19^{\underline{8}}$	8/16/76	$13^{\underline{7}}$	8/16/76	$32^{\underline{5}}$	8/16/76
$23^{\underline{6}}$	8/30/76	$19^{\underline{3}}$	8/30/76 Rain 9/5 & 9/6	$35^{\underline{7}}$	8/30/76
					9/13/76

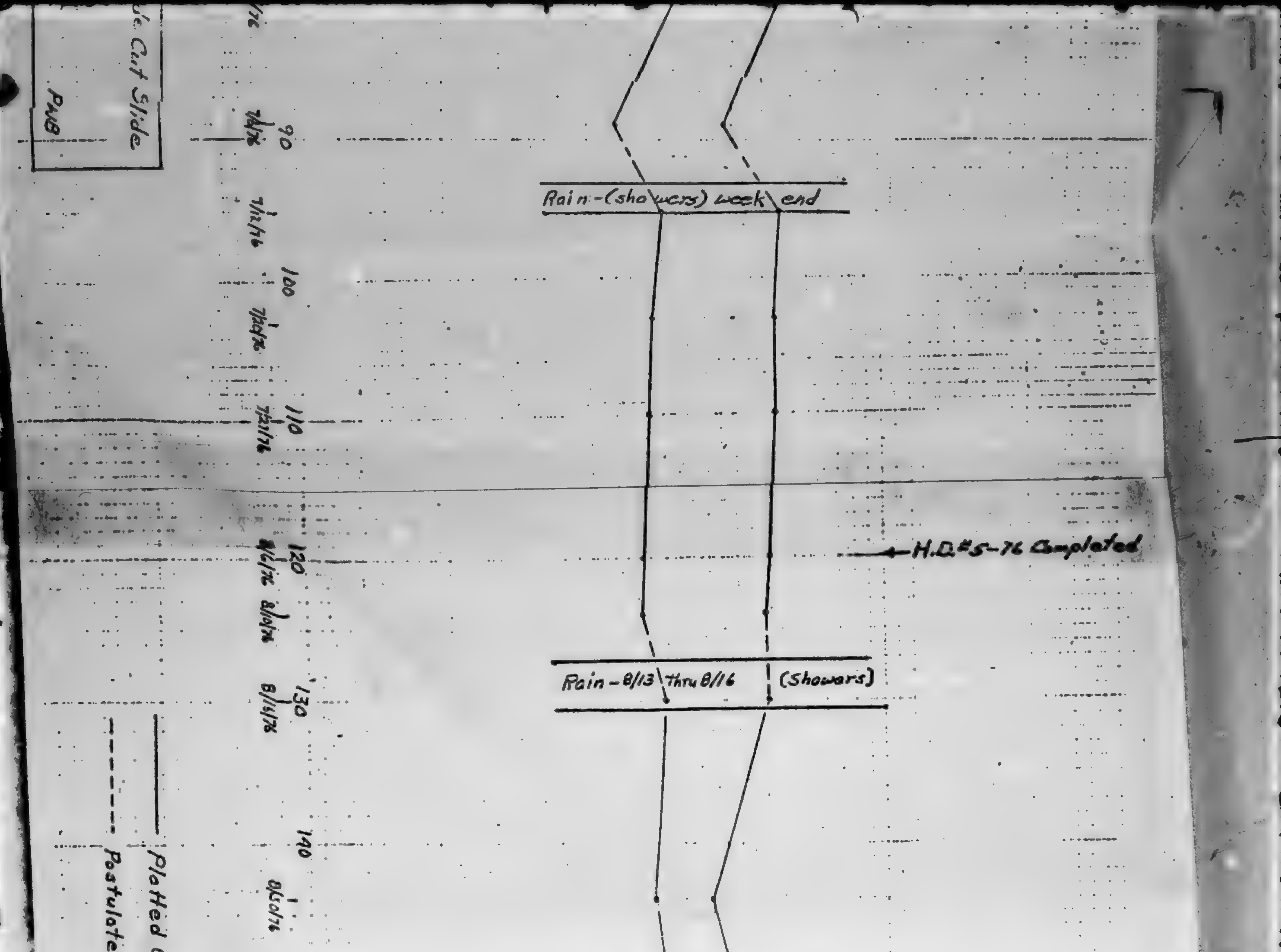
22^{0}	4/9/76		16^{0}	4/9/76		22^{0}	4/9/76	
22^{0}	4/21/76		16^{0}	4/21/76		29^{0}	4/21/76	
24^{0}	5/11/76		17^{0}	5/11/76		32^{0}	5/11/76	
24^{0}	5/28/76	Rainy Week-end	18^{0}	5/28/76	Rainy Week-end	3[illegible]	5/28/76	
20^{2}	6/3/76		14^{4}	6/3/76		30^{0}	6/3/76	
20^{2}	6/4/76		14^{6}	6/4/76		30^{0}	6/4/76	
20^{2}	6/7/76		14^{6}	6/7/76		30^{2}	6/7/76	H.D.#1-7 Complete
20^{2}	6/8/76		14^{9}	6/8/76		30^{3}	6/8/76	
[illegible]0^{2}	6/9/76	Rain Overnite	14^{9}	6/9/76	Rain Overnite	30^{3}	6/9/76	
20^{2}	6/10/76		15^{0}	6/10/76		30^{4}	6/10/76	
20^{2}	6/11/76		15^{1}	6/11/76		30^{5}	6/11/76	
20^{3}	6/14/76		15^{3}	6/14/76		30^{8}	6/14/76	H.D.#2- Complet
20^{3}	6/15/76		15^{3}	6/15/76		30^{8}	6/15/76	
20^{3}	6/16/76		15^{3}	6/16/76		30^{8}	6/16/76	
20^{3} 20^{3}	6/17/76 6/21/76		15^{4}	6/17/76		30^{9}	6/17/76	H.D.# Complet
20^{3}	6/23/76		15^{6}	6/21/76		31^{0}	6/21/76	
20^{3}	6/24/76		15^{7}	6/23/76		31^{2}	6/23/76	
21^{2}	6/28/76		15^{6}	6/24/76		31^{3}	6/24/76	H.D.#4 Comple
23^{7}	7/6/76		16^{6}	6/28/76		31^{8}	6/28/76	
			19^{6}	7/6/76		35^{7}	7/6/76	
20^{8}	7/12/76	Rain wk end of 7/11/76	16^{5}	7/12/76	Rain wk end 7/11/76	32^{4}	7/12/76	
[illegible]^{9}	7/20/76		16^{7}	7/20/76		32^{7}	7/20/76	
20^{9}	7/27/76		16^{8}	7/27/76		32^{8}	7/27/76	
21^{0}	8/6/76		17^{0}	8/6/76		33^{1}	8/6/76	HD#5- Comple
21^{1}	8/10/76		17^{0}	8/10/76		33^{2}	8/10/76	
		Rain 8/13 thru 8/16						
19^{8}	8/16/76		13^{2}	8/16/76		32^{5}	8/16/76	
23^{6}	8/30/76	-Rain 9/5 & 9/6	19^{3}	8/30/76	-Rain 9/5 & 9/6-	35^{7}	8/30/76	
20^{8}	9/13/76	-Rain 9/16	16^{3}	9/13/76	-Rain 9/16-	32^{8}	9/13/76	~~Rain~~
20^{8}	9/17/76		16^{2}	9/17/76		32^{7}	9/17/76	
20^{9}	9/24/76		16^{2}	9/24/76		33^{0}	9/24/76	

Water Level Fluctuation Pattern

Lower Bench

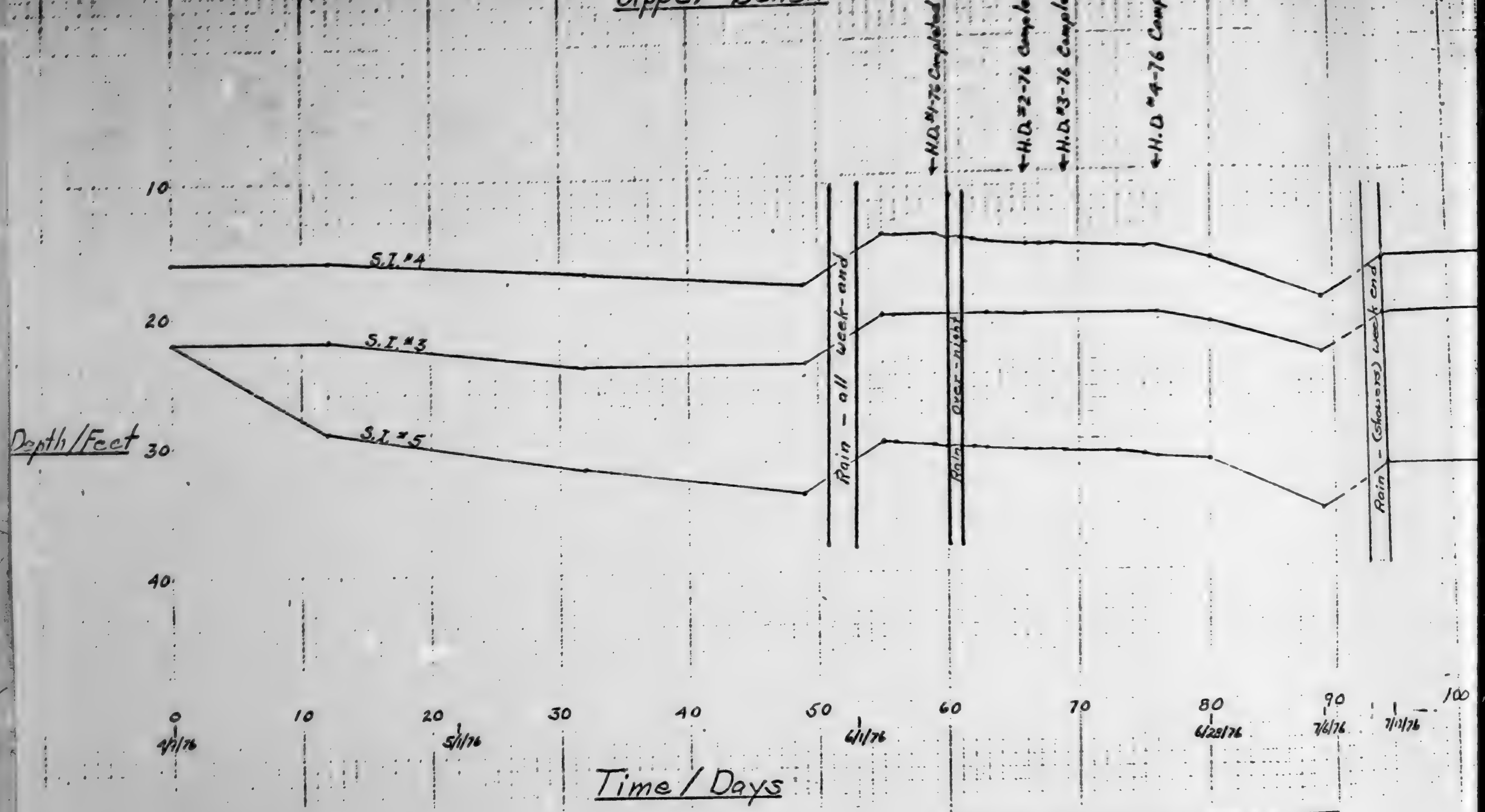


Roberts Mtn. - Westside Cut Slide
Pacific Highway
Douglas County
29 June 76 PWB

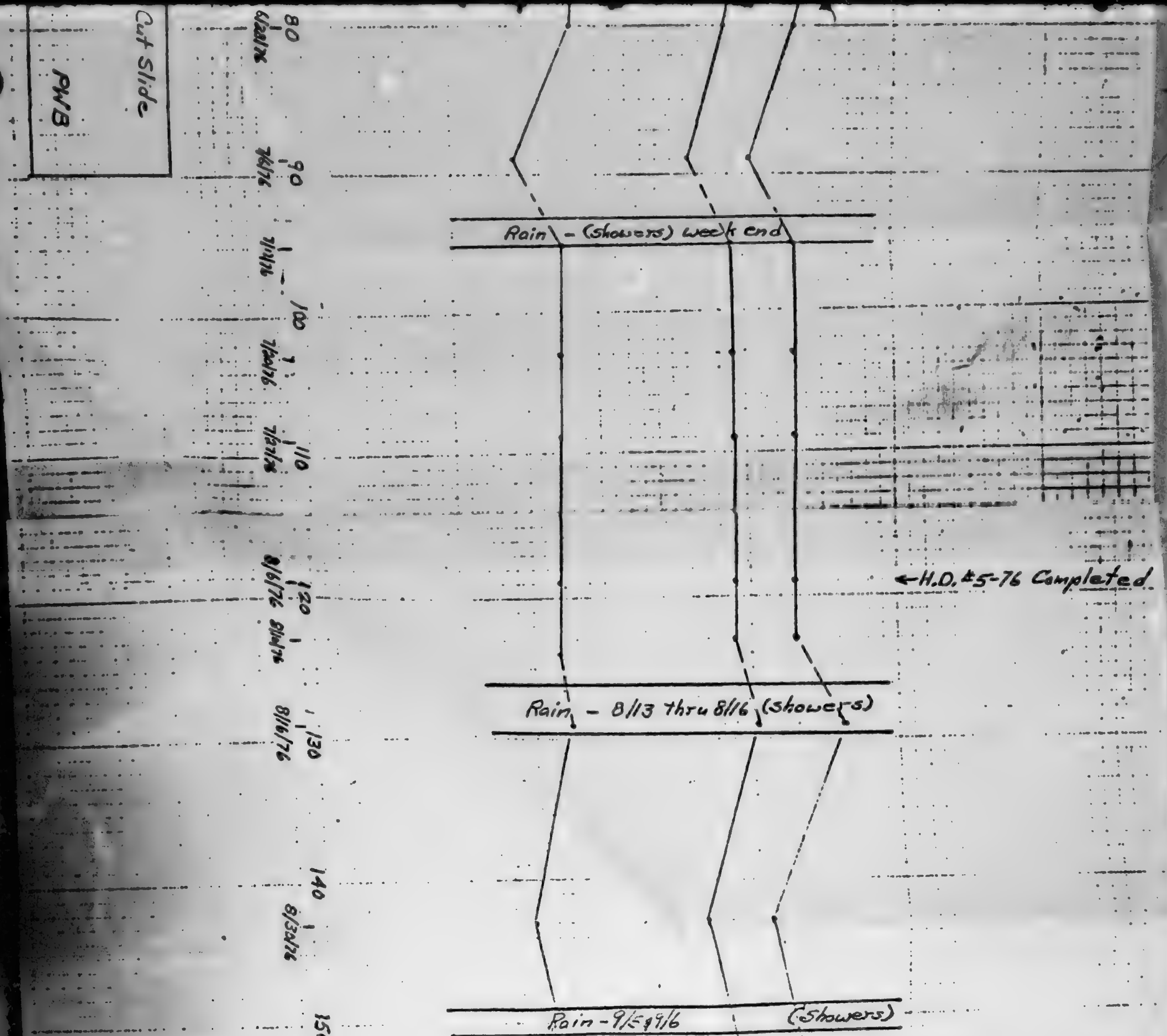


...e Cut Slide
90
7/12/76
100
110
7/21/76
120
8/10/76
130
8/15/76
140
9/13/76
Rain-(showers) week end
H.D.#5-76 Completed
Rain - 8/13 thru 8/16 (Showers)
Rain 9/5 & 9/6 (Showers)
Rain 9/16
Plotted Curve
Postulated Curve

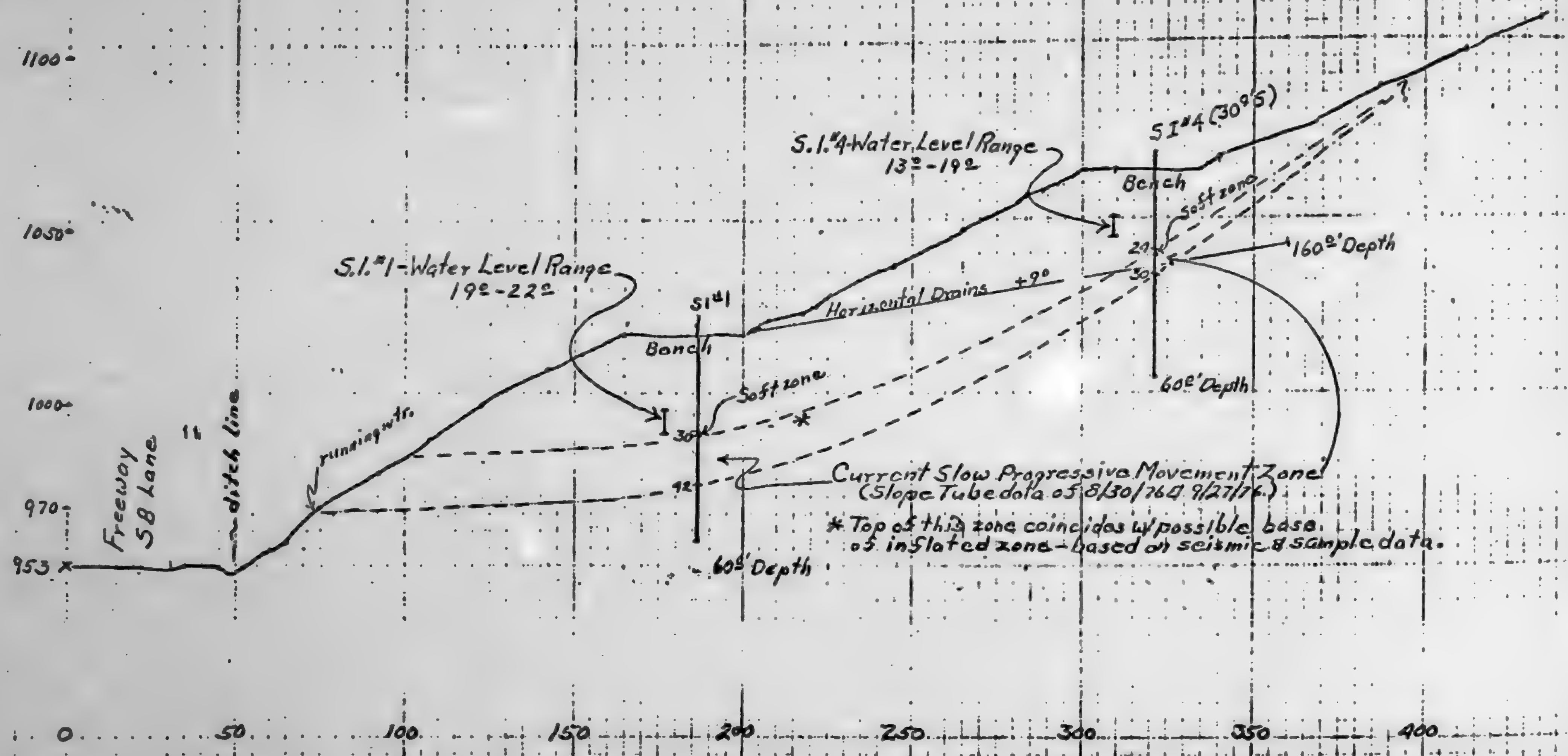
Water Level Fluctuation Pattern
Upper Bench



Roberts Mtn.-Westside Cut Slide
Pacific Highway
Douglas County
29 June 76 PWB


Cut Slide
PWB
80
6/28/76
90
7/6/76
7/14/76
100
7/20/76
110
7/27/76
120
8/6/76
8/10/76
130
8/16/76
140
8/30/76
150
160
9/13/76
9/17/76
9/21/76
Rain - (showers) week end
← H.D. #5-76 Completed
Rain - 8/13 thru 8/16 (showers)
Rain - 9/5 & 9/6 (showers)
Rain 9/16
Plotted Curve
Postulated Curve

Profile - Sta 2963+00 thru SI #1
(Integrated Section)

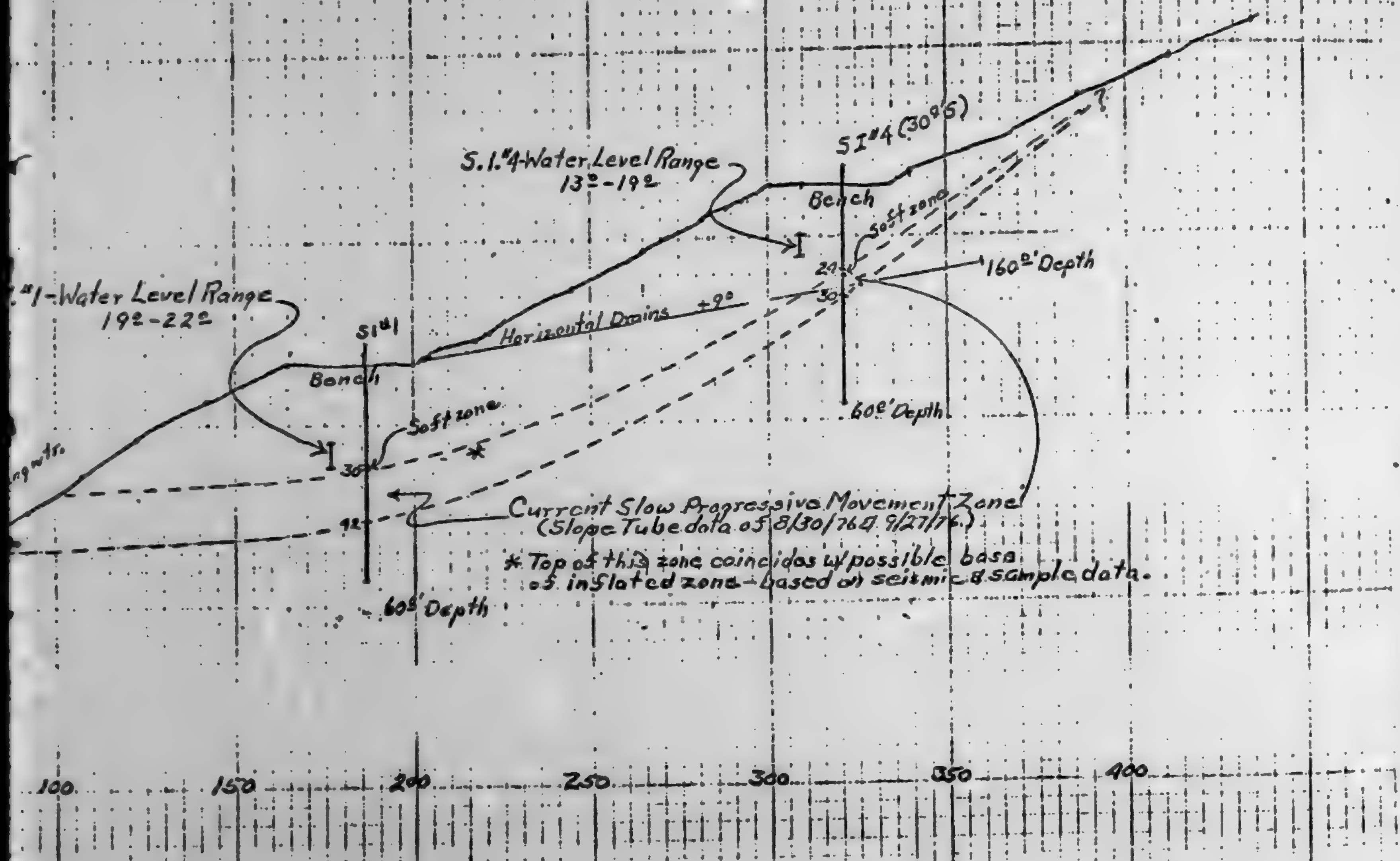

1100
1050
1000
970
953
Freeway
SB Lane
ditch line
running wtr.
S.I. #1 - Water Level Range
19± - 22±
SI #1
Bench
Soft zone
30
42
60± Depth
Horizontal Drains +9°
S.I. #4 - Water Level Range
13± - 19±
SI #4 (30±5)
Bench
Soft zone
29
30
160±' Depth
60±' Depth
?
0
50
100
150
200
250
300
350
400

Current Slow Progressive Movement Zone
(Slope Tube data of 8/30/76 & 9/27/76.)

* Top of this zone coincides w/possible base of inflated zone - based on seismic & sample data.

Roberts Mtn. Sec.
Westside Cut Slide
Pacific Highway
Douglas County
Scale: 1" = 50'

Profile - Sta 2963+00 thru SI #1
(Integrated Section)


S.I. #4 Water Level Range
13± - 19±
SI #4 (30±5)
Bench
Soft zone
24±
30±
160±' Depth
60±' Depth
Horizontal Drains +9°
#1-Water Level Range
19± - 22±
SI #1
Bench
Soft zone
30±
92±
*
60±' Depth
ngwtr.
?
Current Slow Progressive Movement Zone
(Slope Tube data of 8/30/76 & 9/27/76.)
* Top of this zone coincides w/possible base of inflated zone - based on seismic & sample data.
100
150
200
250
300
350
400

Roberts Mtn. Sec.
Westside Cut Slide
Pacific Highway
Douglas County
Scale: 1" = 50'

Encl. 5

FORM E-30

OREGON STATE HIGHWAY DIVISION
INTER-DEPARTMENT CORRESPONDENCE
ROSEBURG, OREGON 97470

ELLIOTT PARKER
No. EG004

DATE APRIL 4,1977

TO MEMO TO FILE

FROM ELLIOTT PARKER
REGION 3 ENGINEERING GEOLOGIST
by Peter W. Bowers,Jr. Peter W Bowers, Jr.
Engineering Geologist

SUBJECT Pacific Highway Douglas County
Shady Interchange-Dillard Junction Section
Roberts Mountain Westside Cut Slide
PROGRESS REPORT

On March 30,1977, Fred Yarbrough, Soils and Geology Engineer (Salem), requested by telephone that an updated report be forwarded to him.

The date of the last Progress report was December 13,1976. The monitoring of Slope Tubes and Water Levels has continued and the data evaluated and integrated.

SLOPE INDICATOR DATA-

Slope Indicator Data currently indicates movement in Tubes No. 1 & 4 with the directional focal point being located about where the competent rib or shell is slowly rupturing near the freeway level. This movement is believed to parallel the major slide crack on the surface along the northerly side of the slide area. Rate of movement, though progressive, is indicated to vary seasonally. Surface indications in the form of cracks,pressure ridges, over thrusts, and sloughing are further evidence of this slow but continuous subsurface adjustment. Cracks are visible over a much larger area than the "current limits of the slide proper."

WATER DATA -

Water level fluctuations in the Slope Indicator Tubes as previously stated are evidenced to be directly affected by added surface water.

Horizontal Drains appear to have increased the rate of drop of the water levels in the Slope Indicator Tubes to some extent. The rapid build up of water levels in the tubes indicate they would remain high during a pro-longed rainy season even though there is an increased flow from the existing horizontal drains. This year we have had no pro-longed rainy season but six (6) of the eight (8) drains are making some water which is estimated to total one gallon per minute plus/minus.

CONCLUSIONS and RECOMMENDATIONS-

It is suggested your consideration be given to the Conclusions and Recommendations contained in the last Progress Report dated December 13,1976.

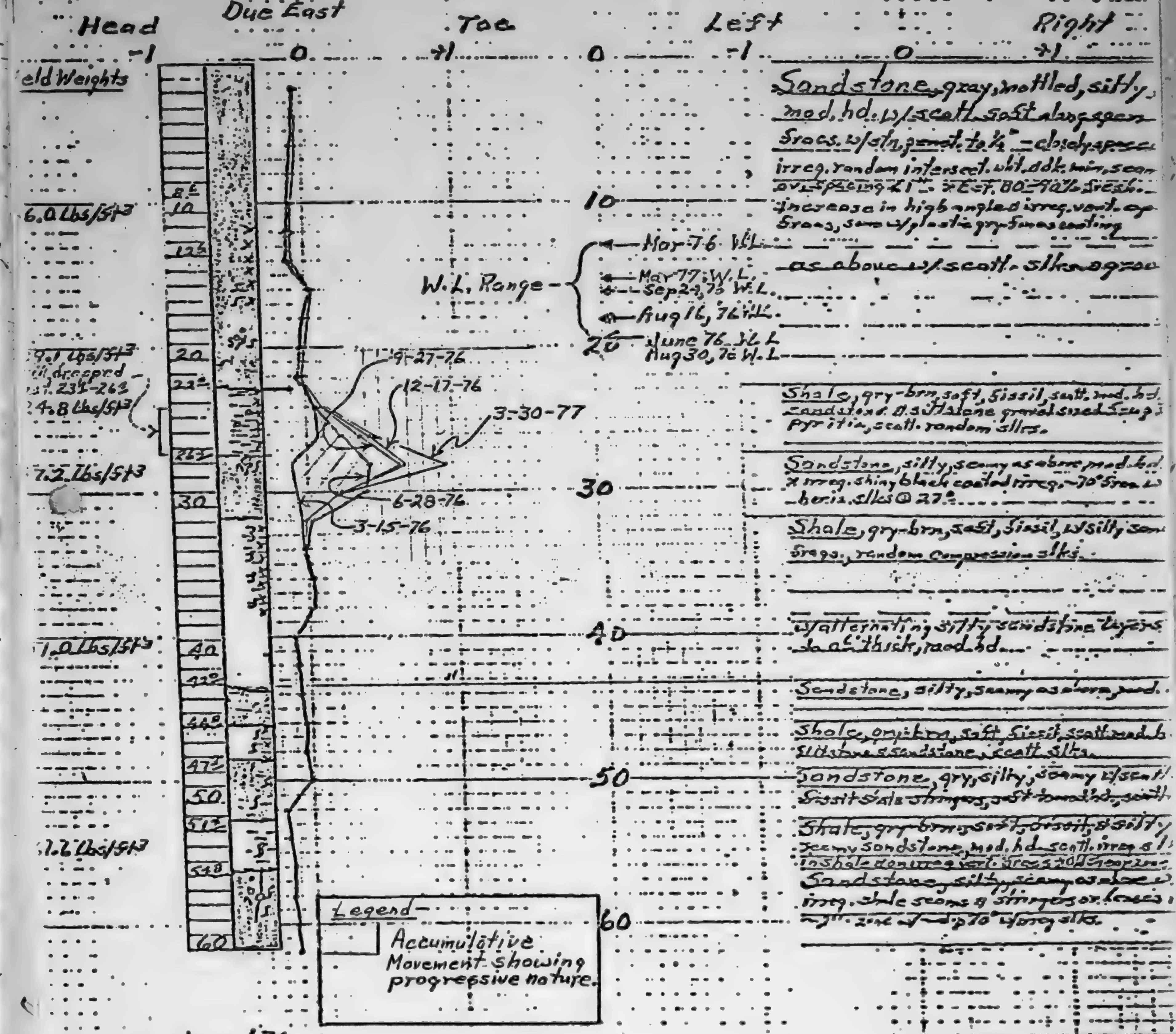
c.c. Jim Gix
F. Yarbrough
A. Bates
Ron Chassie
file

Enclosures
1) Loc. Map(Roberts Mtn.-Problem Areas)
2) Comp. Graph S.I. #1
3) Sum. Graph S.I. #1
4) Accum. Movement Graph S.I. #1
5) Comp. Graph S.I. #4
6) Sum. Graph S.I. #4
7) Accum. Movement Graph S.I. #4
8) Rpt. dtd. May 10,1976 (Lithology)
9) Rpt. dtd. Dec. 13,1976 (Progress)

[illegible] Westside Cut Slide

Scale: Horizontal = Inch
Vertical = Feet

S.U. 2ª



— June '76
- - - Initial Reading Plot 3/15/76
▨ Indicated Accumulative Adjustment
— Reading of 8/16/76
— Reading of 8/30/76

6/28/76

- - - Reading of 9/27/76

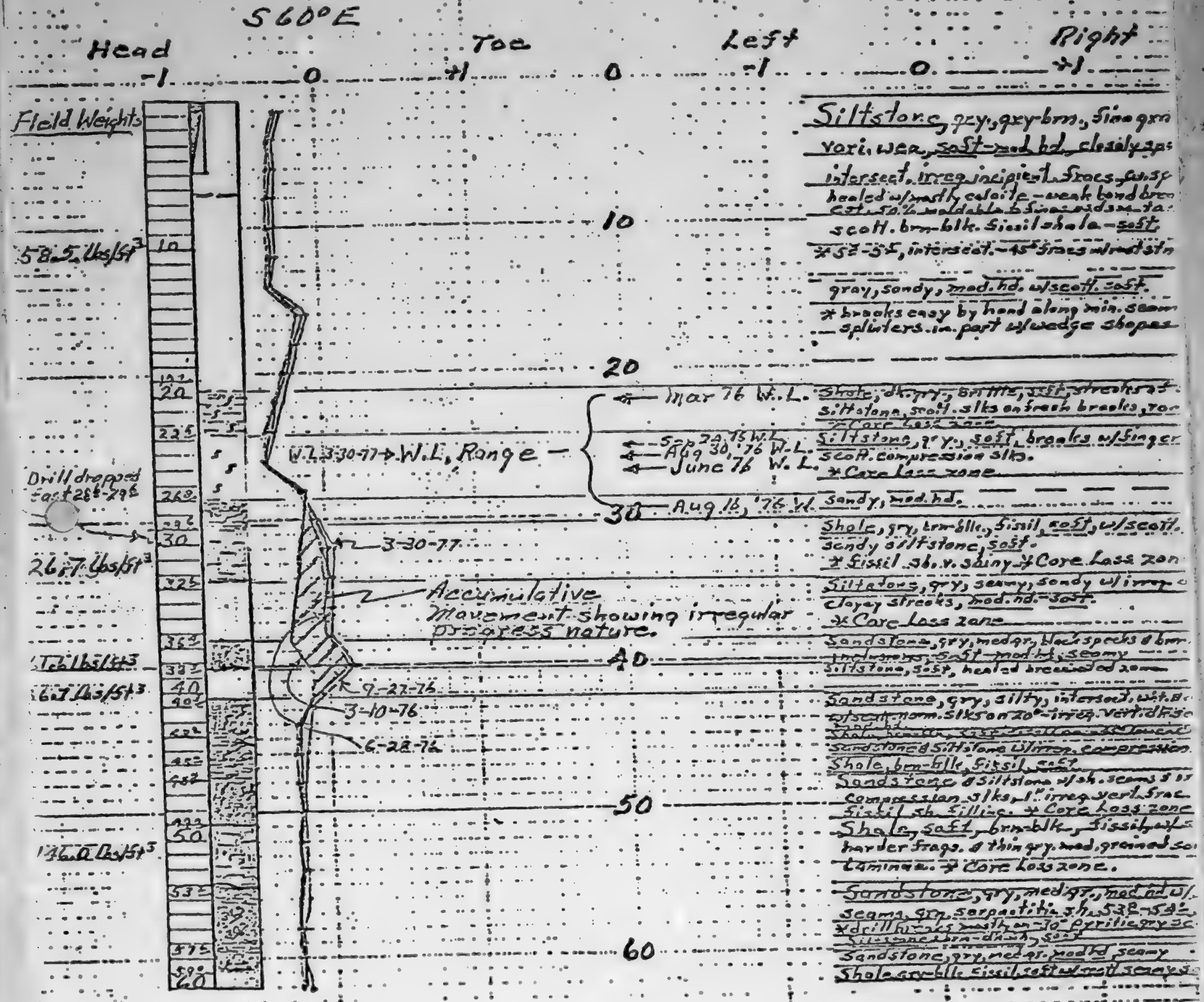
Fnrl. 5

Tube #4

Roberts Mtn.-Westside Cut Slide

Scale: Horizontal = Inch
Vertical = Feet

S.U. 3²



Siltstone, gry, gry-brn, fine grn vari. wea, soft-mod. hd. closely sp. intersect. irreg. incipient fracs, [illegible] healed w/mostly calcite - weak bond [illegible] [illegible] 50% [illegible] scatt. brn-blk. fissil shale - soft.

* 5½-5½, intersect. -45° fracs w/red stn

gray, sandy, mod. hd. w/scatt. soft.

* breaks easy by hand along min. seam splinters in part w/wedge shapes

Shale, dk. gry, brittle, soft, streaks of siltstone, scatt. slks on fresh breaks, [illegible]

* Core loss zone

Siltstone, gry, soft, breaks w/finger scatt. compression slks.

* Core loss zone

Sandy, mod. hd.

Shale, gry, brn-blk, fissil, soft, w/scatt. sandy siltstone, soft.

* fissil sh. v. shiny * Core Loss zon

Siltstone, gry, seamy, sandy w/irreg. clayey streaks, mod. hd.-soft.

* Core Loss zone

Sandstone, gry, med gr. black specks & brn. [illegible], soft-mod. hd. seamy

Siltstone, soft, healed brecciated zone

Sandstone, gry, silty, intersect. wht. [illegible] w/scatt. norm. slks on 20° - irreg. vert. [illegible]

Shale, [illegible]

Sandstone & Siltstone w/irreg. compression.

Shale, brn-blk, fissil, soft

Sandstone & Siltstone w/sh. seams & [illegible] compression slks, 1" irreg. vert. frac fissil sh. filling. * Core Loss zone

Shale, soft, brn-blk, fissil w/ harder frags. & thin gry. med. grained [illegible] laminae. * Core Loss zone.

Sandstone, gry, med gr., med hd w/ seams, gry. serpentitic sh. 53½-54½.

* drill [illegible] on 30° pyritic gry [illegible]

Siltstone, brn-dk [illegible], soft

Sandstone, gry, med gr. mod hd seamy

Shale, gry-blk, fissil, soft w/scatt. seamy [illegible]

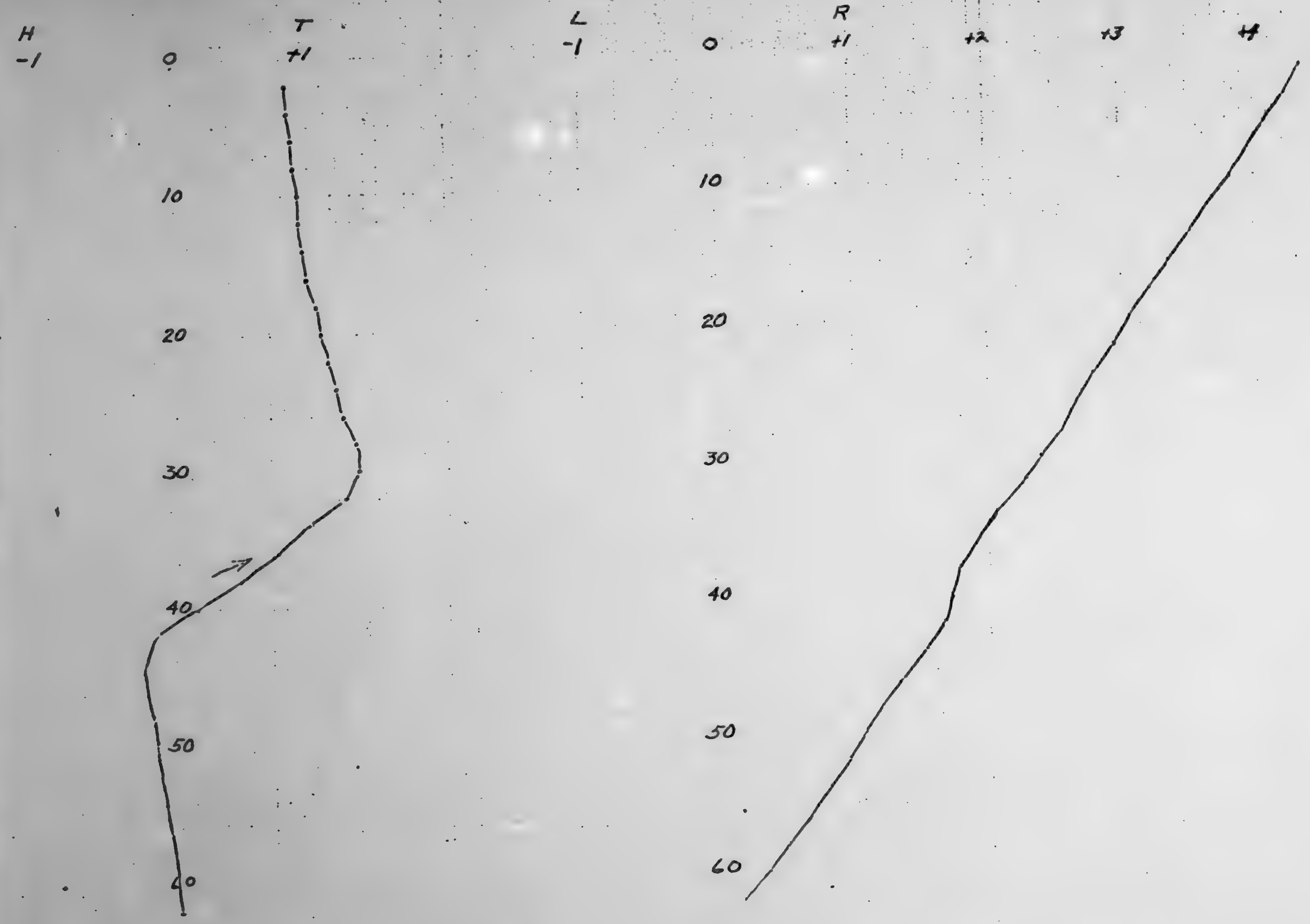
—— Reading of June 76
—— Initial Reading Plot 3/10/76
▨ Indicated Accumulative Adjustment
—— Reading of 8/16/76
—— Reading of 8/30/76
6/28/76
- - - Reading of 9/27/76

Encl. 1

Tube #1

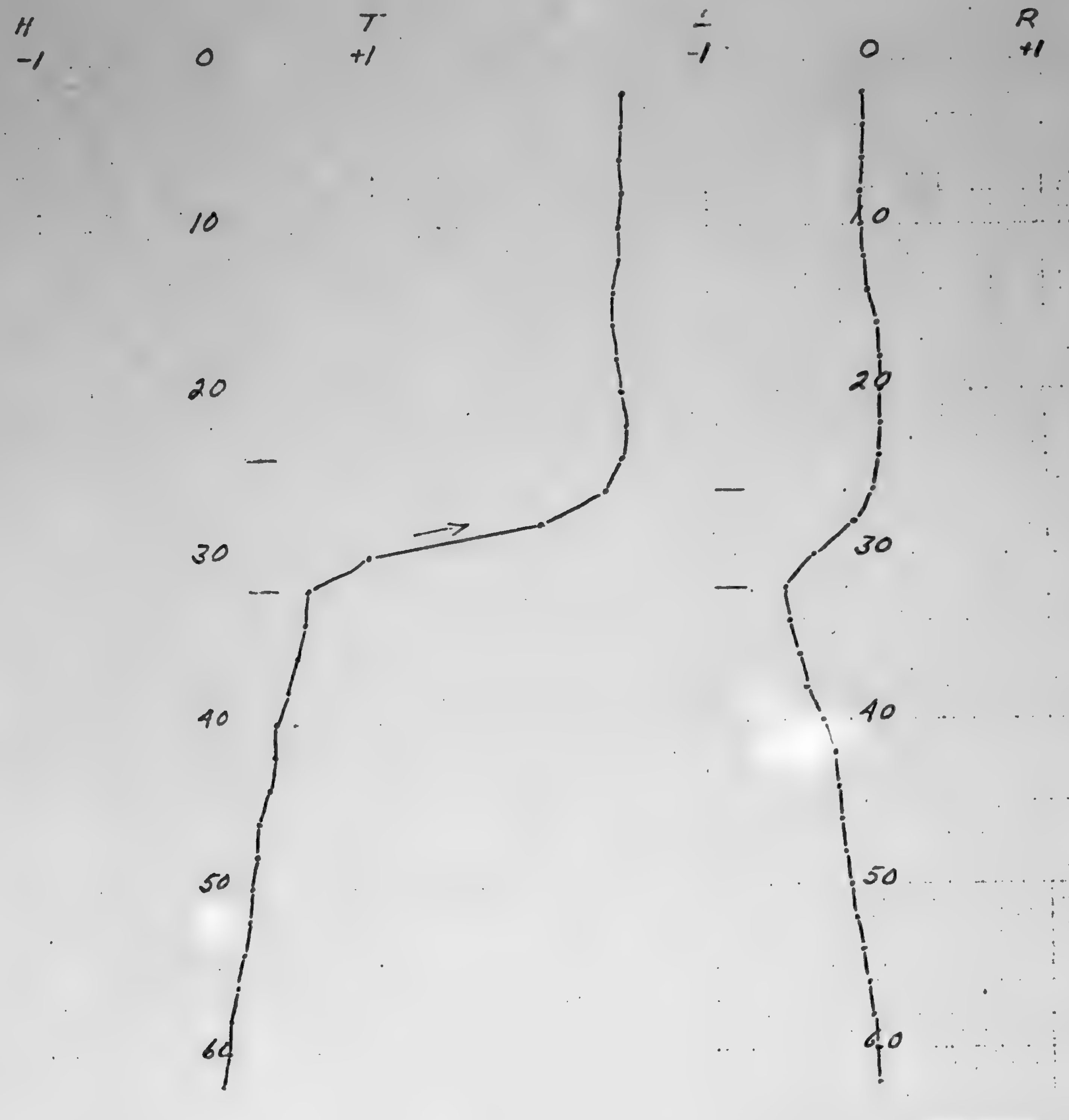
L R 184

Roberts Mtn. - Wes ide Cut Slide



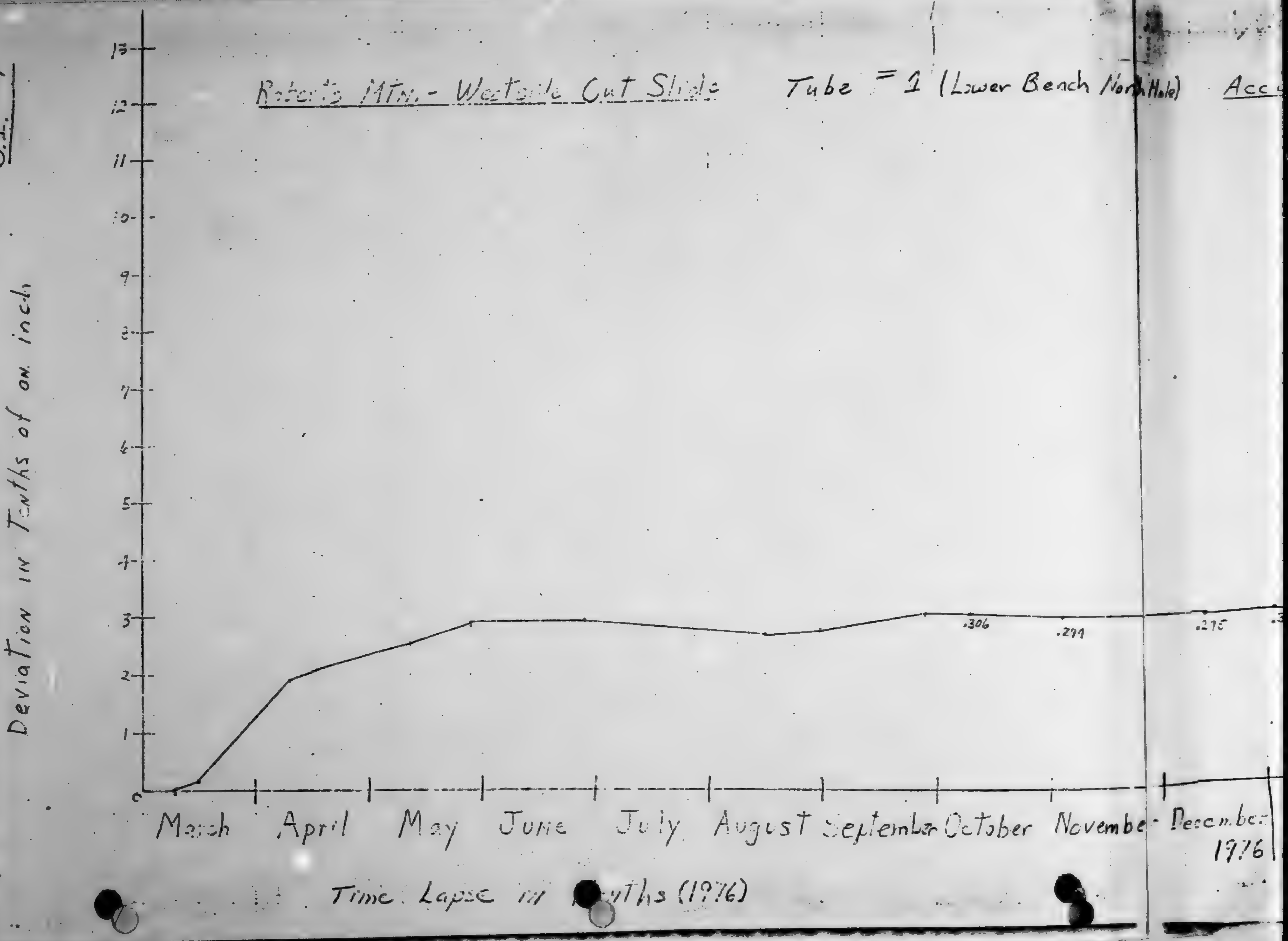
Tube # 1 3-30-77
(Summation Graph) . PB

Roberts Mountain
Westside Cut Slide

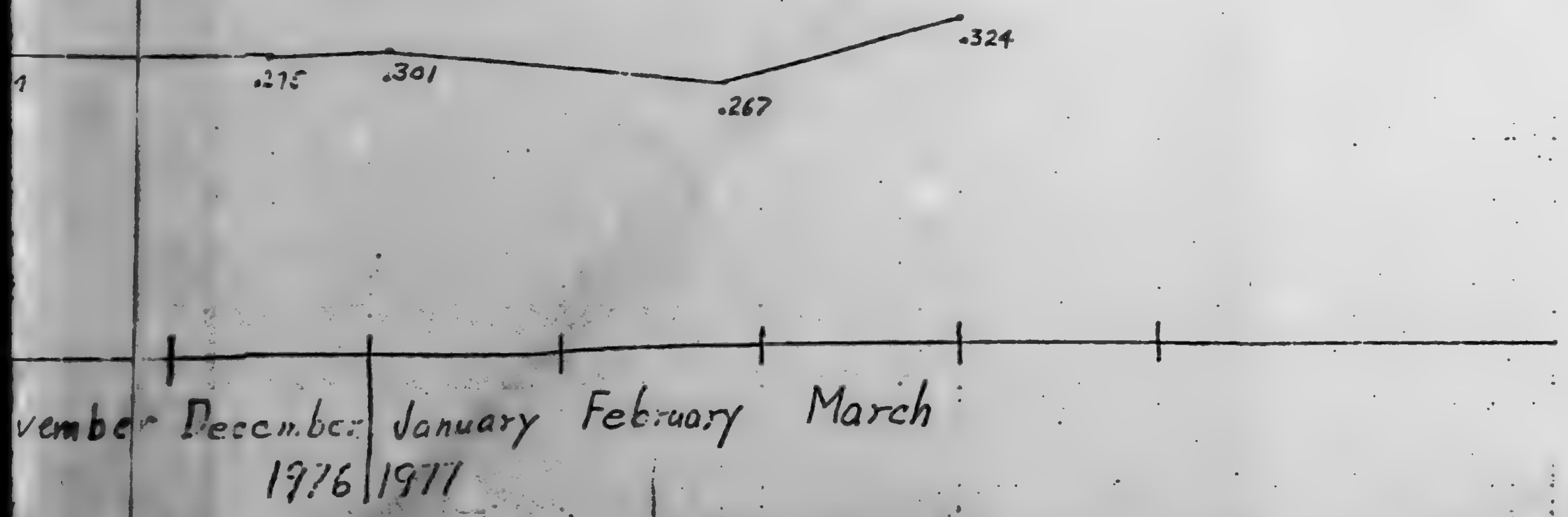


Tube #4
3-30-77
(Summation Graph)

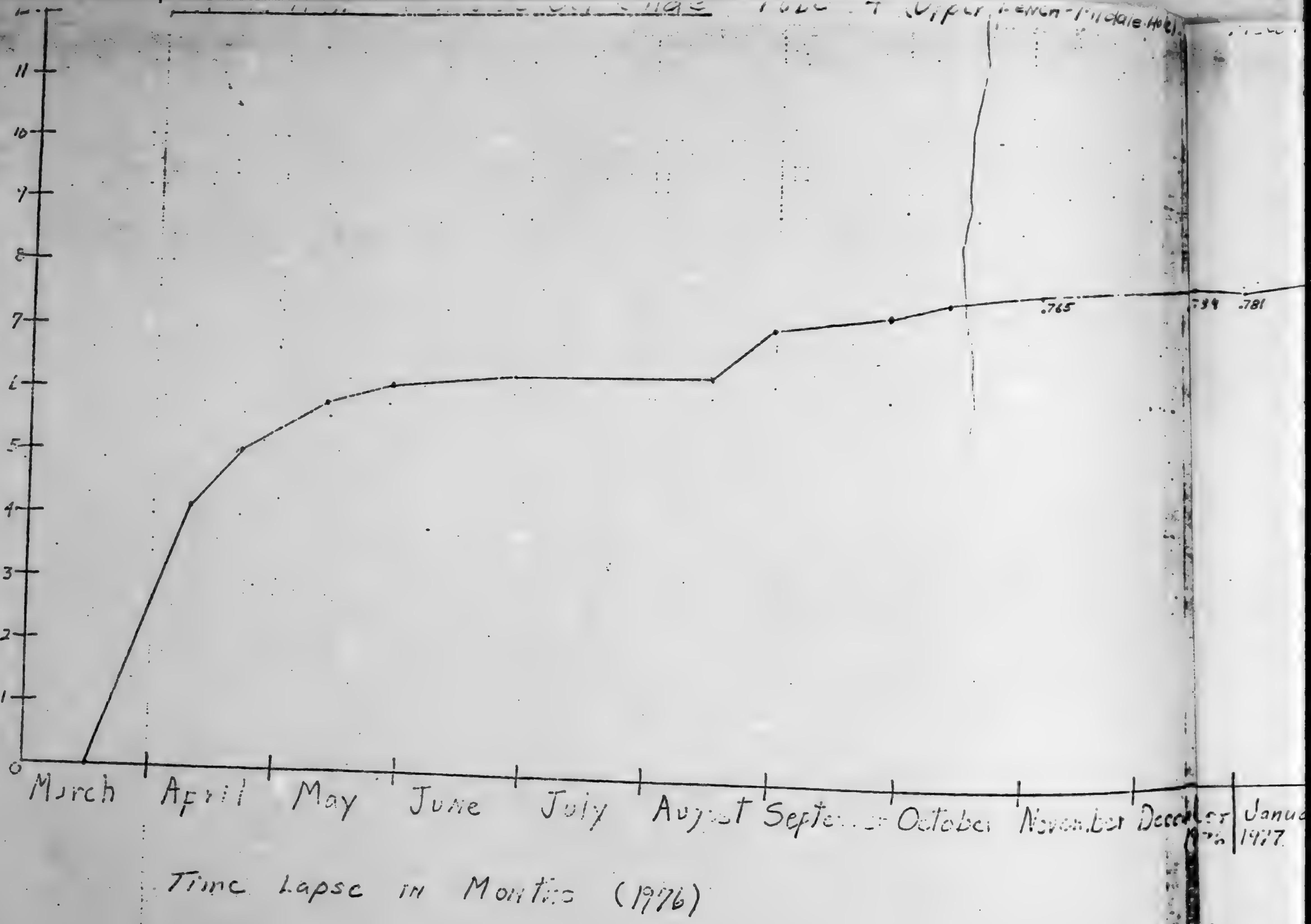
S.I. #1

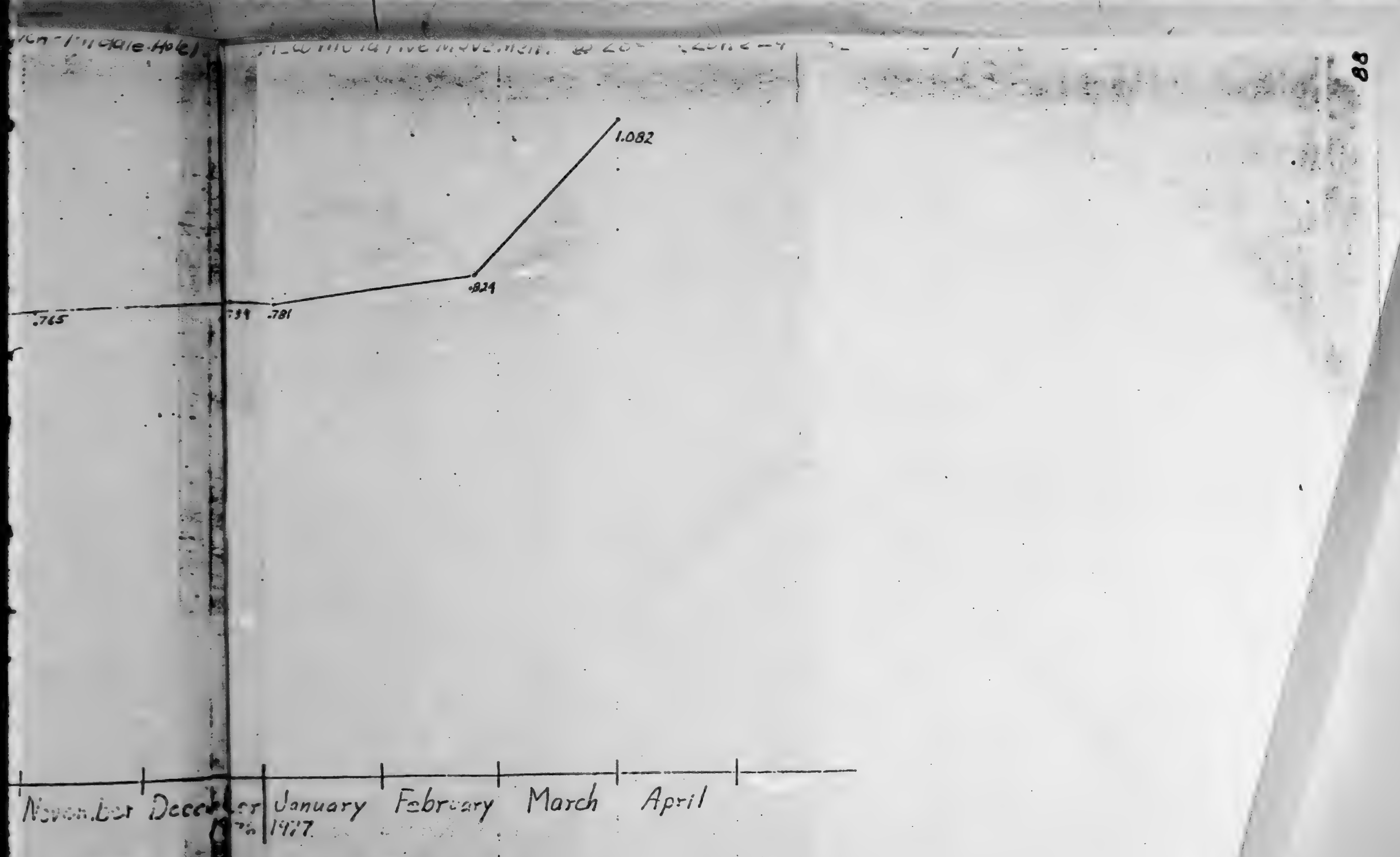

Roberts Mtn. - Westside Cut Slide Tube #1 (Lower Bench North Hole) Acc
Deviation in Tenths of an inch
0
1
2
3
4
5
6
7
8
9
10
11
12
13
.306
.279
.275
March April May June July August September October November December 1976
Time Lapse in Months (1976)

ch North Hole) Accumulative Movement @ 36° (Zone 30° - 42°) - using $a^2+b^2=c^2$



[illegible] Tube 7 (Upper Bench-Middle Hole)




ch-Middle Hole)
Cumulative Movement @ 20' Zone 4
.765
.79
.781
.824
1.082
November
December
January 1977
February
March
April

SECTION D

WEBER SLIDE

Region Geologist Report - Final Update....90

Slope Tube Deviation Graphs....95

Horizontal Drain Rate of Penetration Graphs....98

Foundation Investigation - Profile....101

Drill Hole Logs....102

Plan Map - Weber Slide Area....106

Vertical Well Program Report....107

Lateral Drain Pilot Holes....110

Gravel Test Hole Locations....111

Drain System Proposal....112

Rock Inlay Location Recommendations....113

Drain and Inlay Plan....114

Place in file of [illegible] for [illegible] in progress [illegible]

FORM E-30

OREGON STATE HIGHWAY DIVISION

INTER-DEPARTMENT CORRESPONDENCE

ROSEBURG, OREGON 97470

DATE MAY 10, 1976

TO ELLIOTT PARKER
REGION 3 ENGINEERING GEOLOGIST

FROM PETER W. BOWERS, JR. Peter W. Bowers, Jr.
ENGINEERING GEOLOGIST

SUBJECT EXPLORATION EVALUATION
ROBERTS MOUNTAIN WESTSIDE CUT SLIDE
SHADY INT.-DILLARD JUNCTION SECTION
PACIFIC HIGHWAY DOUGLAS COUNTY

The Roberts Mountain lithology consists of an irregular series and mixture of sandstones, siltstones, and shales of varied thickness and competency. This series appears to have been highly fractured then rehealed with predominantly calcitic and possibly chloritic mineralization with scattered indications of some degree of metamorphism.

The basic problem is indicated to be related to the relatively high percentage of incompetent shales coupled with impure sandstones of which most have a low tensile strength.

The shales appear to be of the compaction type which slake and disintegrate when subjected to alternate wetting and drying with the rapidity and completeness of disaggregation being a function of the thoroughness of the previous drying. This type shales may be compressed by the load of overlying strata. If this load is removed by excavation and/or erosion, the rock will expand and open joints and fissures may be formed which tends to weaken the rock still further and also furnish channels along which water may penetrate and disaggregate the constituent particles.

Progressive deterioration of these essentially compaction shales is indicated by slaking and disintegration on the surface and in the subsurface by very soft zones or voids beneath some of the sandstone members. These soft zones or voids are believed to periodically serve as water courses at certain times of the year. As firm support at the base of the low tensile strength sandstone members is gradually taken away, they adjust downward by breaking off, through development of irregular vertical fractures. This makes it possible for more and more water to get into the material which is an integral step in the progressive deterioration process resulting in mass movement. Seismic data indicates the current thickness of the affected material to be approximately 25 feet.

Current movement is believed to be intermittent and segmental with the magnitude dependent on the availability of and introduction into of water into this heterogeneous material that is predominantly highly susceptible to slaking and disintegration..

Encl. 8

SECTION D

WEBER SLIDE

Region Geologist Report - Final Update..............................90

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Rock Inlay Location Recommendations.........113

Drain and Inlay Plan........................114

OREGON STATE HIGHWAY DIVISION

INTER-DEPARTMENT CORRESPONDENCE

ROSEBURG, OREGON 97470

DATE July 18,1977

TO Alfred Shirley, Jr.
Region 3 Engineer

FROM Elliott Parker
Region 3 Engineering Geologist
by Peter W. Bowers, Jr. Eng'r. Geologist
Peter W. Bowers Jr.

SUBJECT WEBER SLIDE - Final Update
Shady Interchange - Dillard Jct. Sec.
Pacific Hwy. Douglas County

Analysis of Slope Tube Readings, Water Levels and Horizontal Drilling Data at Weber Slide has resulted in several data supported conclusions. The slide mass is highly silty with irregular water flow channels, and does not react favorably to installation of small diameter horizontal drains that are intended to function freely over a prolonged period of time. Movement is very slow and progressive with current instability largely due to the inability of the water to pass uniformly through or out of the slide mass. Movement of the total slide mass is indicated to be segmental with the divisions being made into lower, middle, and upper segments, which to date have adjusted individually. The lower segment, which involves both lanes of the freeway, is indicated to be the key target toward which our efforts should be currently directed in working to achieve increased stability.

PIEZOMETER INSTALLATION:

Surface water influence on some of the holes used in monitoring water levels in the lower segment had been previously observed. It was believed necessary to obtain positive evidence that water was possibly moving along the slip plane, pressuring up, and spreading out under the southbound lane. Using slope indicator data as a guide, three piesometers were installed in which bentonite seals were placed a short distance above the slip plane. (Enclosure # 1)

P.S.# 1-77, located near S.I.#3 on the outside northbound shoulder, was drilled to a depth of 59.5 feet but caved back to 48.5 feet. The Piezometer Tube was set @ 48.5' with 10.0 feet of perforations 36.0-46.0 feet and the 2.0 foot bentonite seal @ 32.0 feet. P-gravel was used as packing below the seal with the remainder of the hole random backfilled. The water level range since completion of 3-4-77 to date is 14.0 to 15.0 feet from ground level.

P.S.# 2-77, located near S.I.# 1 on the inside southbound shoulder, was drilled to a depth of 42.0 feet but caved back to 36.0 feet. The Piezometer Tube was set at 36.0 feet with 10.0 feet of perforations 24.0-34.0 feet and the 2.0 foot bentonite seal at 22.0 feet. P-gravel was used as packing below the seal with the remainder of the hole random backfilled. The Water Level Range since completion on 3-7-77 to date is 5.0 to 6.0 feet from ground level.

P.S. # 3-77, located near S.I. # 2 on the northbound outside shoulder, was drilled to a depth of 58.0 feet but caved back to 50.5 feet. The Piezometer Tube was set at 50.5 feet with 10.0 feet of perforations 40.5-50.5 feet and the 2.0 foot bentonite seal at 38.0 feet. P-gravel was used as packing below the seal with the remainder of the hole random backfilled. The Water Level Range since completion of 3-10-77 to date is about 32.0 to 35.0 feet from ground level.

Although the ground water is in motion, the rate is believed so slow that the pressure may be considered hydrostatic varying from point to point.

HORIZONTAL DRAINS:

As shown on the Weber Slide Location Map the main water course, from above leading into the designated Water Problem Area is indicated to be from the vicinity above A-8 trending diagonally northwestward down into the vicinity of Slope Tube #3 where it then moves into and along the disturbed area associated with the most northerly crack of the 1971-73 movement. Based on Water Level Data indicating the necessity of a water course leading into the lower segment through a possible tear zone marking the division between the Lower and Middle Segments, three (3) horizontal drains were installed. (See Rate of Penetration Graphs - Enclosure #2.)

Horizontal Drain #6-77, located at about Sta. 3058+05 N.B. was completed on 4-22-77 at a total depth of 239.0 feet, is believed to have intersected several extensive small cracks. This was evidenced when the drill water return was lost at 149.0 feet and the water level in Vertical Well #3-75 N.B. raised visibly and Horizontal Drain #1-76, with which it has a direct connection, started flowing. The slip plane is believed to have been cut by the drill at approximately 203 feet and the encountered water flowed through 235 feet of slotted 2 inch PVC pipe and apparently overcame the effects of the cracks previously encountered. The drain initially flowed 2.5 GPM and is currently flowing about ½ GPM.

Horizontal Drain #7-77 located at about Sta. 3057+30 N.B. was completed on 4-28-77 at a total depth of 261.0 feet, is believed to have been drilled predominantly in disturbed material. The material was very silty and drilled extremely fast (soft) in most of the hole with numerous points where drill water return was lost with subsequent partial return until completely lost at about 195 feet. Upon completion of the drilling the hole was making about 1 GPM through the drill steel but after installation of 258 feet of slotted 2 inch O.D. PVC pipe this dropped to only a small water seep. No water was ever recovered from the drain pipe but instead was captured by the cracks encountered as indicated during the drilling.

Horizontal Drain #8-77, located at about Sta. 3057+70 S.B. was completed on 5-6-77 at a total depth of 267.0 feet. Drill water return was partial from about 69 feet to the total depth. Drilling was predominantly soft (fast) from 84.0 feet to 247.0 feet with relatively short sections of irregular more resistant (slow) drilling ranging from 2.0 to about 15 feet in length. At 260.0 feet during the drilling operation a small stream of water (about ½GPM) was flowing through the drill steel, but after completion of the drilling at 267.0 feet and installation of 270.0 feet of slotted 2 inch O.D. PVC drain pipe only a very slow drip remained. The tube was dry when checked a couple of days later.

Horizontal Drains no's. 6 & 7 appear to support the presence of a water course, as previously mentioned, which is essentially wandering through a tear zone resulting from segmental sdjustment.

SLOPE INDICATOR INSTALLATION:

Based on Water Levels, Slope Indicator Data, drill data and surface information there was indicated a need for a weighted toe in the specific area which has been defined through a time permitting continual program of exploration and evaluation. It was decided to drill four (4) holes three of which were to be used both for Foundation Investigation (See profile-Enclosure #3) and Slope Indicator Installation on the toe of the current problem area. (Logs-Enclosure #4)

FDH #1-77 completed on 5-18-77 is located on the inside shoulder of the southbound lane at about Sta. 3057+50. Continuous drive samples were taken from 3.0 feet to 54.0 feet at which point refusal was encountered, with the total depth of 54.3 feet. The material as encountered is plastic slayey silty sand matrix with an estimated 30%-50% variably weathered sandstone and siltstone rock fragments. The essentially high blow count is believed due to driving rock fragments ahead in the matrix and this is also indicated by sample recovery.

FDH #2-77 completed on 5-19-77 and located at about Sta. 3061+27 (60' Rt.) was drilled to a total depth of 33.0 feet. Continuous drive samples were taken from 3.0 feet to about 29 feet where refusal was encountered. Blow count and sample examination reveal the possible problem material to go from 3.0 feet to 15.0 feet with a potential of extending to 23.0 feet. (See Enclosure #3) Slope Indicator Tubing was set on bottom with 2.5 sacks of P-gravel. The current water level is 8.7 feet from ground level.

FDH #3-77 (also S.I.#17) completed on 5-26-77 and located about Sta. 3059+92 (60' Rt.) was drilled to a total depth of 49.0 feet. Continuous drive samples were taken 3.0 feet to 39.0 feet and 39.0 feet to 49.0 feet was drilled with a tricone bit. Blow count and sample examination reveal the possible problem material to go from 7.0 feet to 9.0 feet and from 13.0 feet to 17.0 feet with a potential of from 3.0 feet to 23.0 feet. (See Enclosure #3) Slope Indicator tubing was set on bottom with 4.5 sacks of P-gravel. The current water level is 8.9 feet from ground level.

FDH #4-77 (also S.I.# 18) completed on 6-7-77 and located at about Sta. 3058+33 (45' Rt.) was drilled to a total depth of 70.0 feet. Continuous drive samples were taken as much as possible from 2.0 feet to 62 feet with the remainder of the hole being drilled with wireline core and bicone rock bit. Blow count and sample examination reveal the possible problem material to go from 8.0 feet to 18.0 feet with a potential of from 2.0 feet to 24.0 feet.(See Enclosure #3) Slope Indicator tubing was set on bottom with 11.5 sacks of P-gravel. The current water level is 33.2 feet from ground level.

Evidence derived from the foundation drilling and visual observation indicates a probable gradual progressive deterioration of resistance in the toe area.

CONCLUSIONS:

The continued on-going exploration program of the Weber Slide over the past couple of years has resulted in what is believed to be a defined problem area.

The Slide appears to be divided into three (3) segments with each adjusting individually. This is indicated by the apparent accelerated time lag between monitored individual slope tube adjustments. Prior to the latter part of 1974, Tube #1 which is located on the inside shoulder of the southbound lane, showed a major adjustment. This was followed by Tube #3, which is located on the outside shoulder of the northbound lane, which adjusted in May 1976, and subsequently Tube #5, located about 250.0 feet above the barn (near the center of the old 1964 slide) showed an adjustment in May 1977. The indications here may be inferred to signify that a gradual loss of toe support allowed the lower segment to start adjustment initially in the area of the old rock blanket above the culvert and the Humbert ponds. This was followed closely by that of Tube #1 on the southbound inside shoulder, near the toe area. Subsequent different segmental adjustments occurred in the Lower and Middle segments from the base upward at shorter time intervals.

Piezometers with seals set a short distance above the "Slope Tube indicated slip plane" shows the presence of free water under variable head pressures.

Horizontal Drains #'s 6&7 seem to indicate the presence of the water course as mapped as well as the existence of a tear zone marking the division between the lower and middle segments of the slide. The horizontal drain drilling program and overall results has indicated that small diameter horizontal drains which are intended to function freely for a prolonged period of time will perform best if used in conjunction with vertical gravel packed wells.

Foundation Holes #2,3,&4 (which are now S.I.# 16,17&18 respectively) show the toe area to consist of soft to stiff material in about the upper 24 feet. About 3.0 feet to 15.0 feet appears to be the current problem zone. The entire upper 24.0 feet can be considered potential problem material as it is believed the essential ingredients necessary to make the alteration are time and added moisture under stress conditions. The alteration process is believed to be currently in progress as indicated visibly and by recent exploration data.

RECOMMENDATIONS:

Recommended remedial measures confined within or adjacent to the defined problem area, which are believed necessary to work toward stabilization of the slide mass, are shown on the proposed work map except for a more encompassing recommendation for an improved effective surface water drainage system which should have lined or sealed ditches where nesessary. (Enclosure #6)

DRAINAGE - It is recommended consideration be given to the drilling and installation of eight (8) gravel packed 24" vertical wells 40 feet deep, on ten (10) foot centers along the inside shoulder of S.B. lanes from approximately Sta. 3056+80 to 3057+80 and four (4) gravel packed 24" vertical wells, 60 feet deep on 25 foot centers along the outside shoulder of the Northbound lane from approximate Sta. 3055+70 to 3056+70. These wells would cut the slip plane in both cases and would serve as targets for about 12 horizontal drains to effectively transport a considerable quantity of water directly to an improved and maintained surface drainage system or directly out of the problem area. This would hopefully lower the water table in the general area.

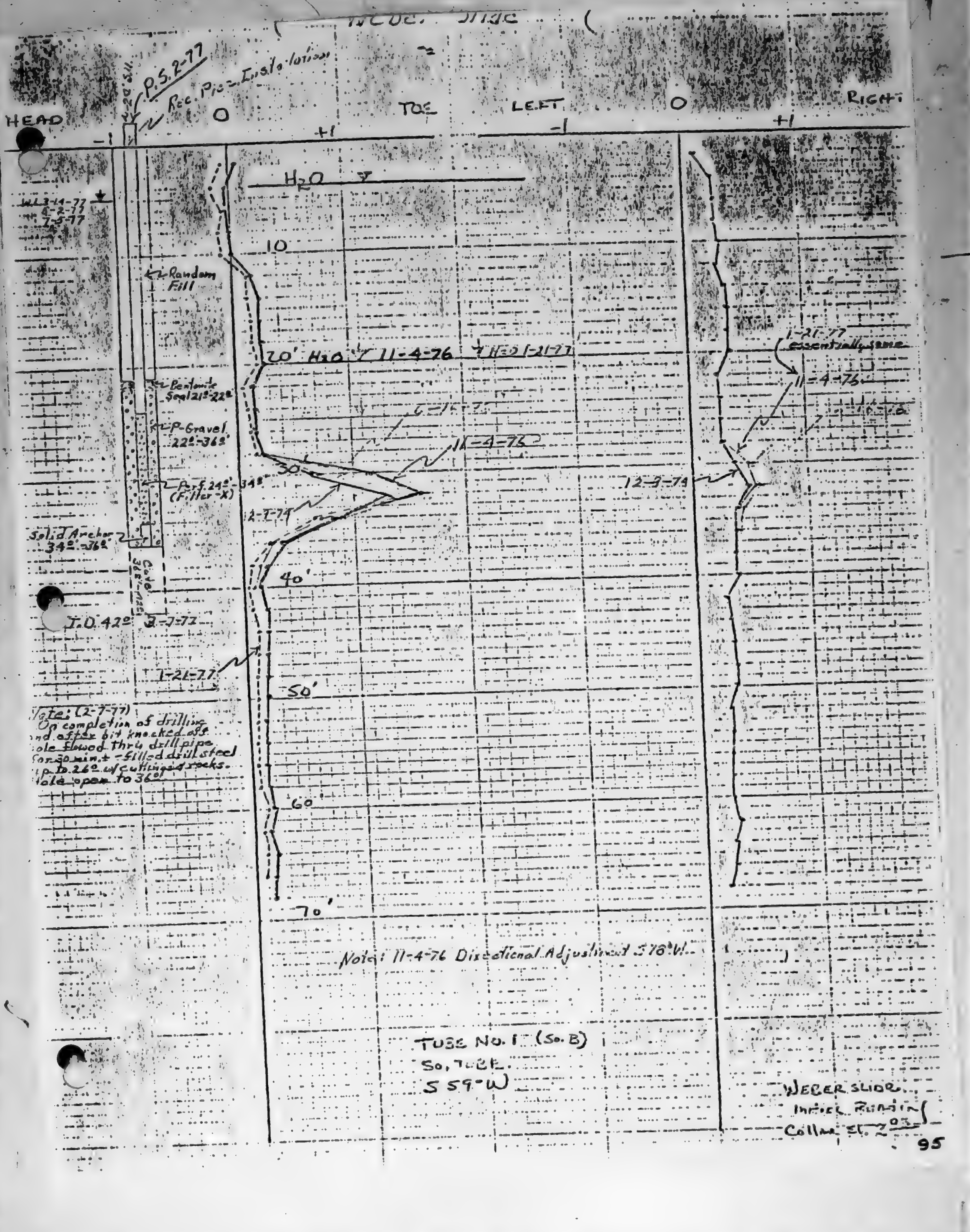
07

ROCK INLAY - Slope Indicator monitoring, surface evidence and foundation exploration data indicate the need for a weighted toe. It is recommended consideration be given to the installation of a Rock Inlay in the area shown on the proposed work map. (Encl.#6)

It is further recommended the cut slope of the Northbound lane involving the older rock blanket be redressed and the rock blanket repaired as necessary.

It is also recommended a Rock Blanket with a perpendicular thickness of 3.0 feet be installed on the median slope between Sta. 3056+00 to Sta. 3059+50.

c.c. F.W. Yarbrough
A.W. Bates
FHWA (Ron Chassie)
file



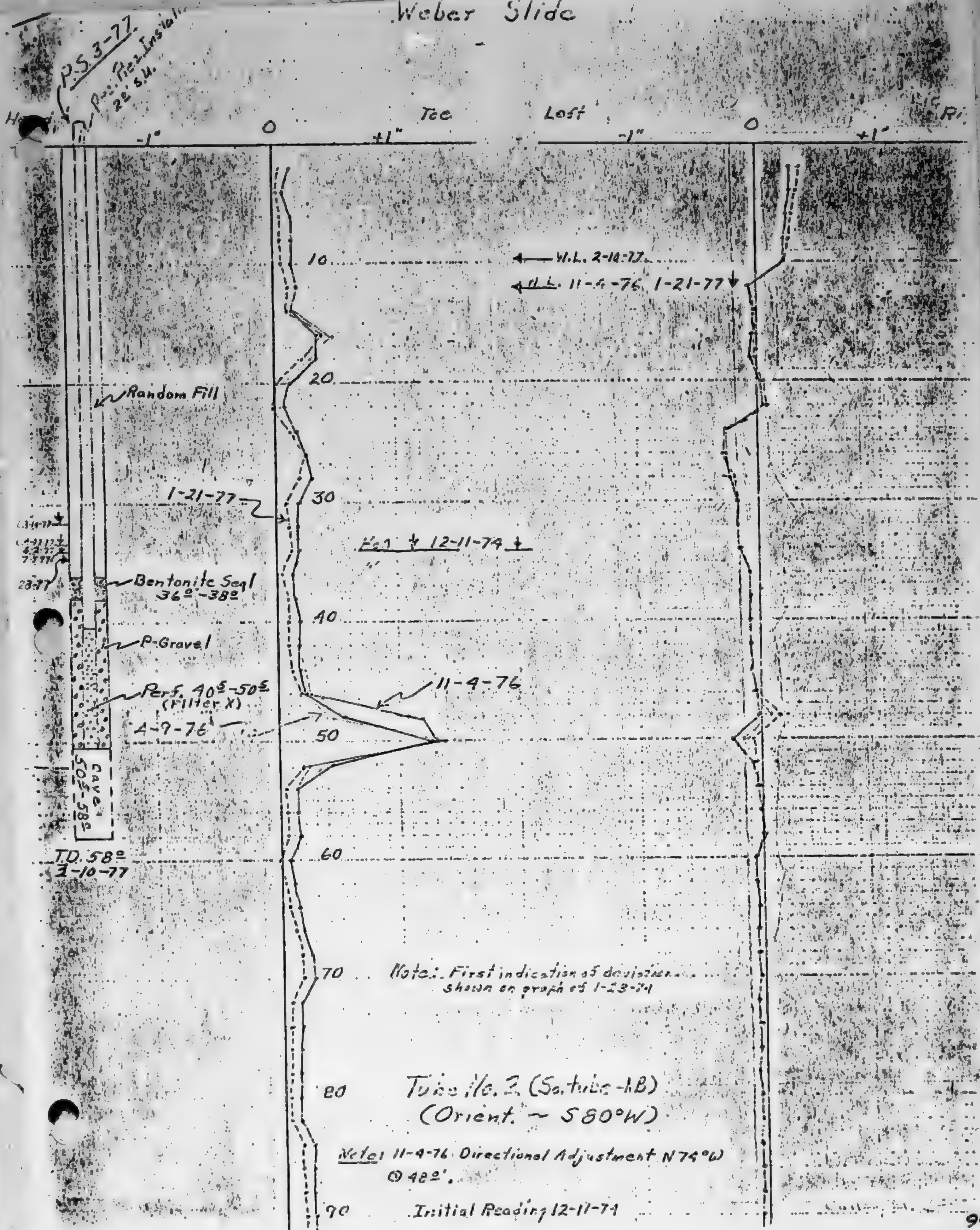
Note: (2-7-77)
On completion of drilling
and after bit knocked off
hole flowed thru drill pipe
for 30 min.± - filled drill steel
up to 26° w/cuttings & rocks.
Hole open to 36°

Note: 11-4-76 Directional Adjustment S 76° W.

TUBE NO. 1 (So. B)
So. TUBE
S 59° W

WEBER SLIDE
Initial Reading
Collar El. 2°3

Weber Slide



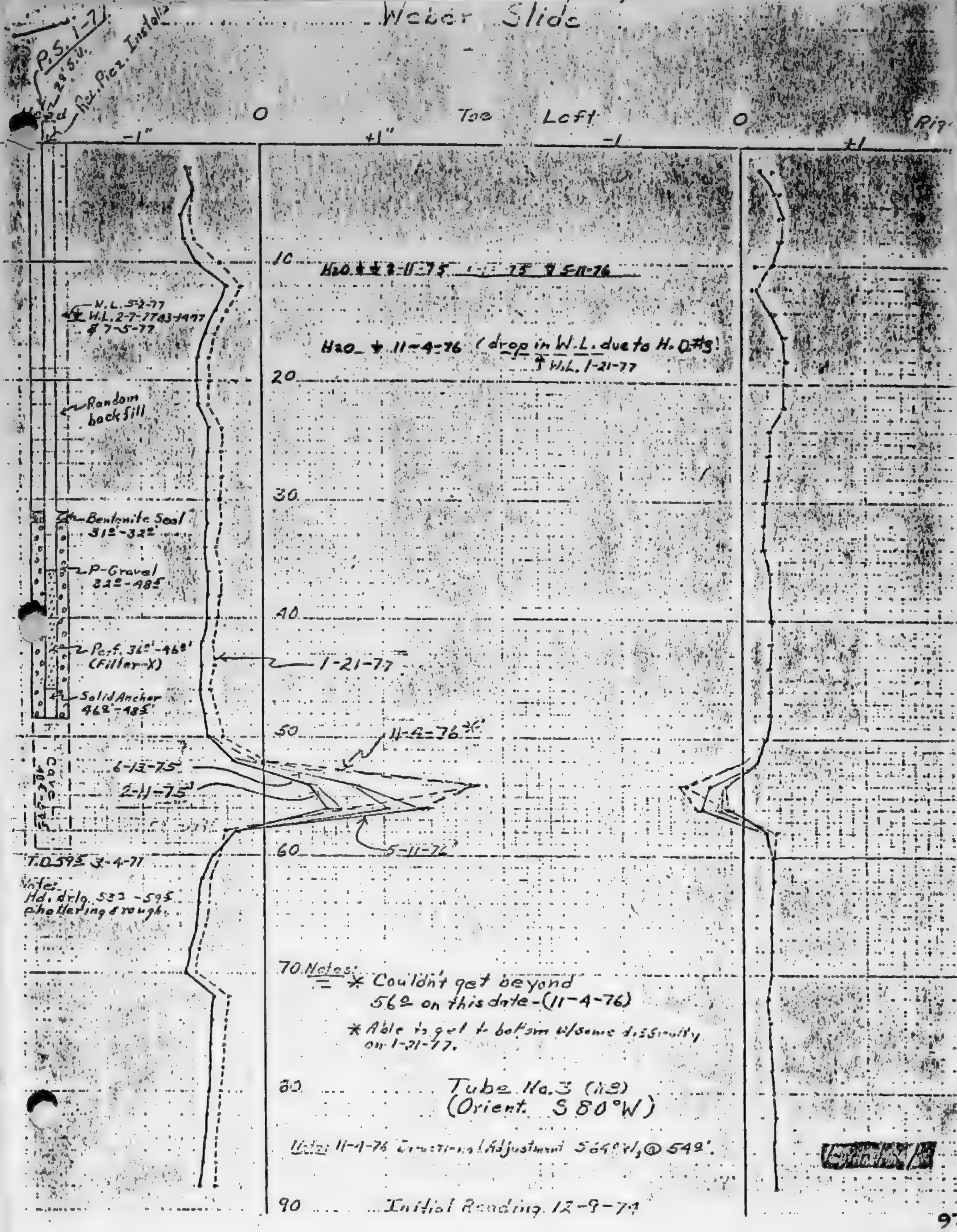
Note: First indication of deviation shown on graph of 1-23-74

Tube No. 3 (So. tube-1B)
(Orient. ~ S80°W)

Note: 11-4-76 Directional Adjustment N74°W
@ 42º.

Initial Reading 12-11-74

Weber Slide



Note:
Hd. drlg. 53.3 -59.5
chattering & rough.

Notes:
* Couldn't get beyond
56.5 on this date-(11-4-76)

* Able to get to bottom w/some difficulty on 1-21-77.

Tube No.3 (NS)
(Orient. S 80°W)

Note: 11-4-76 Directional Adjustment 56.4°rl, @ 54.5'.

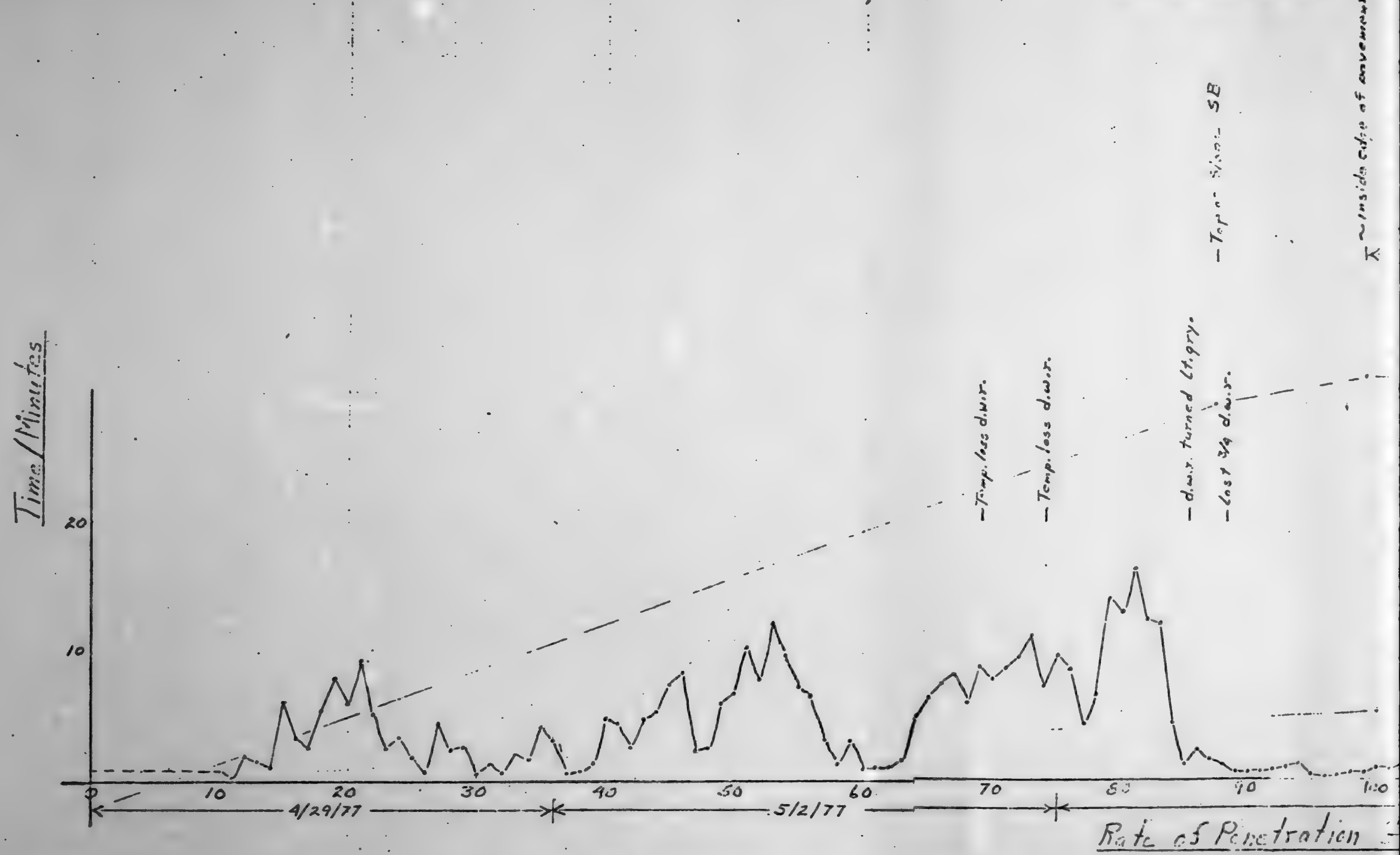
Initial Reading 12-9-74

[redacted]

H.D. #8-77

Weber Slide

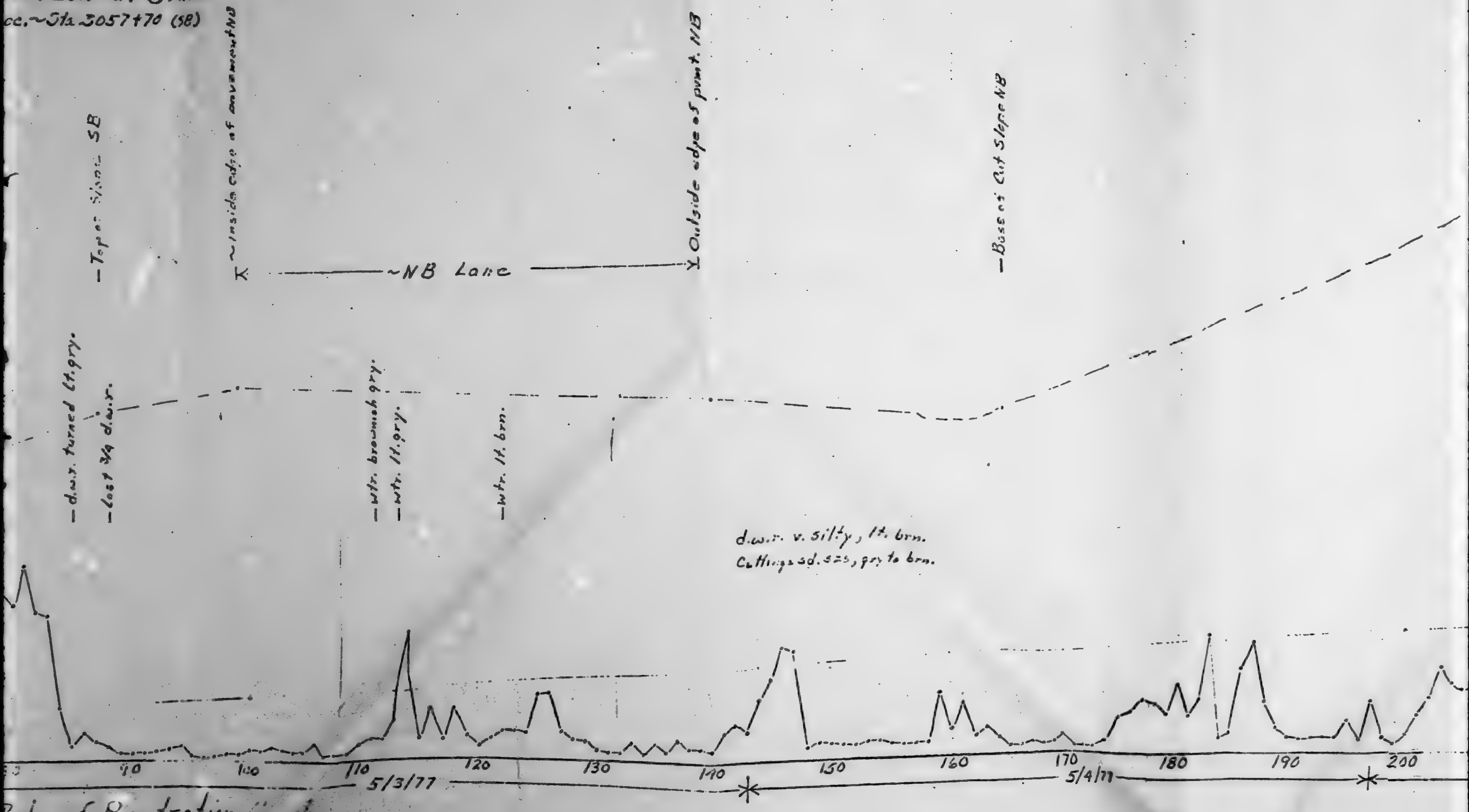
Horizontal Drain #8-
Loc.~Sta 3057+70 (SB)



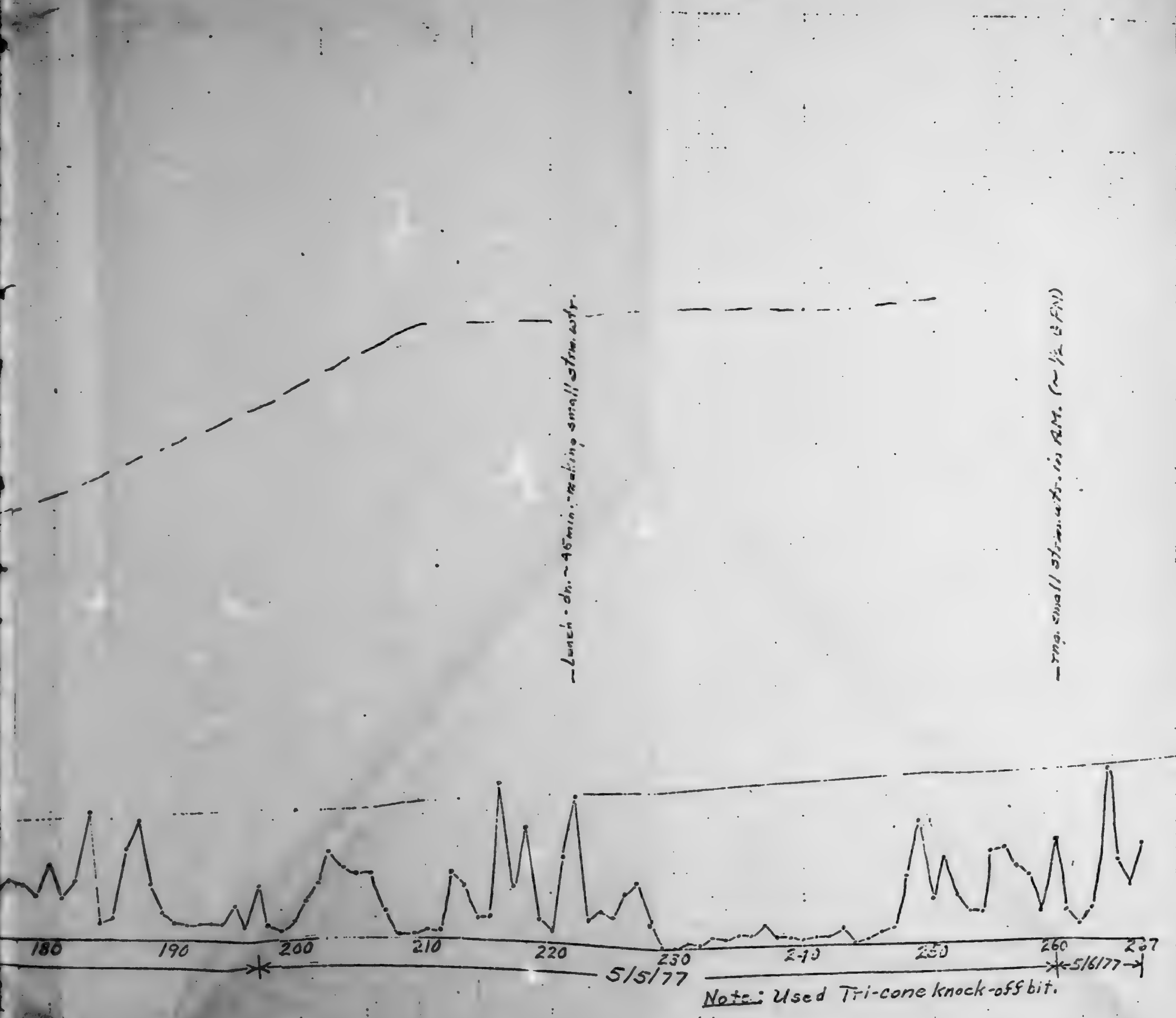
Weber Slide

Horizontal Drain #8-77

cc.~Sta. 3057+70 (SB)



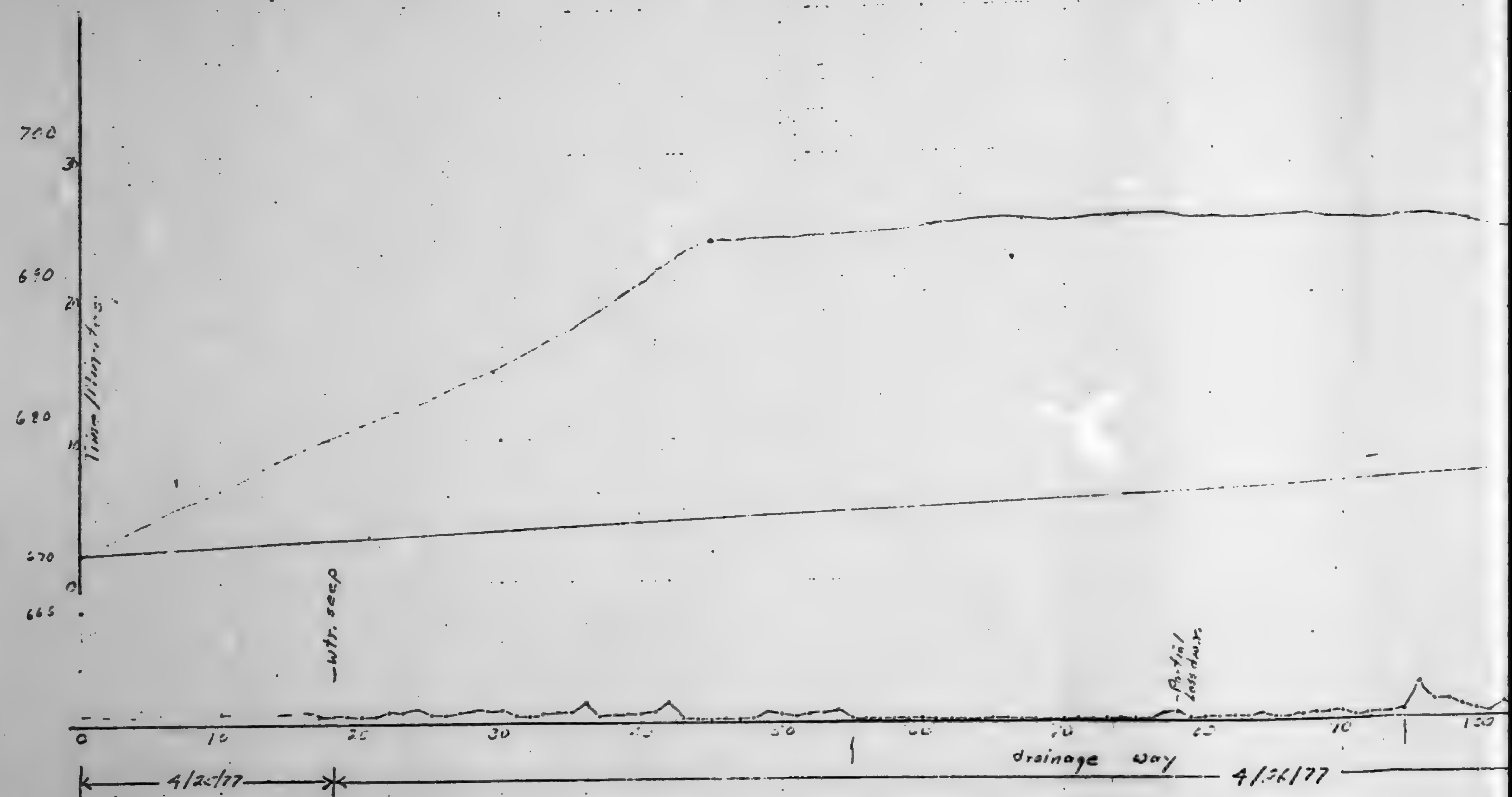
Rate of Penetration Graph



Note: Used Tri-cone knock-off bit.

T.D. 267½'
Installed 270½' PVC. -
V. slow drip.

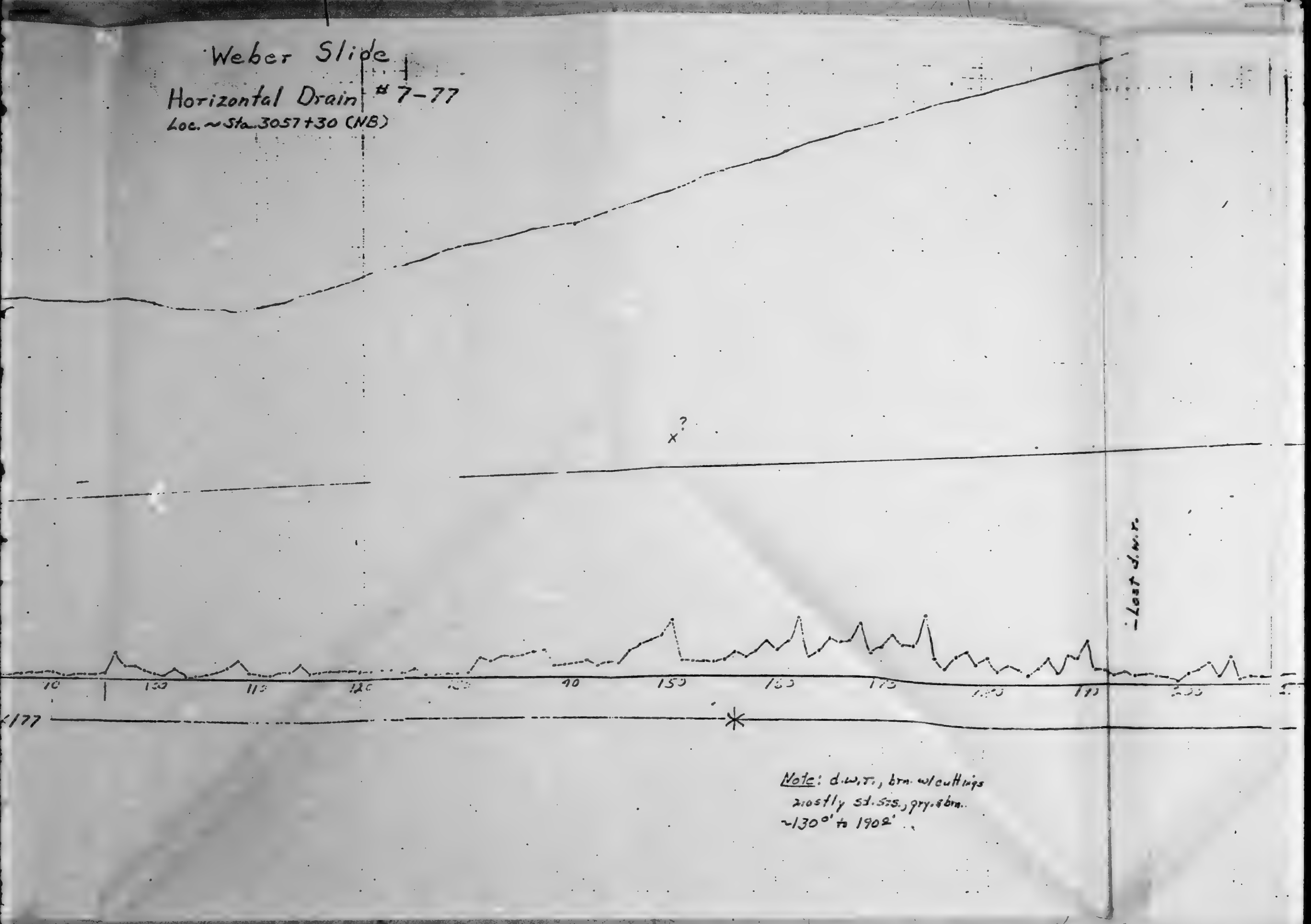
H
Lo



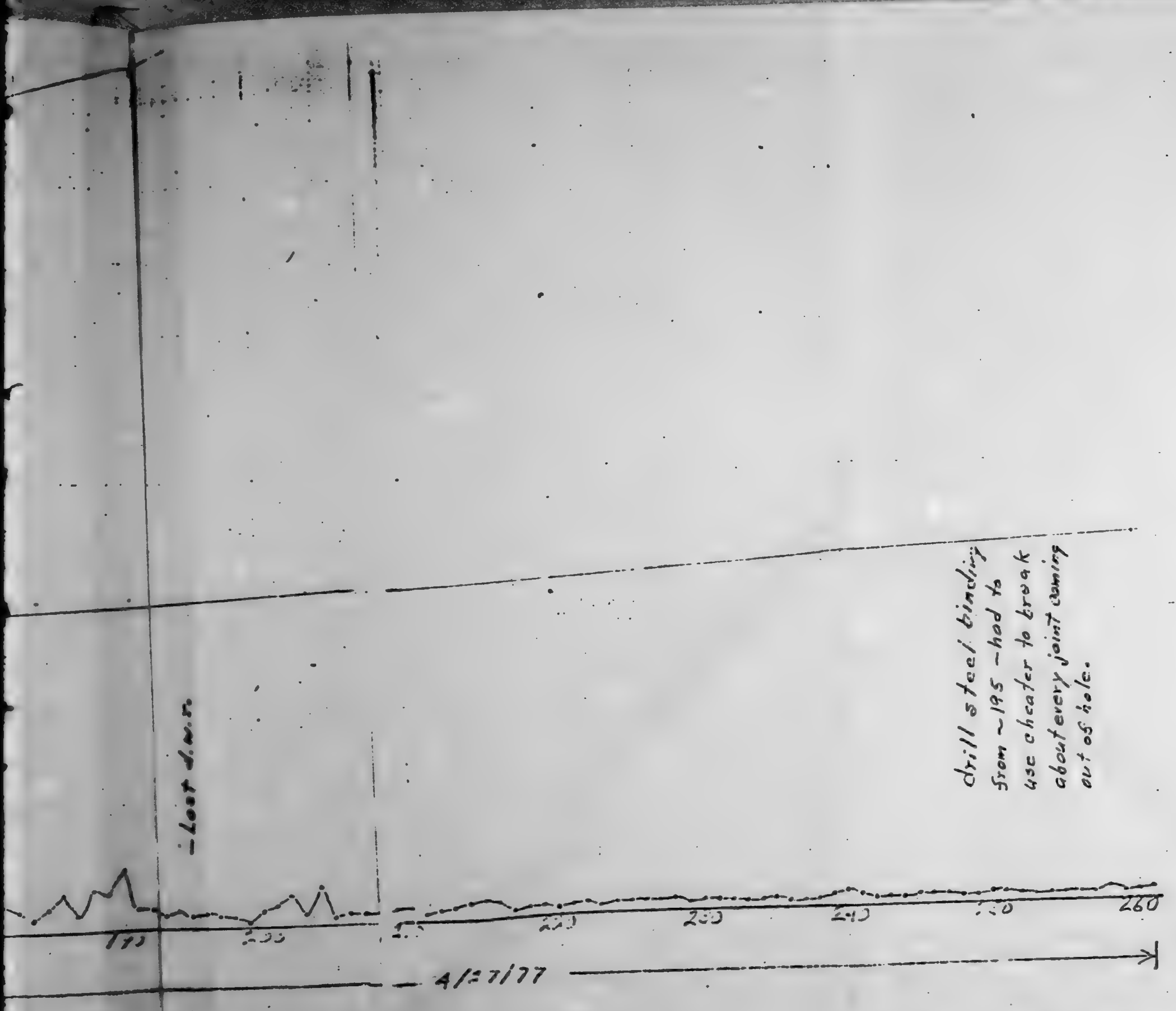
Note: dry yel.-brn. v. silty, sdy/sand, (sdy. silt), little cuttings recovered to 131±.

Weber Slide

Horizontal Drain #7-77
Loc. ~ Sta. 3057+30 (NB)


x?
- Lost d.w.r.
10
115
120
40
150
190
(177

Note: d.w.r., brn. w/cuttings
mostly sd. sts., gry. & brn.
~130' to 190'.



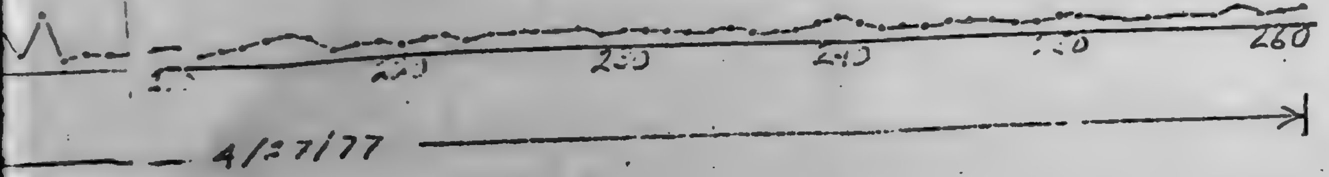
drill steel binding from ~195 - had to use cheater to break about every joint coming out of hole.

T.D. 261'

4/28/77 **Note:** Installed 258' PVC - pipe parted - reglued back to ~120'+ but was also parted farther back - always pushed back to same point - believed plugged due to pulling ~6' when taking joints of drill pipe off. - Making small stream of wtr. mostly coming out on hole btm. instead of pipe.

Used knock-off Hawthorne (Blade Bit)

drill steel binding
from ~195 – had to
use cheater to break
about every joint coming
out of hole.



T.D. 261$^{\underline{0}}$'

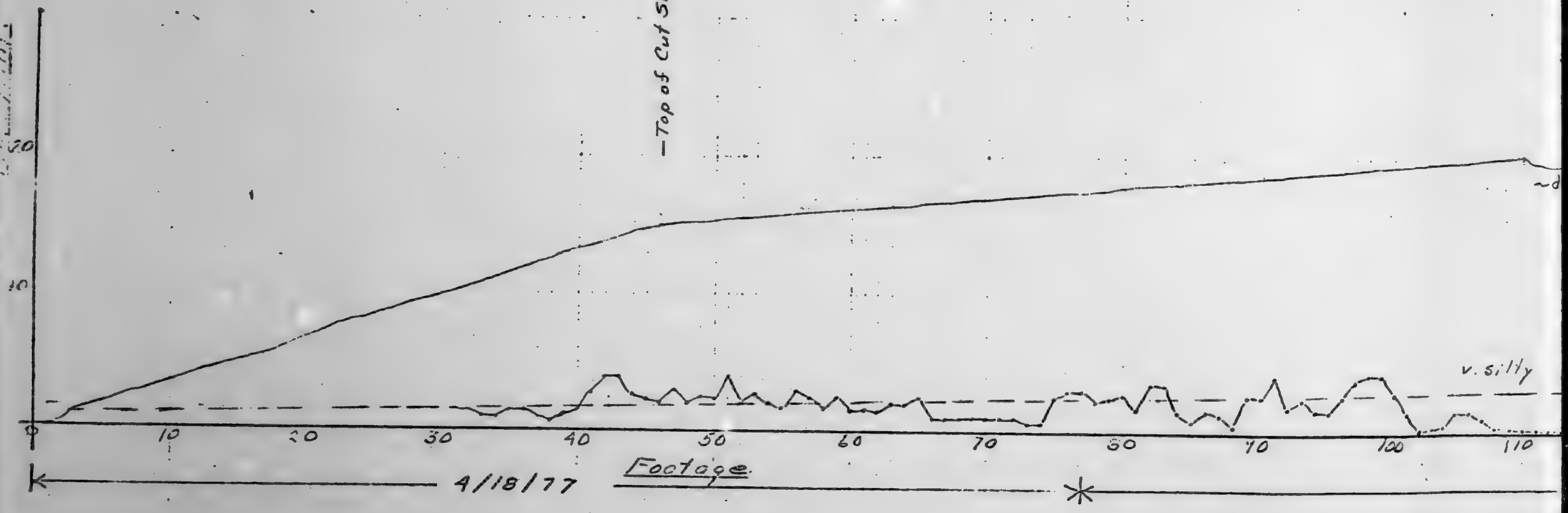
4/28/77 **Note:** Installed 258$^{\underline{0}}$' PVC – pipe parted – regained
back to ~120$^{\underline{0}}$'+ but was also parted farther back – always
pushed back to same point – believed plugged due to pulling & pushing
~6$^{\underline{0}}$' when taking joints of drill pipe off. – Making small
stream of wtr. mostly coming out on hole btm. instead of pipe.

Used knock-off Hawthorne (Blade Bit)

H.D. #6-77

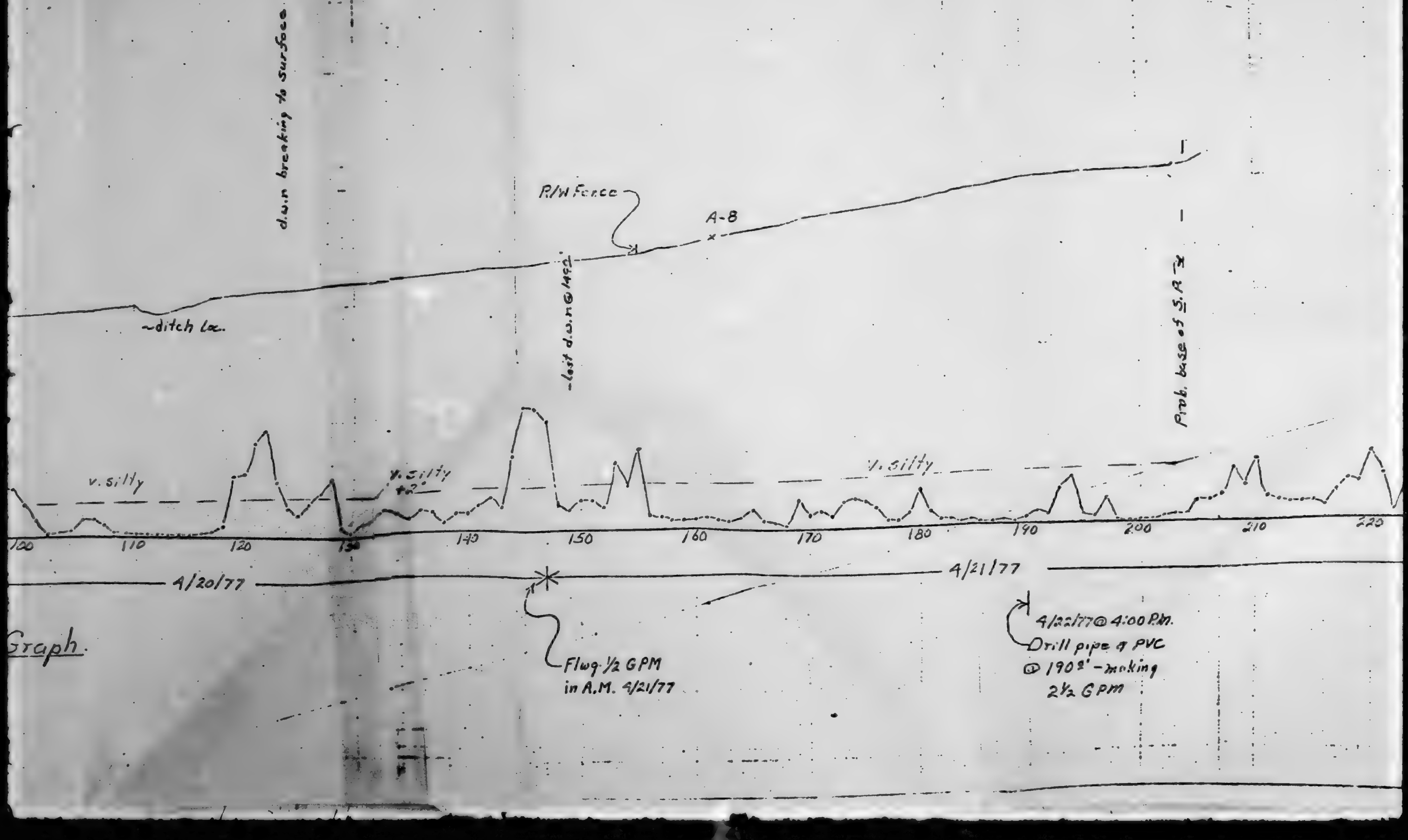
Weber Slide

Shady Interchange-Dillard Jct. Sec.
Pacific Highway-Douglas Co.



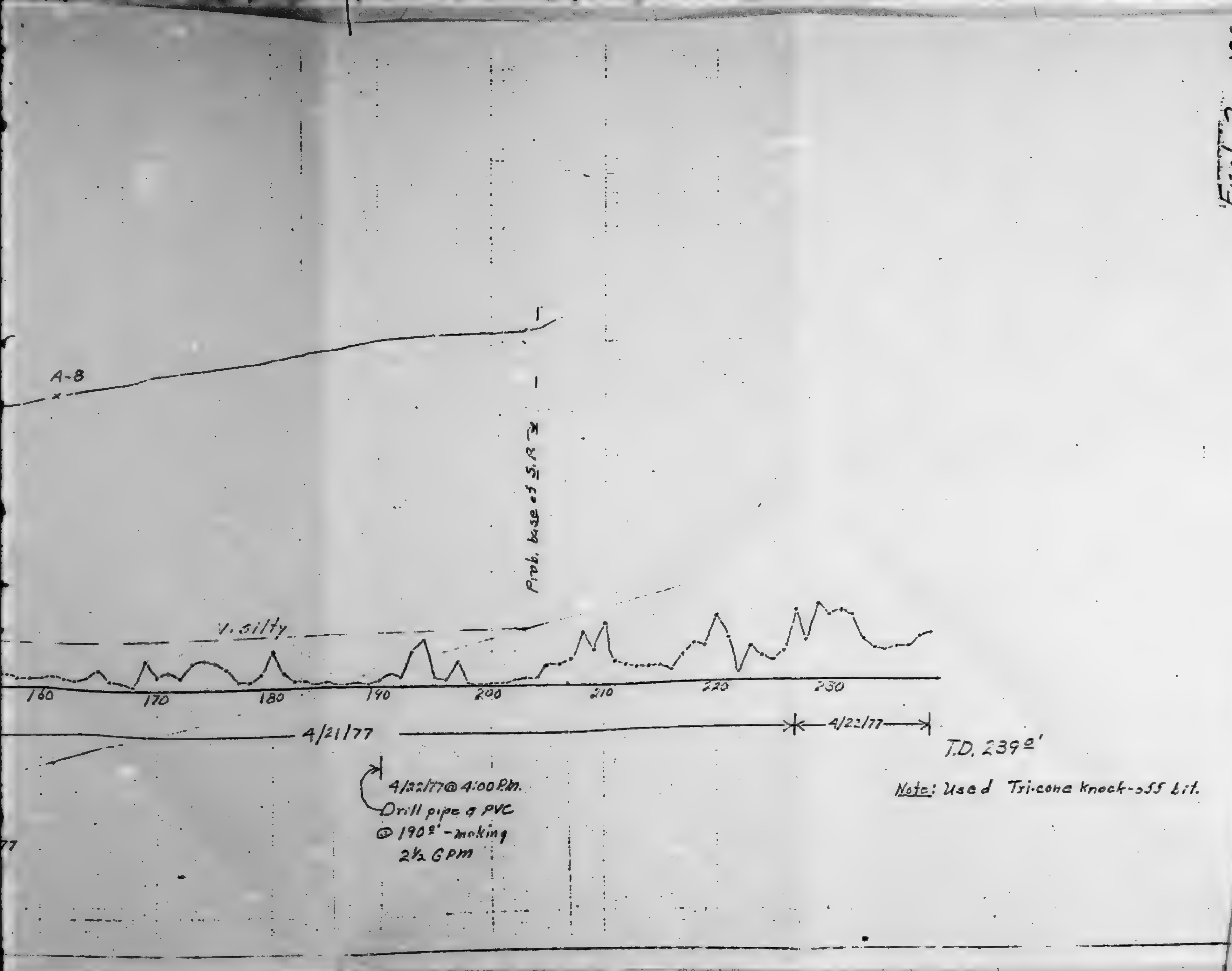
Rate of Penetration Graph.

Horizontal Drain # 6-77
Loc. ~ Sta. 3058+05 (NB)

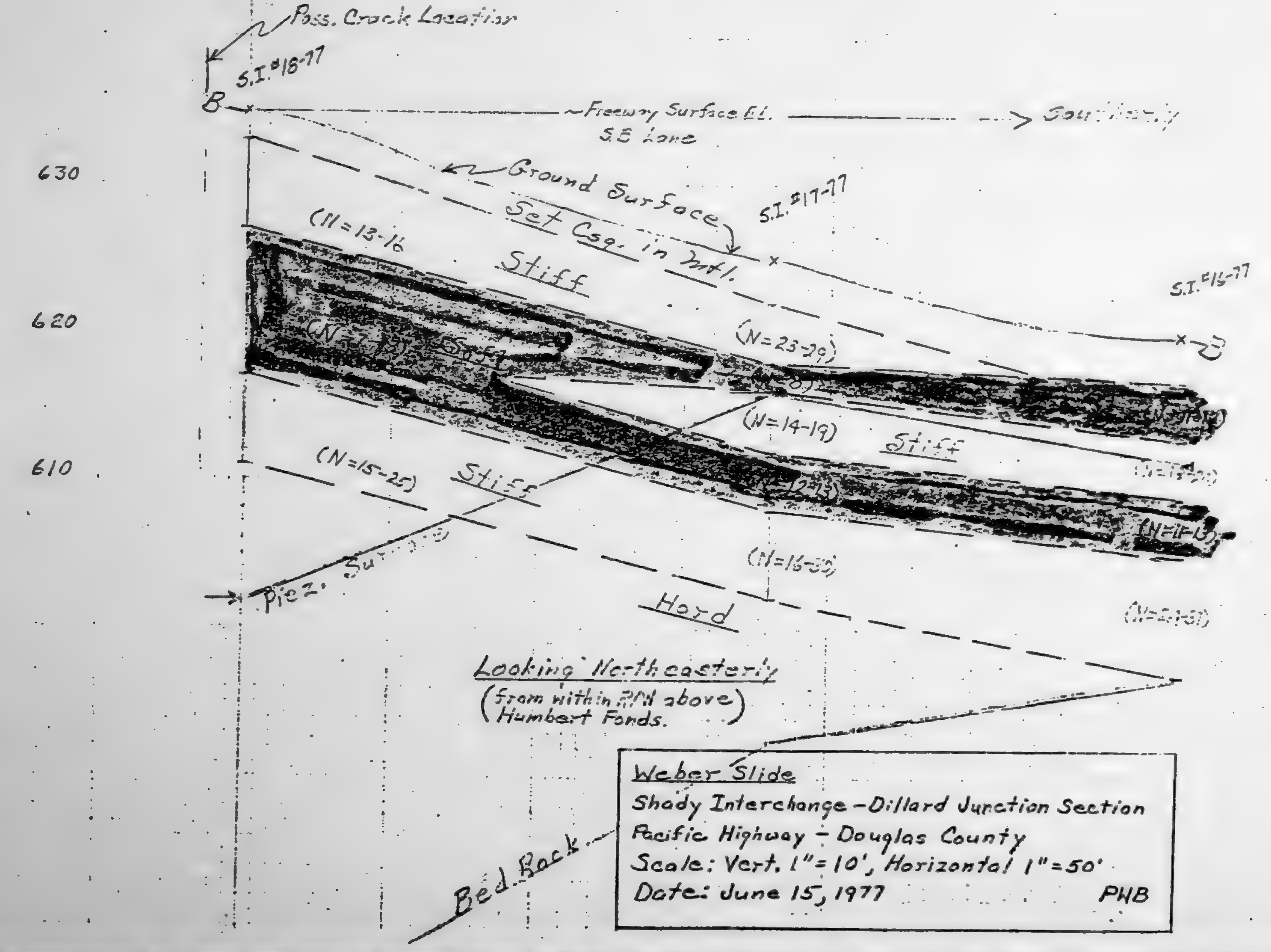


Flwg. 1/2 GPM in A.M. 4/21/77

4/22/77 @ 4:00 P.M. Drill pipe & PVC @ 190.8' - making 2½ GPM


A-8
Prob. base of S.R. ✕
V. silty
160
170
180
190
200
210
220
230
4/21/77
4/22/77
T.D. 239±'
4/22/77 @ 4:00 P.M.
Drill pipe & PVC
@ 190±' - making
2½ GPM
Note: Used Tri-cone knock-off bit.

Weber Slide


Poss. Crack Location
S.I.#18-77
B
Freeway Surface El.
S.B. Lane
Southerly
630
620
610
Ground Surface
Set Csg. in Mtl.
S.I.#17-77
S.I.#15-77
B
(N=13-16
Stiff
Soft
(N=23-29)
(N=14-19)
Stiff
(N=15-25)
Stiff
Piez. Su
(N=16-39)
Hard
Bed Rock
Looking Northeasterly
(from within R/W above)
(Humbert Ponds.

Weber Slide
Shady Interchange - Dillard Junction Section
Pacific Highway - Douglas County
Scale: Vert. 1" = 10', Horizontal 1" = 50'
Date: June 15, 1977
PWB

Encl. 31

GEOLOGIC EXPLORATION LOG

Hole No. 1
Sheet 1 of 1

Project S 1
Highway County
(Tenmile Creek Sta 58)
Location Weber Slide Sta 205+60 Prefix 910
Purpose of Hole Slide Investigation
Driller [illegible] Logged by R. [illegible]
Drill M[illegible] B-50 Angle Vertical
Casing Core
Drive Sampler OD ID Hammer Wt 140 Fall 30 inches
Undisturbed Sampler —

GRAPHIC LOG

- Decomposed rock (hand crushable)
- Mixed decomposed and weathered rock
- Weathered rock (color, hardness, strength, etc., modified by weather
- X Zone of fragmental core
- Mixed weathered and fresh rock
- / Bedding dip
- ʃ Slickensides
- ≠ Joint

NOTES

Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fingernail
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type	Blows	Inches	N Value	Recovered Sampled	% Recovery	Water Level	% Moisture	Depth
									1
	1	12,13,[illegible],15		[illegible]6	10/24	42	STIFF		5
	2	16,16,16,[illegible]1		32	0/24	0			
	3	7,12,22,23		34	15/24	62			10
	4	9,13,18,25		31	17/24	71			
	5	17,21,23,23		44	16/24	67	[illegible]		
	6	9,13,19,28		32	14/24	58	[illegible]		15
	7	7,27,[illegible]7,24		[illegible]	[illegible]/24	75	HARD		
	8	7,19,20,25		37	12/24	50			
	9	[illegible],17,23,25		40	12/24	50			20
	10	[illegible] 15,17,25		3[illegible]	10/24	42	[illegible]		
	11	8,17,23,33		40	12/[illegible]	50	[illegible]		25
	12	9,15,[illegible],[illegible]		[illegible]	11/24	46			
	13	7,14,26,30		40	14/24	58	HARD		30
	14	15,19,25,28		44	10/24	42			
	15	7,15,[illegible],[illegible]		36	[illegible]/24	58			
	16	12,16,19,[illegible]		[illegible]	[illegible]/24	33			35
	17	11,16,21,22		37	[illegible]/24	46			
	18	7,17,23,25		40	8/24	33	STIFF		40
	19	7,9,14,16		23	10/24	42			
	20	[illegible],11,12,16		[illegible]	8/24	33			
	21	15,11,29,44		40	7/24	29	HARD	[illegible]	45
	22	16,24,30,36		57	24/24	100			
	23	15,24,40,43		[illegible]	14/24	58			50
	24	13,29,37,47		61	[illegible]/24	?		—	
	25	10,14,17,24		31	24/24	100	STIFF	20	
	26	14,[illegible],50/		[illegible]	10/[illegible]	100	[illegible]	—	
		BOTTOM		OF	HOLE				

Description	Remarks	Date
		5-18
Rocky Slope Wash		
Clayey Silty Sand [illegible]		
with yellow, brown + red		
rx frag. [illegible]lly sub-angular		
+ weathered, 5mm minus		
% [illegible] rx frag. varies from		
30 [illegible] 3'-13'		
grey rx frag.		
some rx frag crush to sand & silt		
41-43 sample color changes [illegible]		
[illegible] brown to [illegible]		
[illegible] [illegible] gray, pebbly, Clayey		
Silty Sand		
[illegible]-47 [illegible] to med. brown		
47-54³ gray, pebbly, Silty Sand		
weathered OTTER POINT		
Bottom of Hole @ 54³		

Undisturbed Sampler —

NOTES

Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fingernail
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation / Sample Type / Blows / Inches / N Value / Recovered / Sampled / % Recovery / Water Level / % Moisture / Depth / Graphic Log / Description / Remarks / Date

								1
1	12,13,[illegible],15	16	10/24	42			5	
2	16,16,16,[illegible]	32	0/24	0	Stiff			
3	7,12,22,23	34	15/24	62				
4	9,13,18,25	31	17/24	71			10	
5	17,21,23,23	44	16/24	67				
6	9,13,19,28	32	14/24	58			15	
7	7,27,[illegible],24	[illegible]	[illegible]/24	75	HARD			
8	9,19,20,25	37	12/24	50				
9	[illegible],17,23,25	40	12/24	50			20	
10	8,15,17,25	3[illegible]	10/24	42				
11	8,17,23,33	40	12/[illegible]	50			25	
12	9,15,[illegible]	[illegible]	11/24	46				
13	7,14,26,30	40	14/24	58				
14	15,17,25,28	44	10/24	42	HARD		30	
15	9,15,[illegible]	36	[illegible]/24	58				
16	12,16,17,[illegible]	[illegible]	[illegible]/24	33			35	
17	11,16,21,22	37	11/24	46				
18	7,17,23,25	40	8/24	33				
19	7,9,14,16	23	10/24	42	Stiff		40	
20	[illegible],11,12,16	[illegible]	8/24	33				
21	15,11,29,44	40	7/24	29	HARD		45	
22	16,24,30,36	59	24/24	100				
23	15,29,40,43	[illegible]	14/24	58				
24	13,29,37,47	61	2/24	8		—	50	
25	10,14,17,24	31	24/24	100	Stiff	20		
26	14,[illegible],50/	[illegible]	10/[illegible]	100	[illegible]	—		
	BOTTOM	OF	HOLE					

Rocky, Slope Wash — 5-18

Clayey, Silty Sand [illegible]

with yellow, brown, + red

rx frag. [illegible]lly sub-angular

+ [illegible]red, 5mm minus

[illegible] rx frag. [illegible]

30 [illegible] 3'-13'

grey rx frag.

some rx frag. crush to sand + silt

[illegible] sample color changes [illegible]

[illegible] brown to [illegible]

[illegible] [illegible] pebbly, Clayey,

Silty Sand

[illegible] to med. brown

47-54³ gray, pebbly, Silty Sand

weathered OTTER POINT

Bottom of Hole @ 54³

Encl. 4

ole No. FSH#2-77 (S.I.#H-77) Sheet 1 of 1

roject Shady Int. - Dillard Junction (Winston Sec.)

ighway Pacific County Douglas

tion ~Sta 3061+27 60' Rt (SB) refix 610-1321-310

ose of Hole Foundation Invest. & Slope Tube Install.

riller Sch. Bridge Crew Logged by P. Bowers

rill B-50 Mobile Angle Vert.

asing NX Core ——

rive Sampler OD 2" ID ___ Hammer Wt 140# Fall 30"

ndisturbed Sampler ___

▯	Decomposed rock (hand crushable)
⁞	Mixed decomposed and weathered rock
⌋	Weathered rock (color, hardness, strength, etc., modified by weathert
X	Zone of fragmental core
⁞	Mixed weathered and fresh rock
⁄	Bedding dip
∫	Slickensides
⌀	- Joint

NOTES

Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fingernail
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type	Blows / 6 Inches	N Value	Recovered / Sampled	% Recovery	Water-Level	% Moisture	Depth	Graphic Log
	#1	4,4,7,8	11	24/12	50	Soft	19.0		
	#2	1,5,7,10	12	24/15	63				
	#3	5,9,11,13	20	24/15	63	Stiff	12.0		
	#4	5,8,10,13	18	24/15	63			10	
	#5	4,6,7,10	13	24/16	67	Soft	16.5		
	#6	3,5,6,8	11	24/10	42				
	#7	3,10,14,21	24	24/20	83	Stiff	15.5		
	8	8,10,18,24	28	20/14	58				
	9	8,13,17,21	30	24/17	71		17.5	20	
	#10	9,13,18,23	31	24/18	42				
	#11	23,34,41,-	85	18/15	63	Hard	9.0	25	
	#12	12,21,32,-	53	18/16	89		12.5		
	#13	32/6", 50/3½"		9½/7	74				
	#14	50/4½"		4½/4	89			30	
		Drilled w/ Tricone 319-33º						33	

Description	Remarks	Date
Road Rock & Rocky Slope Wash to 3º		5/19/
Clay, dk. gry-yel. brn., slty, sdy, moist, plast. est. 5-20% small vari. wea. rk. frags. mottled-speckled	* Problem Mtl. to 23º (Currently)	
increase in fn. sd.		
Lt. gry-yel. rd. brn., mottled to ~horiz. strks.; some gry-grn., sticky, poss. sensitive		
Lt. gry. clayey sdy silt w/ est. 20% included siltstone frags, matrix plastic.		
← Top Bedrock		
Shale, dk. gry-brn, fissil, molds to slt. fsd. szs, damp-moist, scatt. lt. gry clayey that is plastic, most non-plast.		
Bottom of Hole 33º	19 May 77	

* Slope Indicator tubing set on bottom w/ 2 sacks of Pea gravel.

ndisturbed Sampler

Soft - can be scratched with fingernail
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Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type	Blows / 6 Inches	N Value	Recovered / Sampled	% Recovery	~~Water Level~~	% Moisture	Depth	Graphic Log	Description	Remarks	Date
										Road Rock & Rocky Slope Wash to 3º		5/191
	#1	4,4,7,8	11	24/12	50	Soft	19.0			Clay, dk. gry-yel-brn., slty, sdy, moist, plast. est. 5-20% small vari. wea. rk. frags. mottled-speckled	* Problem Intl. to 23º' (Currently)	
	#2	1,5,7,10	12	24/15	63							
	#3	5,9,11,13	20	24/15	63	Stiff	12.0			increase in fn. sd.		
	#4	5,8,10,13	18	24/15	63			10				
	#5	4,6,7,10	13	24/16	67	Soft	16.5			Lt. gry-yel. rd. brn., mottled to ~horiz. strks.; some gry-grn., sticky, poss. sensitive		
	#6	3,5,6,8	11	24/10	42							
	#7	3,10,14,21	24	24/20	83	Stiff	15.5			Lt. gry. clayey sdy silt w/ est. 20% included siltstone frags, matrix plastic.		
	#8	8,10,18,24	28	20/14	58							
	#9	8,13,17,21	30	24/17	71		17.5	20				
	#10	9,13,18,23	31	24/18	42					← Top Bedrock		
	#11	23,34,41,-	85	18/15	63	Hard	9.0	25		Shale, dk. gry-brn, fissil, molds to slt. & sd. sz's, damp-moist, scatt. lt. gry clayey that is plastic, most non-plast.		
	#12	12,21,32,-	53	18/16	89		12.5					
	#13	32/6", 50/3½"		9½/7	74							
	#14	50/4½"		4½/4	89			30				
		Drilled w/ Tricone 31º-33º						33				
										Bottom of Hole 33º	19 May 77	

* Slope Indicator tubing set on bottom w/ 2 sacks of P[illegible]

ole No. FDH#1-77 (S.T. #18 Sheet 1 of 1
oject Shady Int.-Dillard Junction (Weber Slide)
ighway Pacific (I-5) County Douglas
tion ~3058+33 45' Rt (SBL) Profile 610-1951-210
urpose of Hole Foundation Investig. & Slope Tube Install.
riller Salem Bridge Crew Logged by P. Bowers
rill B-50 Mobil Angle Vert.
asing NX Core ——
rive Sampler OD 2" ID ___ Hammer Wt 140# Fall 30"
ndisturbed Sampler ——

Symbol	Legend
]	Decomposed rock (hand crushable)
⁞	Mixed decomposed and weathered rock
]	Weathered rock (color, hardness, strength, etc., modified by weather).
X	Zone of fragmental core
⁞	Mixed weathered and fresh rock
/	Bedding dip
ʃ	Slickensides
ø	- Joint

NOTES

Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fingernail
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type-Jars	Blows / 6 Inches	N Value	Recovered / Sampled	% Recovery	~~Water Level~~	% Moisture	Depth	Graphic Log
	#1	4,6,7,8	13	24/12	50	Stiff			
	#2	6,7,9,10	16	24/11	46				
	#3	6,8,7,10	15	24/14	58				
	#4	4,5,6,6	11	24/10	42		13.0	10	
	#5	4,3,4,6	7	24/8	33	Soft	15.6		
	#6	2,5,6,11	11	24/13	54		13.0		
	#7	6,5,5,5	10	24/9	38		13.6		
	#8	6,6,7,8	13	24/14	58				
	#9	5,6,9,9	15	24/15	63	Stiff	15.5	20	
	#10	5,8,11,14	19	24/18	75		13.6		
	#11	4,9,16,20	25	24/20	83				
	#12	10,15,25,34	38	24/17	71				
	#15	15,25,37,48	62	24/17	79				
	#14	17,29,44,–	73	18/18	100		18.9	30	
		15,25,37,48	62	24/20	83		14.0	32	
		22,30,43,54	73	24/20	83		16.3	34	
		25,50,–	Ref.	12/12	100		21.2	36	
		17,30,50/5"	Ref.	17/10	59	Hard	15.6	38	
		6,25,44,53	69	24/11.5	48		14.9	40	
		25,36,50/4"	Ref.	16/11	69		14.9	42	
		17,27,35,43	64	24/20	83		20.4	44	
	#15	13,22,28,53	50	24/19	79		15.5		
	#16	11,26,29,35	55	24/12	50		19.7	50	
	#17	14,13,17,23	30	24/20	83	Stiff	21.9		
	#18	12,20,41,54	61	24/21	88	V. Compact	13.0		
	#19	29,41,40,50	81	24/16.5	69		13.0		
	#20	31,47,38,50	85	24/12	50		15.5		
	#21	18,28,33,28	61	24/18	75		15.0	60	
	#22	14,48,50/3"	98	15/					
		*Bicone & Wireline Core							
								70	

Description	Remarks	Date
Road Rock & Rocky Slope Wash to 2º'		5-31-
Clayey silty Sand, red-brown, moist, plastic, matrix w/est. 20% vari. wea. rk. frags.		
Silty sandy Clay, brn. to yel. brn., moist, plastic, scatt. rk. frags., 5-15%		
Clayey silty sd. matrix w/est. 10-40% rk. frags.	*Shelby Tube #1, 10º-12º	←W.L. 6-1-
	*Shelby Tube #2, 12º-14º	6-1-
Silty clayey sand & sandy clay, rd. brn. w/blk. spots, moist, plastic, rk. frags as above	*Problem Mtl. to 24º' (Currently)	
Increase in % rk. frags		
Sdy clay seam, gry., yel-brn. moist, plastic		
		←W.L. 6-8-
← color change		
Clayey silty sand, yel. brn., moist, plastic w/est. 40% small rk. frags. av. <¼"		
red-brn, spotted		
Silty sand, fn.-med. grained, gry., blue-gry, moist, plastic w/siltstone rk. frags., grading to dk. gry., fn. grained, plastic silty sand matrix.	*d.w.r. blue @ 43º'	
← Gradational		
Gravels, (grading from slty. gravelly sand (gry) to sandy gravel @ base.		
*multilith. gravels, slty., sdy., 90% fresh, hd. (Jar Samp. 61º-63º)	*Wtr. Slug. over csg. on break. of drill steel in gravel zone.	
← Bedrock		
Otter Point gry. med. hd. seamy siltstone & sandstone in/soft brn-blk. fissil shales. *mixtures of mtls.		
Bottom of Hole 70º'	7 June 1977	

ole No. FDH 4-77 (S.T. #18) Sheet 1 of 1

oject Shady Int.-Dillard Junction (Weber Slide)

ighway Pacific (I-5) County Douglas

tion ~3058+33 45' Rt (SBL) Profile 610-1951-310

urpose of Hole Foundation Invest. & Slope Tube Install.

riller Salem Bridge Crew Logged by P. Bowers

rill B-56 Mobil Angle Vert.

asing NX Core ——

rive Sampler OD 2" ID ___ Hammer Wt 140# Fall 30"

ndisturbed Sampler ——

Decomposed rock (hand crushable)
Mixed decomposed and weathered rock
Weathered rock (color, hardness, strength, etc., modified by weather).
X Zone of fragmental core
Mixed weathered and fresh rock
Bedding dip
Slickensides
Joint

NOTES

Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fingernail
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type-Jars	Blows / 6 Inches	N Value	Recovered / Sampled	% Recovery	~~Water Level~~	% Moisture	Depth	Graphic Log
	#1	4,6,7,8	13	24/12	50	Stiff			
	#2	6,7,9,10	16	24/11	46				
	#3	6,8,7,10	15	24/14	58				
	#4	4,5,6,6	11	24/10	42	Soft	13.0	10	
	#5	4,3,4,6	7	24/8	33		15.6		
	#6	2,5,6,11	11	24/13	54		13.0		
	#7	6,5,5,5	10	24/9	38		13.6		
	#8	6,6,7,8	13	24/14	58				
	#9	5,6,9,9	15	24/15	63	Stiff	15.5	20	
	#10	5,8,11,14	19	24/18	75		13.6		
	#11	4,9,16,20	25	24/20	83				
	#12	10,15,25,34	38	24/17	71				
	#13	15,25,37,48	62	24/17	79				
	#14	17,29,44,–	73	18/13	100		18.9	30	
		15,25,37,48	62	24/20	83		14.0	32	
		22,30,43,54	73	24/20	83		16.3	34	
		25,50,–	Ref.	12/12	100		21.2	36	
		17,30,50/5"	Ref.	17/10	59	Hard	15.6	38	
		6,25,44,53	69	24/11.5	48		14.9	40	
		25,36,50/4"	Ref.	16/11	69		14.9	42	
		17,27,35,43	64	24/20	83		20.4	44	
	#15	13,22,28,53	50	24/19	79		15.5		
	#16	11,26,29,35	55	24/12	50		19.7	50	
	#17	14,13,17,23	30	24/20	83	Stiff	21.9		
	#18	12,20,41,54	61	24/21	88	V. Compact	13.0		
	#19	29,41,40,50	81	24/16.5	69		13.0		
	#20	31,47,38,50	85	24/12	50		15.5		
	#21	18,28,33,28	61	24/18	75		15.0	60	
	#22	14,48,50/3"	98	15/					
		*Bicone & Wireline Core							
								70	

Description	Remarks	Date
Road Rock & Rocky Slope Wash to 2.0'		5-31-
Clayey silty Sand, red-brown, moist, plastic, matrix w/est. 20% vari. wea. rk. frags.		
Silty sandy Clay, brn. to yel. brn., moist, plastic, scatt. rk. frags., 5-15%		
Clayey silty sd. matrix w/est. 10-40% rk. frags.	*Shelby Tube #1, 10.0-12.0	←W.L. 6-1-
	*Shelby Tube #2, 12.0-14.0	6-1-
Silty clayey sand & sandy clay, rd. brn. w/blk. spots, moist, plastic, rk. frags as above	*Problem mtl. to 24.0' (Currently)	
Increase in % rk. frags		
Sdy clay seam, gry, yel-brn, moist, plastic.		←W.L. 6-8-
←color change		
Clayey silty sand, yel. brn., moist, plastic w/est. 40% small rk. frags. av. <1/4"		
red-brn, spotted		
Silty sand, fine-med grained, gry, blue-gry, moist, plastic w/ siltstone rk. frags., grading to dk. gry, fn. grained, plastic silty sand matrix.	*d.w.r. blue @ 48.0'	
←Gradational		
Gravels, (grading from slty. gravelly sand (gry) to sandy gravel @ base.		
*multilith. gravels, slty., sdy., 90% fresh, hd. (Jar Samp. 61.5-63.0)	*Wtr. Slug. over csg. on break. of drill steel in gravel zone	
←Bedrock		
Otter Point gry. med. hd. seamy siltstone & sandstone in/soft brn-blk. fissil shales *[illegible]		
Bottom of Hole 70.0'	7 June 1977	

ndisturbed Sampler

Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fingernail
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type-No.	Blows / 6 Inches	N Value	Recovered / Sampled	% Recovery	~~Water Level~~	% Moisture	Depth	Graphic Log
	#1	4,6,7,8	13	24/12	50	Stiff			
	#2	6,7,9,10	16	24/11	46				
	#3	6,8,7,10	15	24/14	58				
	#4	4,5,6,6	11	24/10	42		13.0	10	
	#5	4,3,4,6	7	24/8	33	Soft	15.6		
	#6	2,5,6,11	11	24/13	54		13.0		
	#7	6,5,5,5	10	24/9	38		13.6		
	#8	6,6,7,8	13	24/14	58				
	#9	5,6,9,9	15	24/15	63	Stiff	15.5	20	
	#10	5,8,11,14	19	24/18	75		13.6		
	#11	4,9,16,20	25	24/20	83				
	#12	10,15,25,34	38	24/17	71				
	#13	15,25,37,48	62	24/19	79				
	#14	17,29,44,–	73	18/18	100		18.9	30	
		15,25,37,48	62	24/20	83		14.0	32	
		22,30,43,54	73	24/20	83		16.3	34	
		25,50,–	Ref.	12/12	100		21.2	36	
		17,30,50/5"	Ref.	17/10	59	Hard	15.6	38	
		6,25,44,53	69	24/11.5	48		14.9	40	
		25,36,50/4"	Ref.	16/11	69		14.9	42	
		17,27,35,43	64	24/20	83		20.4	44	
	#15	13,22,28,53	50	24/19	79		15.5		
	#16	11,26,29,35	55	24/12	50		19.7	50	
	#17	14,13,17,23	30	24/20	83	Stiff	21.9		
	#18	12,20,41,54	61	24/21	88	V. Compact	13.0		
	#19	29,41,40,50	81	24/16.5	69		13.0		
	#20	31,47,38,50	85	24/12	50		15.5		
	#21	18,28,33,28	61	24/18	75		15.0	60	
	#22	14,48,50/3"	98	15/					
		*Bicone & Wireline Core							
								70	

Description	Remarks	Date
Road Rock & Rocky Slope Wash to 2º'		5-31-
Clayey silty Sand, red-brown, moist, plastic, matrix w/est. 20% vari. wea. rk. frags.		
Silty sandy Clay, brn. to yel. brn., moist, plastic, scatt. rk. frags., 5-15%		←W.L. 6-1-
Clayey silty sd. matrix w/est. 10-40% rk. frags.	*Shelby Tube #1, 10º-12º *Shelby Tube #2, 12º-14º	6-1-
Silty clayey sand & sandy clay, rd. brn. w/blk. spots, moist, plastic, rk. frags as above	*Problem Mtl. to 24º' (Currently)	
Increase in % rk frags		
Sdy clay grin. gry., yel-brn. moist, plastic		←W.L. 6-8-
← color change		
Clayey silty sand, yel. brn., moist, plastic w/est. 40% small rk. frags. av. <1/4"		
red-brn, spotted		
Silty sand, fn-med. grained, gry., blue-gry, moist, plastic w/siltstone rk. frags., grading to dk. gry., fn. grained, plastic silty sand matrix.	*d.w.r. blue @ 48º'	
← Gradational		
Gravels, (grading from slty. gravelly sand (gry) to sandy gravel @ base.		
*multilith. gravels, slty., sdy., 90% fresh, hd. (Jar Samp. 61º-63º)	*Wtr. Slwg. over csg. on break. of drill steel in gravel zone.	
← Bedrock		
Otter Point gry. med. hd. seamy Siltstone & Sandstone in/soft brn-blk. fissil shales *[illegible] of mtls.		
Bottom of Hole 70º'	7 June 1977	

* Drive Samples 30º-44º & Shelby Tubes were taken from new hole ~2º' away using this hole as a guide

* Slope Indicator [illegible] set [illegible] [illegible] [illegible] gravel.

[illegible]

le No. [illegible]-77 (S.I.#17-77) Sheet 1 of 1
roject Slady Int. - Dillon [illegible]
ighway [illegible] County [illegible]
tion - 30+04+92 60'Rt.(SB) Prefix [illegible]
urpose of Hole Foundation Invest. & Slope Tube Install.
riller Salem Bridge Crew Logged by P. Bowers
rill B-50 Mobil Angle Vert.
asing NX Core —
rive Sampler OD 2" ID ___ Hammer Wt 140# Fall 30"
ndisturbed Sampler —

▭	Decomposed rock (hand crushable)
(	Mixed decomposed and weathered rock
]	Weathered rock (color, hardness, strength, etc., modified by weatheri
X	Zone of fragmental core
[	Mixed weathered and fresh rock
/	Bedding dip
∫	Slickensides
⌀	- Joint

NOTES

Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fingernail
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type	Blows / 6 Inches	N Value	Recovered / Sampled	% Recovery	Water Level	% Moisture	Depth	Graphic Log
	#1	5,11,18,21	29	24/16	67	Stiff	8.5		
	#2	7,11,12,13	23	24/21	88				
	#3	3,3,5,7	8	24/13	54	Soft	15.5		
	#4	3,5,9,13	14	24/15	63	Stiff		10	
	#5	5,8,11,12	19	24/10	42		17		
	#6	4,5,7,9	12	24/15	63	Soft			
	#7	6,6,7,12	13	24/10	42		14.5		
	[illegible]	6,6,10,13	16	24/16	67	Stiff			
	#9	4,10,19,21	24	24/19	79		9.5	20	
	#10	6,11,19,27	30	24/19	79				
	#11	9,17,21,29	38	24/18	75	Hard	13		
	#12	14,27,33,31	60	24/17	71				
	#13	6,11,18,21	29	24/20	83	Stiff	19.5		
	#14	10,15,20,23	35	24/24	100			30	
	#15	7,10,13,15	23	24/15	63		25		
	#16	13,16,21,37	37	24/16	67	Hard			
	#17	18,29,41,50	70	24/18	75				
	#18	18,30,23,29	53	24/16	67			40	
		Drilled w/ Tricone 39° - 49°							
								49	

Description	Remarks	Date
Road Rock & Rocky Slope Wash 1.5'		5-25
Clay, gry-yel.brn., slty, sdy, moist, Plastic, est. 10% vari. wea. rk frags, small.	← W.L. 6° in A.M. 6-1-77	
decrease in rk. frags, inc. in moisture		
yel-brn., gry. brn. slty. clayey sand matrix, moist, plast. w/est. 50%± vari. wea. rk. frags. - strks. slty. sty. clay - yel. brn., gry. mottled sdy slty clay w/scatt. dk. gry. siltstone frags. to 1"±	* Problem w/l. to 23° (Currently)	
increase to 50%± vari. wea. rk. frags.		
Clay, gry-yel. brn., rd. brn., sandy, tough, mottled look		
gry., rd. brn., speckled, est. 50%± rk. frags. in sdy. clay matrix, moist, plastic.		
Silt, red-brn., gray, mottled, sli. sandy, some apparent horiz. strks., moist, plastic ← Top Bedrock		
Siltstone, gry., gry-grn., pebbly, sandy w/ streaks of lt. gry plastic silt., - thin layers of silty pebbly sandstone		
* wea. in upper portion gradually firming up w/ deeper penetration		
Bottom of Hole 49°	26 May 77	
* Slope [illegible] [illegible] w/ 4.5 sacks of Pea gravel.		

sing NX Core

rive Sampler OD 2" ID ___ Hammer Wt 140# Fall 30"

ndisturbed Sampler ---

/ Slickensides

⌀ - Joint

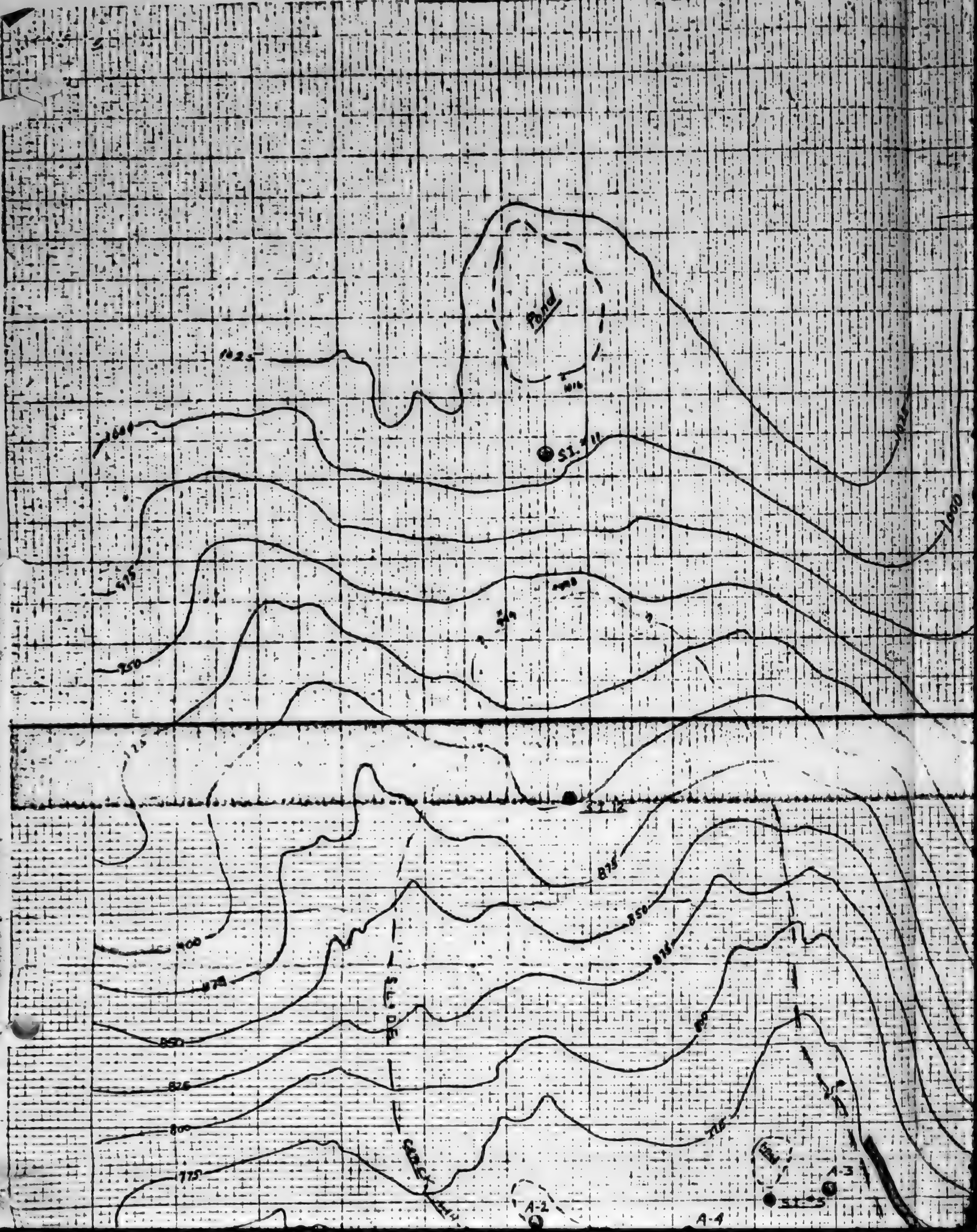
NOTES

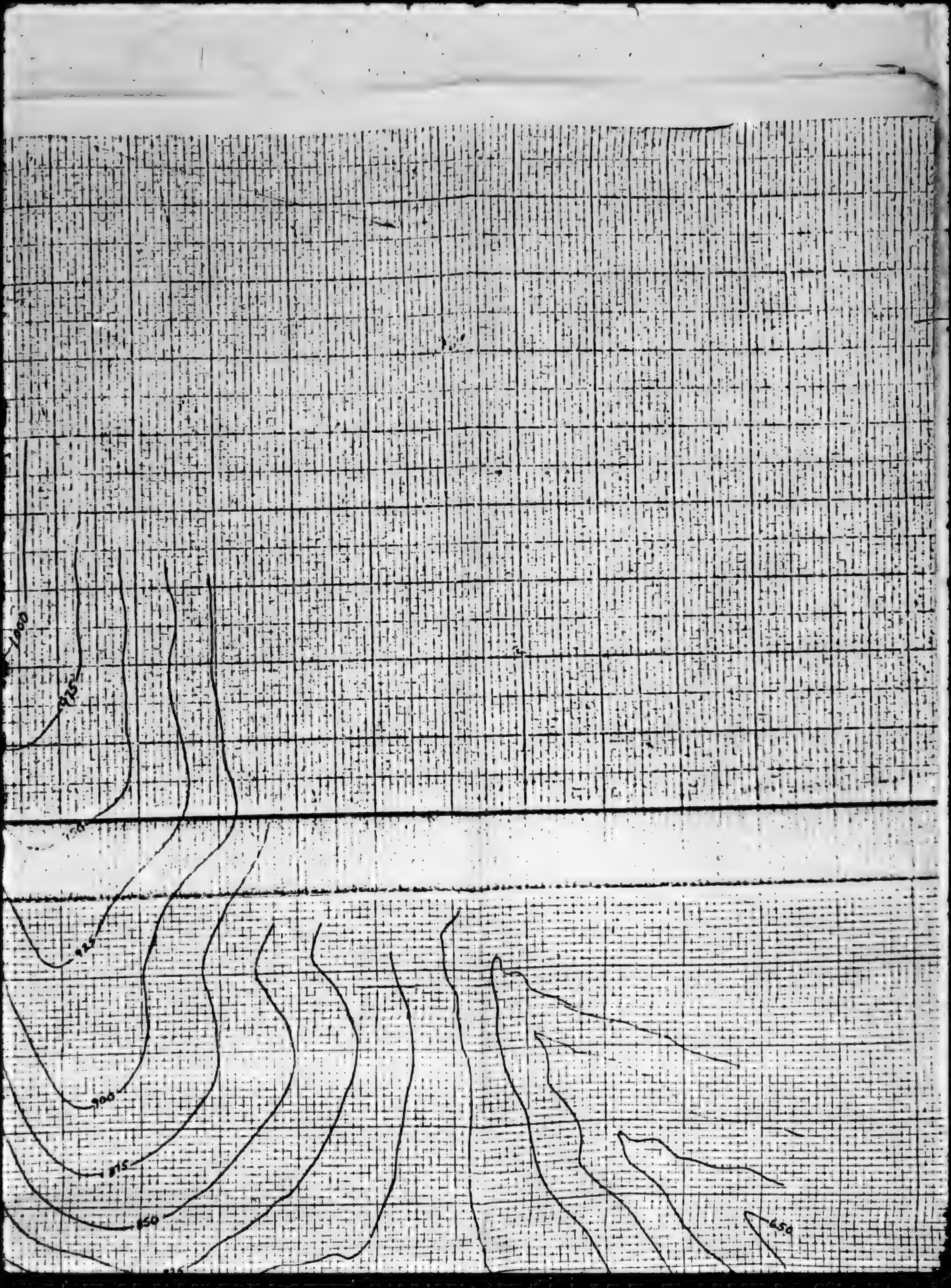
Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fingernail
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

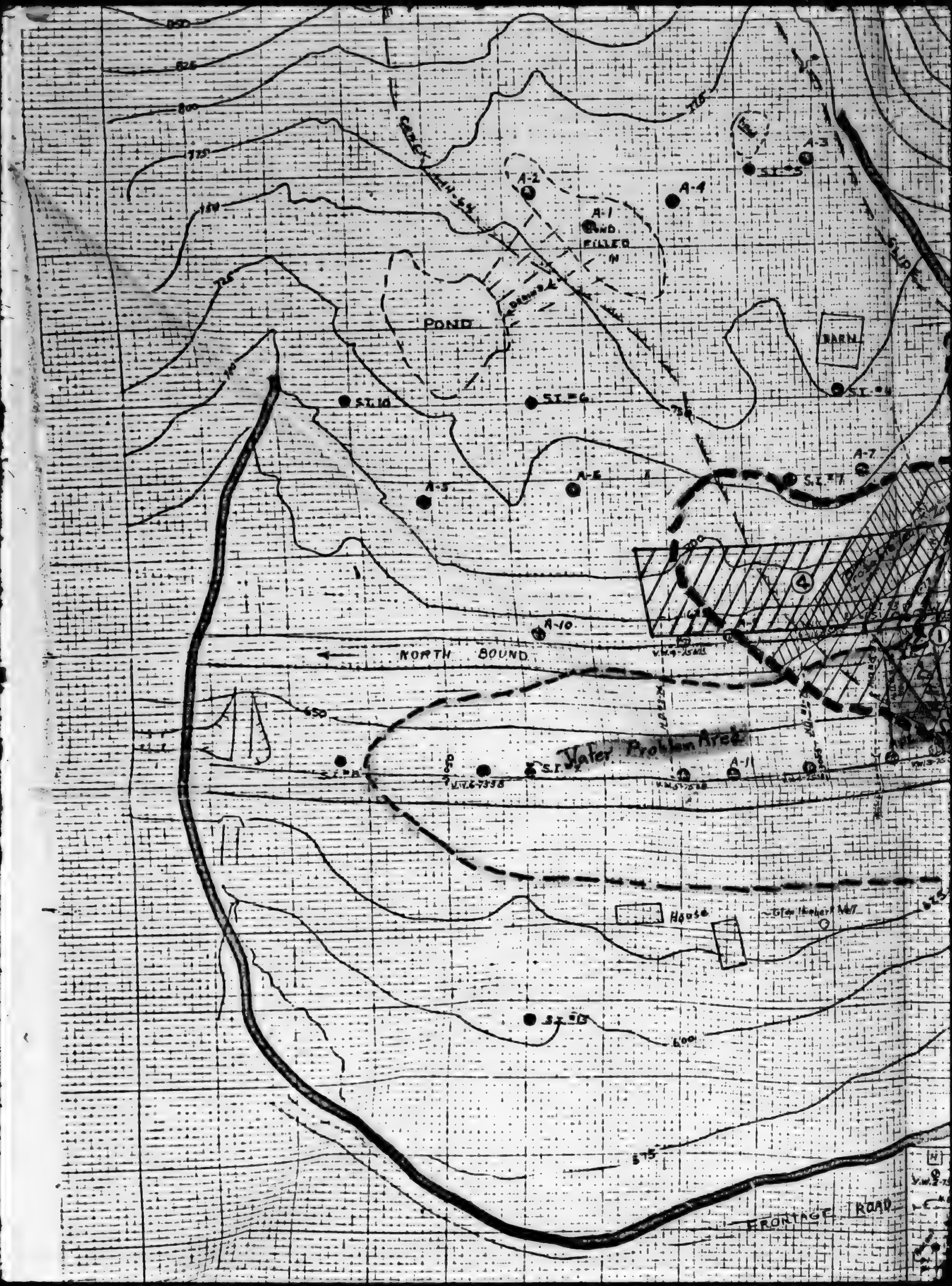
Elevation	Sample Type	Blows /6 Inches	N Value	Recovered / Sampled	% Recovery	Water Level	% Moisture	Depth	Graphic Log
	#1	5,11,18,21	29	24/16	67	Stiff	8.5		
	#2	7,11,12,13	23	24/21	88				
	#3	3,3,5,7	8	24/13	54	Soft	15.5		
	#4	3,5,9,13	14	24/15	63	Stiff		10	
	#5	5,8,11,12	19	24/10	42		17		
	#6	4,5,7,9	12	24/15	63	Soft			
	#7	6,6,7,12	13	24/10	42		14.5		
	[illegible]	6,6,10,13	16	24/16	67	Stiff			
	#9	4,10,14,21	24	24/19	79		9.5	20	
	#10	6,11,19,27	30	24/19	79				
	#11	9,17,21,29	38	24/18	75	Hard	13		
	#12	14,22,23,31	60	24/17	71				
	#13	6,11,18,21	29	24/20	83	Stiff	19.5		
	#14	10,15,20,23	35	24/24	100			30	
	#15	7,10,13,15	23	24/15	63		25		
	#16	13,16,21,37	57	24/16	67	Hard			
	#17	18,29,41,50	70	24/18	75				
	#18	18,30,23,29	53	24/16	67				
								40	
								49	

Drilled w/Tricone
39º - 49º

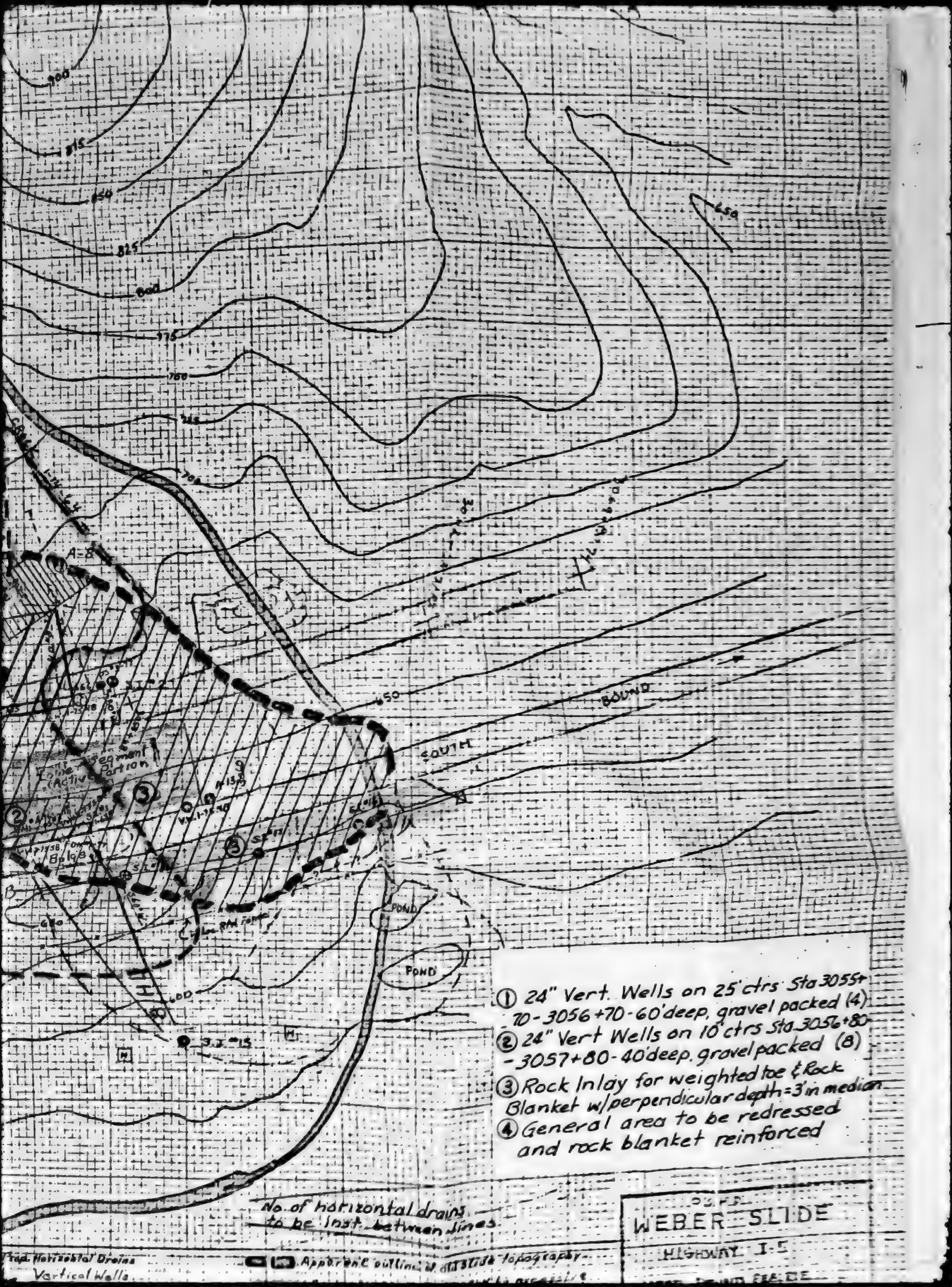
Description	Remarks	Date
Road Rock & Rcky Slope Wash to 5±		5-25
Clay, gry-yel. brn., slty, sdy, moist,		
Plastic, est. 40% vari. wea. rk frags, small.	← W.L. 6º in A.M. 6-1-77	
decrease in rk frags, inc. in moisture		
yel-brn., gry. brn. slty. clayey sand		
matrix, moist, plast. w/est. 50%± vari.	* Problem Mtl.	
wea. rk. frags. - strks. slty. sdy. clay	to 23º (Currently)	
yel. brn., gry. mottled sdy slty clay		
w/scatt. dk. gry. siltstone frags. to 1"±		
increase to 50%± vari. wea. rk. frags.		
Clay, gry-yel. brn., rd. brn., sandy,		
tough, mottled look		
gry, rd brn, speckled, est. 50%±		
rk. frags. in sdy. clay matrix, moist,		
plastic.		
Silt, red-brn., gray, mottled,		
sli. sandy, some apparent horiz.		
strks., moist, plastic ← Top Bedrock		
Siltstone, gry, gry-grn, pebbly,		
sandy w/streaks of lt. gry		
plastic silt, - thin layers of		
silty pebbly sandstone		
* Wea. in upper section gradually		
firming up w/deeper penetration		
Bottom of Hole 49º	26 May 77	
* Slope Indicator [illegible]		
[illegible] w/14.5 [illegible]		
of Pea gravel.		


Pond
1025
1016
1000
1025
1000
S1. 11
975
950
925
875
850
825
800
775
S1. 12
875
850
825
800
775
900
875
850
825
800
775
SLIDE
CREEK
A-2
A-3
A-4
S1-5


1000
975
950
925
900
875
850
825
650



850
825
800
775
750
725
700
675
650
600
575
POND
BARN
A-1
POND FILLED IN
A-2
A-3
A-4
A-5
A-6
A-7
A-10
A-1
S.T.-5
S.T.-6
S.T.-10
S.T.-4
S.T.-7
S.T.-8
S.T.-2
S.T.-13
NORTH BOUND
Water Problem Area
V.W.4-75
V.W.5-75
V.W.6-75
V.W.13-75
House
Gladfelter Well
FRONTAGE ROAD



900
875
850
825
800
775
750
725
700
650
650
600
SOUTH
BOUND
POND
POND
Active Portion
A-8
A-13
No of horizontal drains to be Inst. between lines
Vertical Wells
Apparent outline of old slide topography
PSFS
HIGHWAY I-5

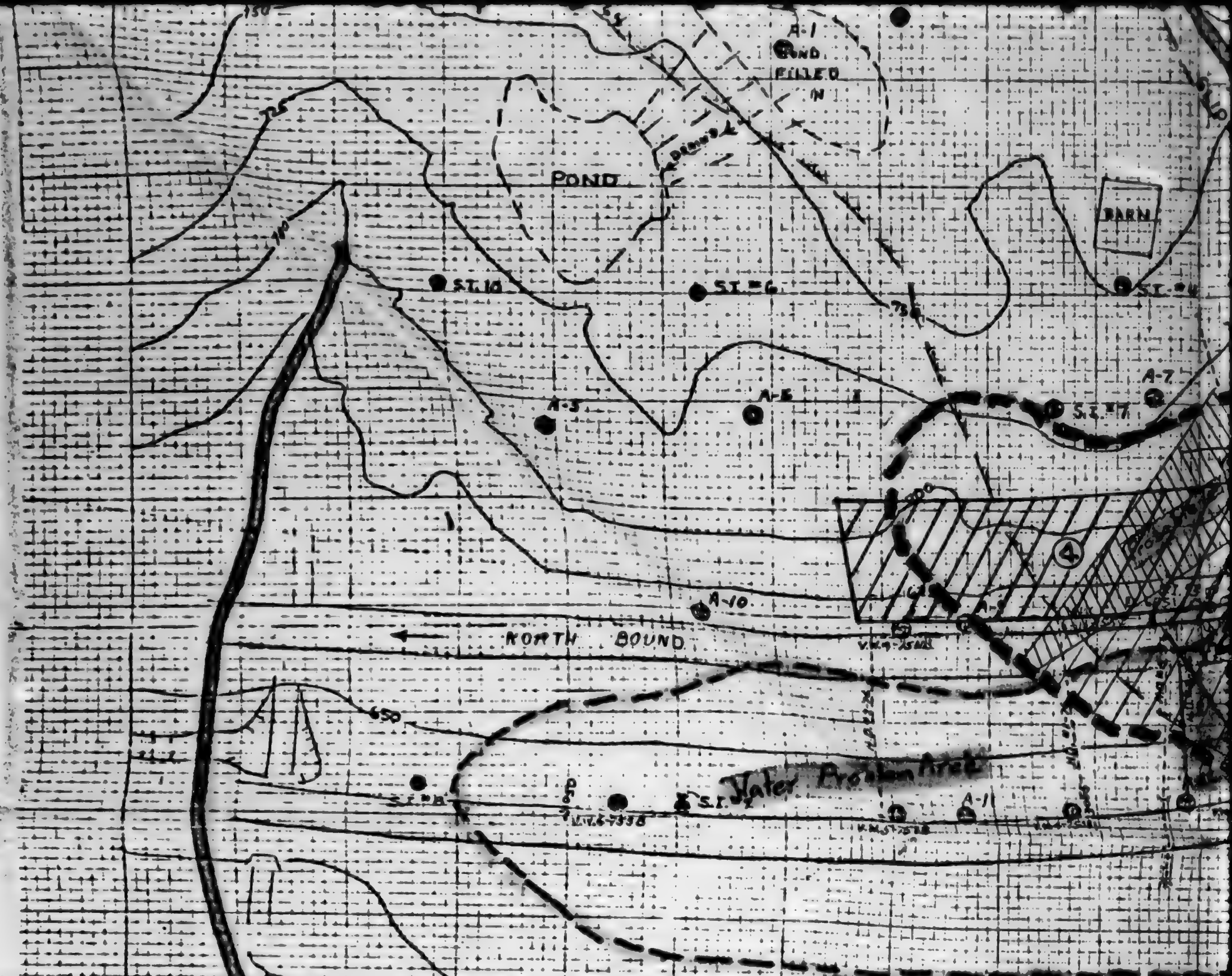
① 24" Vert. Wells on 25' ctrs Sta 3055+70 - 3056+70 - 60' deep, gravel packed (4)

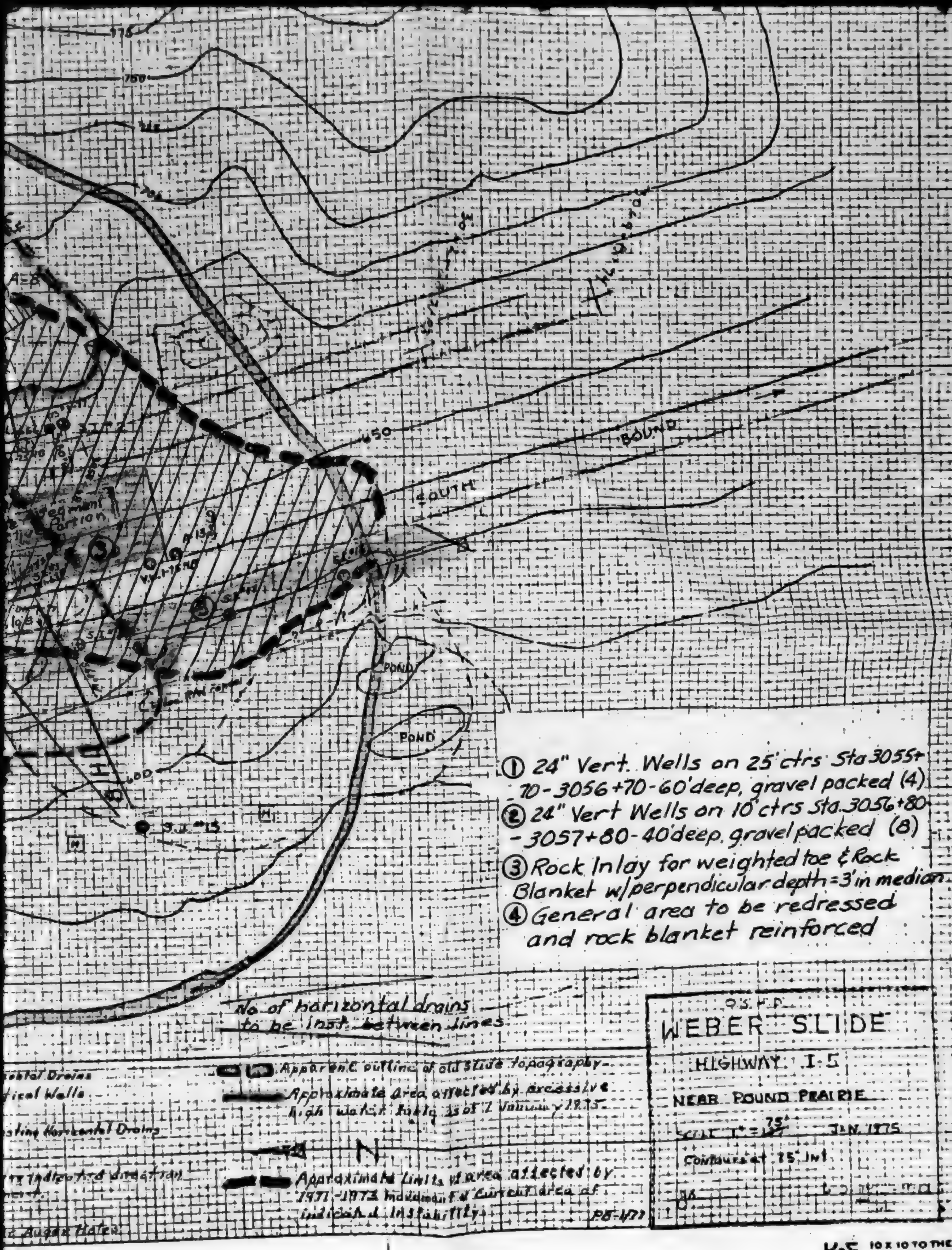
② 24" Vert Wells on 10' ctrs Sta 3056+80 - 3057+80 - 40' deep, gravel packed (8)

③ Rock Inlay for weighted toe & Rock Blanket w/perpendicular depth = 3' in median

④ General area to be redressed and rock blanket reinforced

WEBER SLIDE


A-1
POND
FILLED
IN
POND
BARN
S.T. 10
S.T. 6
S.T. 11
750
A-7
A-3
A-6
S.T. 7
④
A-10
NORTH BOUND
V.W.4-75
650
S.T. 8
V.T.6-7338
S.T.
Water Problem Area
A-1
V.W.S.T.-7538
House
Glen Hubbard Well
S.T. 5
600
575
FRONTAGE ROAD


775
750
725
700
650
600
SOUTH BOUND
POND
POND
Segment Portion
S.J. #15
No of horizontal drains to be inst. between lines
…ntal Drains
…ical Wells
…sting Horizontal Drains
…rs indicated direction
…nt Auger Holes
Apparent outline of old slide topography
Approximate area affected by excessive high water table as of 1 January 1975
N
Approximate Limits of area affected by 1971-1973 movement & current area of indicated instability
PB-477

① 24" Vert. Wells on 25' ctrs Sta 3055+70-3056+70-60' deep, gravel packed (4)
② 24" Vert Wells on 10' ctrs Sta. 3056+80-3057+80-40' deep. gravel packed (8)
③ Rock Inlay for weighted toe & Rock Blanket w/perpendicular depth=3' in median
④ General area to be redressed and rock blanket reinforced

O.S.H.D.

WEBER SLIDE

HIGHWAY I-5

NEAR POUND PRAIRIE

SCALE 1" = 75' JAN. 1975

Contours at 25' Int

K•E 10 X 10 TO THE INCH KEUFFEL & ESSER CO. PRINTED IN U.S.A.

Encl. 5

LOC 16

FORM E-30

OREGON STATE HIGHWAY DIVISION

INTER-DEPARTMENT CORRESPONDENCE

ROSEBURG, OREGON 97470

DATE MARCH 27, 1975

TO J. X. WILSON
REGION CONSTRUCTION ENGINEER

FROM ELLIOTT PARKER
REGIONAL ENGINEERING GEOLOGIST
by Pete W. Bowers, Jr. Pete W Bowers Jr.
Engineering Geologist

SUBJECT WEBER SLIDE - VERTICAL WELL PROGRAM
Shady Interchange-Dillard Junction Section
Pacific Highway - Douglas County

INTRODUCTION An interim report on Weber Slide was submitted on January 27, 1975. It was suggested that a program for improved drainage could be better implemented by drilling vertical well holes in the north and southbound lanes to determine relative permeability and water inflow zones in different sections of the lower end of the slide mass.

This well hole program has been essentially completed with some information gained which will be of help in analyzing drainage correction.

WELL TESTING PROGRAM The well testing program was laid out with ten (10) holes, at a spacing of 175 feet, six (6) of these holes in the southbound and four (4) in the northbound lane. (See attached Location Map Enclosure #1)

The vertical wells, which were drilled with an 8 inch auger, attempted to reach a casing depth of 60 feet in the northbound lane and 40 feet in the southbound lane in an effort to get below the Slope Meter indicated slip plane. The desired amount of casing was installed only in those wells with little or no water interference. In wells that had considerable water interference it was not possible, with available equipment, to get the desired amount of casing installed due mostly to sand and rock fragments filling the lower portion of the hole.

Pump testing to obtain volumes was attempted but, due to silt and coarse sand in the water and lack of large sustained volumes, this was abandoned. The method of pumping down and using the rate of fill-up as a way to obtain approximate volumes was used. This testing was done during a wet season and the surface water complicated the procedures.

The area and depths where most water was encountered has been defined based on the obtained data. The rate of fill-up decreased as the water level advanced past the depths where the water could be seen coming into the casing. This decrease in the rate of fill-up indicates the water was entering the hole at that depth.

CONCLUSIONS AND RECOMMENDATIONS The slide material as indicated by the auger holes is an irregular mixture of clay, silt, and fine sand with some sections containing 10%-25% variably weathered rock fragments. Permeability is predominantly low with free water flow through irregular open cracks, voids, and along thin horizontal permeable zones developed within the upper portion of the mass. Because of this variable permeability and resulting differential water movement, it appears a barrier, in the form of a change in permeability exists across the toe of the slide mass which causes the water to pond.

Based on the evaluation of the data obtained from the pumping tests, the water problem appears to be from the surface to a depth of about 20 feet in the highway section located north of the stake marked slide cracks. These cracks extend from near Slope Indicator #7 southwesterly across the north bound lane, median strip, and southbound lane to a small mound on the west side of the highway.

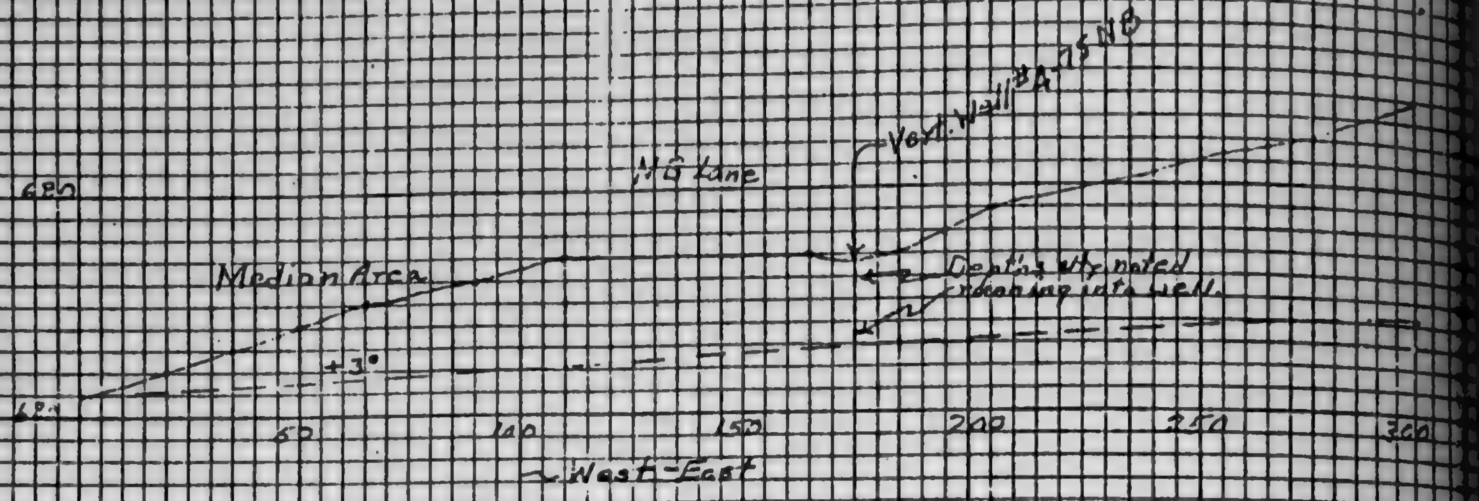
The need for drainage is indicated for both southbound and northbound lanes. Drainage of the northbound lane can be accomplished by installation of lateral drains. Successful completion of lateral drains in the southbound lane will be more difficult because of the required length of the holes and relatively thin section with little margin for error. (See attached crossections-Enclosure #2) A study of available hole logs in the southbound lane indicates the presence of terrace gravels at approximately 77 feet with a thickness from 5-17 feet. It is reccommended these gravels be penetrated by the drill and permeability tested and, if the tests are favorable, used for disposal of water obtained in draining the southbound lane. (See attached location map & plan - Enclosure #3)

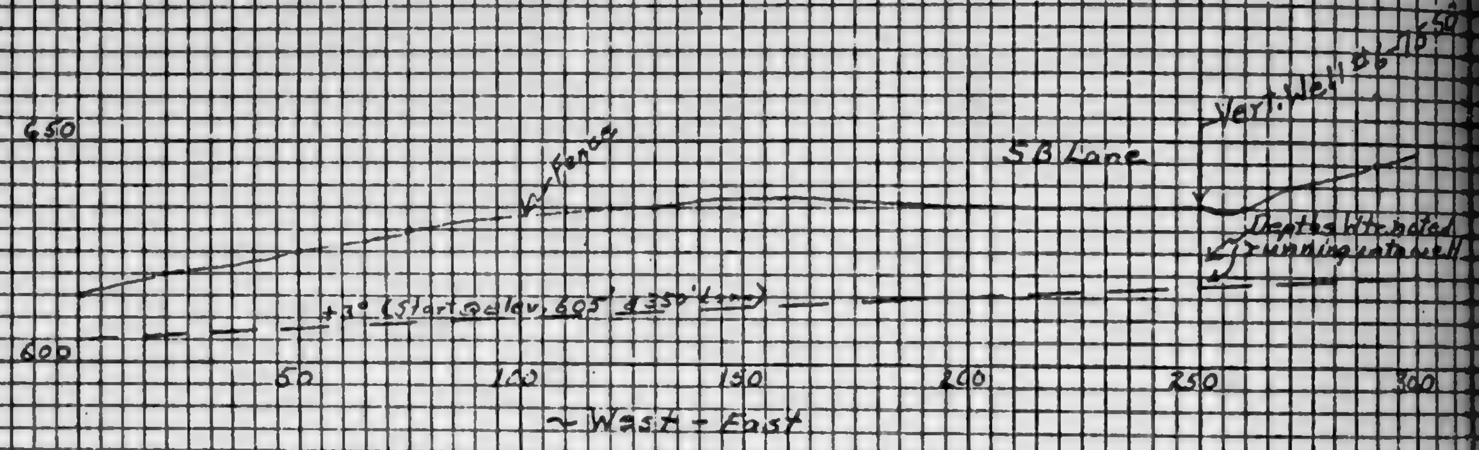
In the event the terrace gravels are impermeable, lateral drains should be installed to effect dewatering of the lower portion of the toe area.

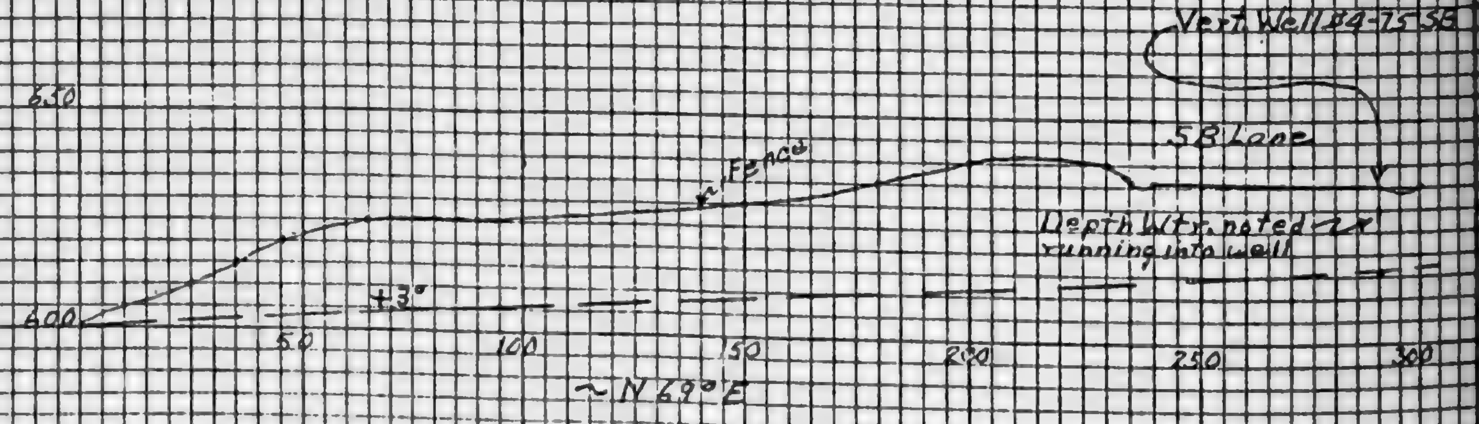
Surface drainage should be improved by use of an asphalt lined ditch. Repairing and adding to the current system along with a regular maintenance schedule is also needed.

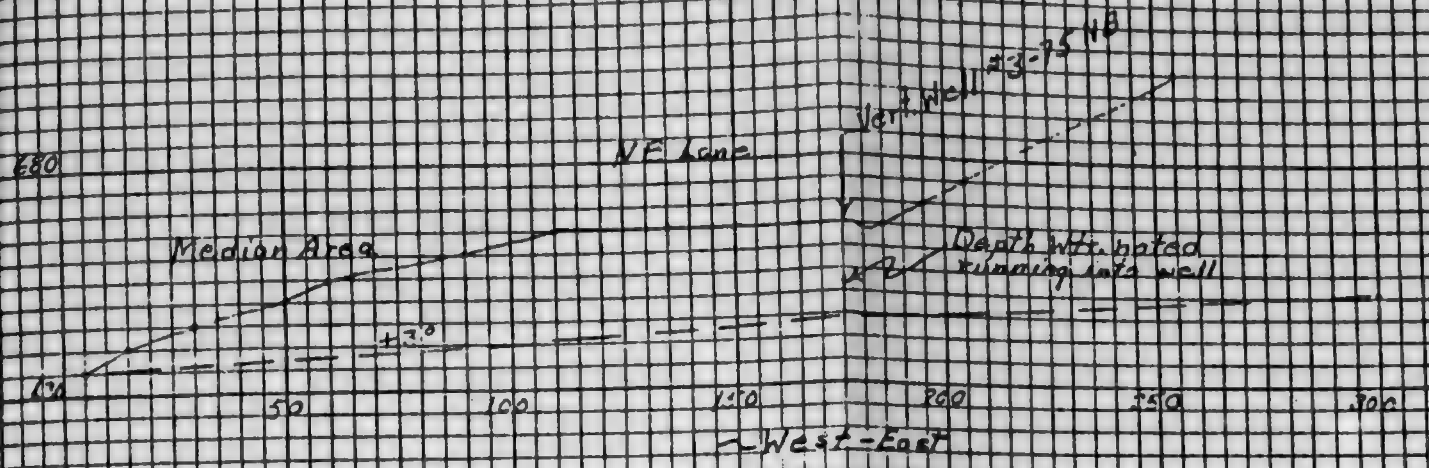
The type material involved and the amount removed during construction coupled with field observations in the area indicate that dewatering alone will in all probability not be enough to effect total stabilization. It may be necessary to install rock inlays to add weight to increase the shear resistance of the slide material and prevent local adjustments. Rock inlays are suggested for the area above the northbound lane below Slope Indicator #7 and along the downhill shoulder of the southbound lane. Location of the rock inlays have been selected by using evidence of recent movement and pressure areas indicated by water and Slope Indicator net directional movement. (See attached plan map - Enclosure #4)

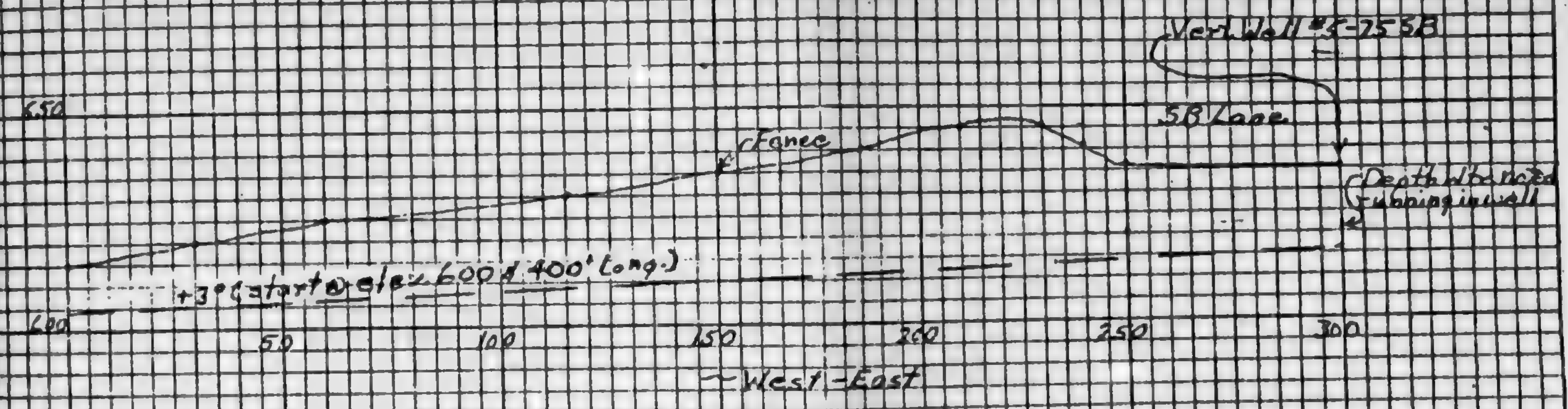
4 enclosures

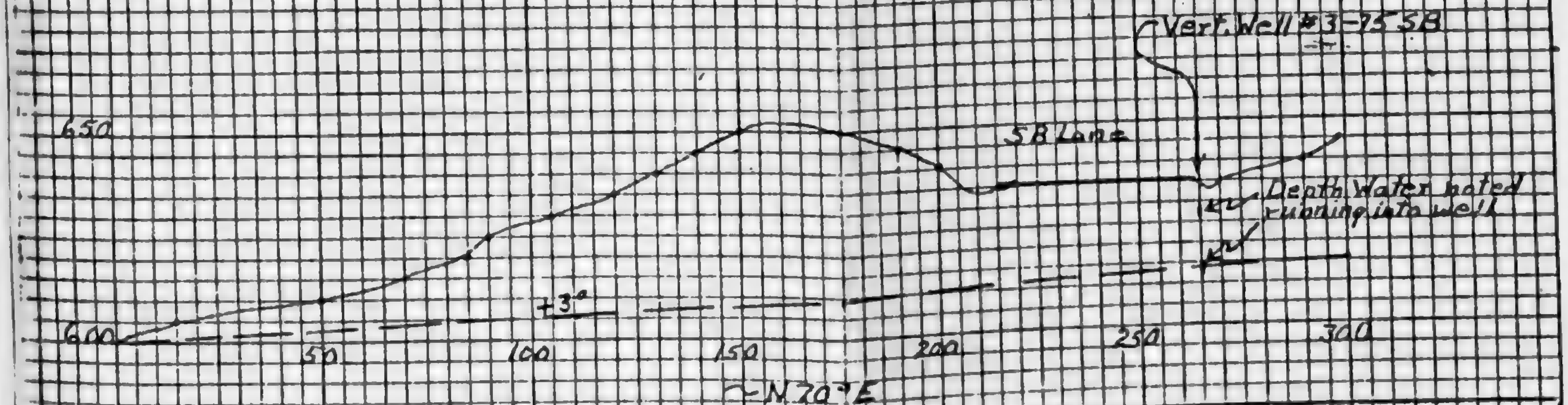

Vert. Well #A-75 NB
NB Lane
680
Median Area
Depth wtr. noted running into well.
+3°
630
50
100
150
200
250
300
~ West - East


Vert. Well #6-75-50
650
Fence
SB Lane
Depth wtr. noted running into well
+3° (Start @ elev. 605' @ 350' Lane)
600
50
100
150
200
250
300
~ West - East


Vert. Well #4-75 SB
650
SB Lane
Fence
Depth Wtr. noted running into well
+3°
600
50
100
150
200
250
300
~ N 69° E







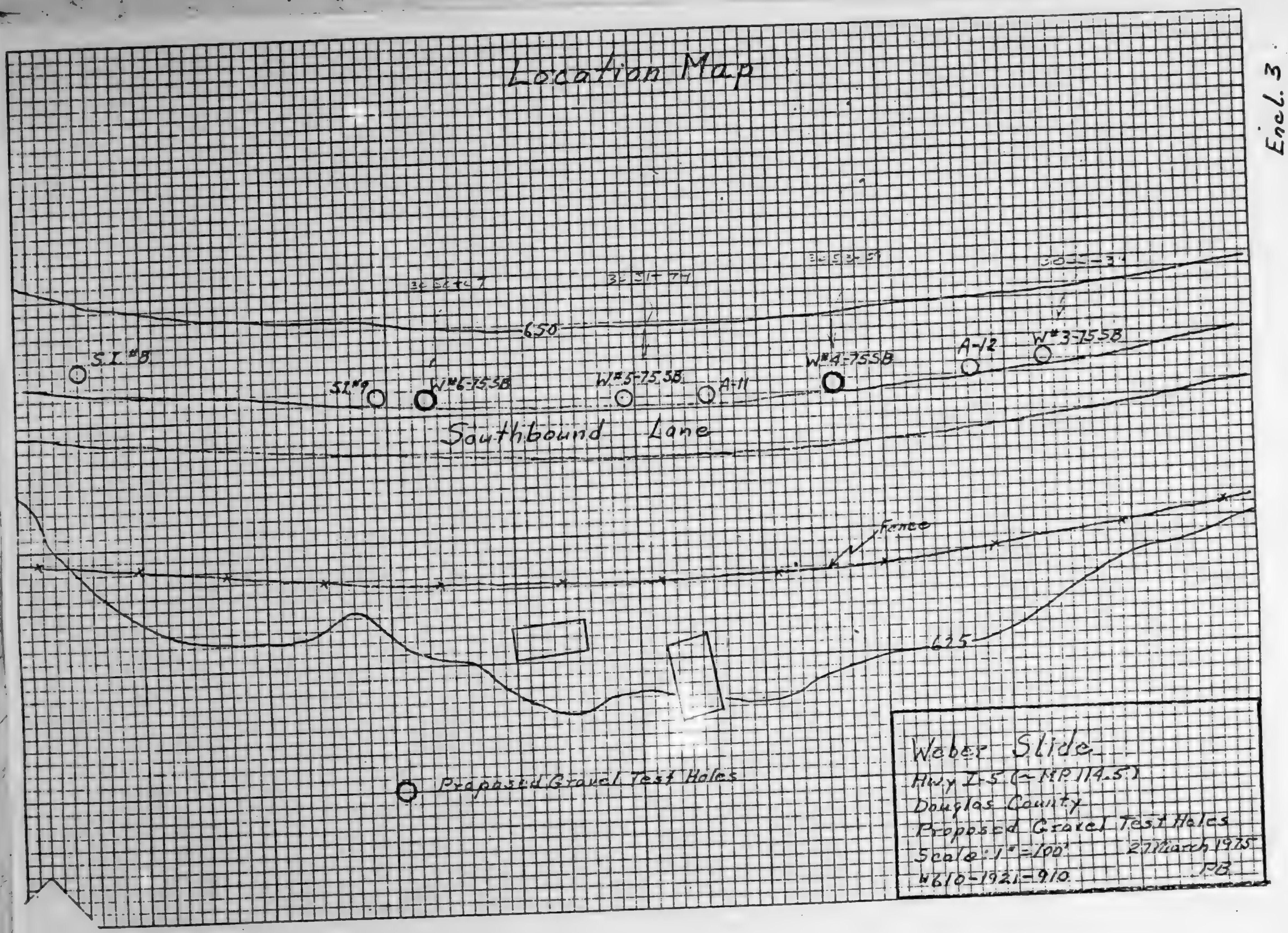
Weber Slide
Hwy. I-5 (~MP 114.5)
Douglas County
Proposed Lateral Drains (Pilot Holes)
Scale: 1" = 50'   25 March 1975

#610-1921-910   PB

Encl: 2

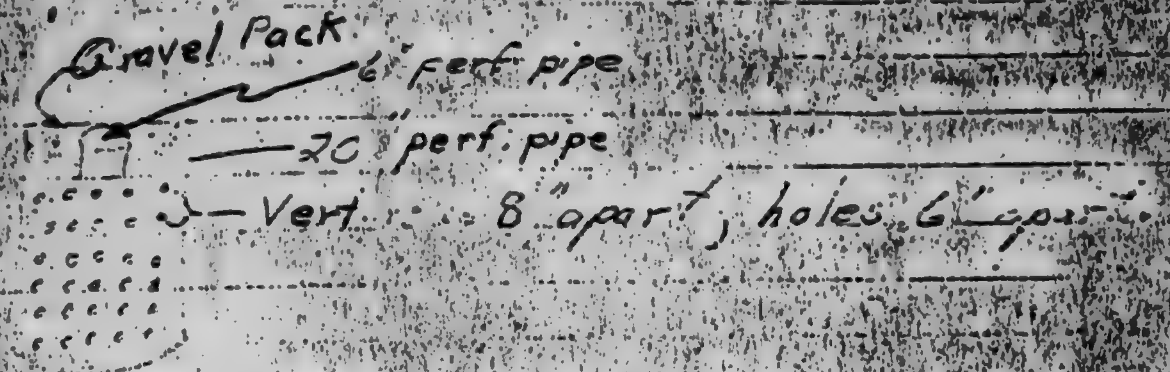
Encl. 3

Location Map


650
S.I.#8
SI#9
W#6-75SB
W#5-75SB
A-11
W#4-75SB
A-12
W#3-75SB
Southbound Lane
Fence
625
Proposed Gravel Test Holes

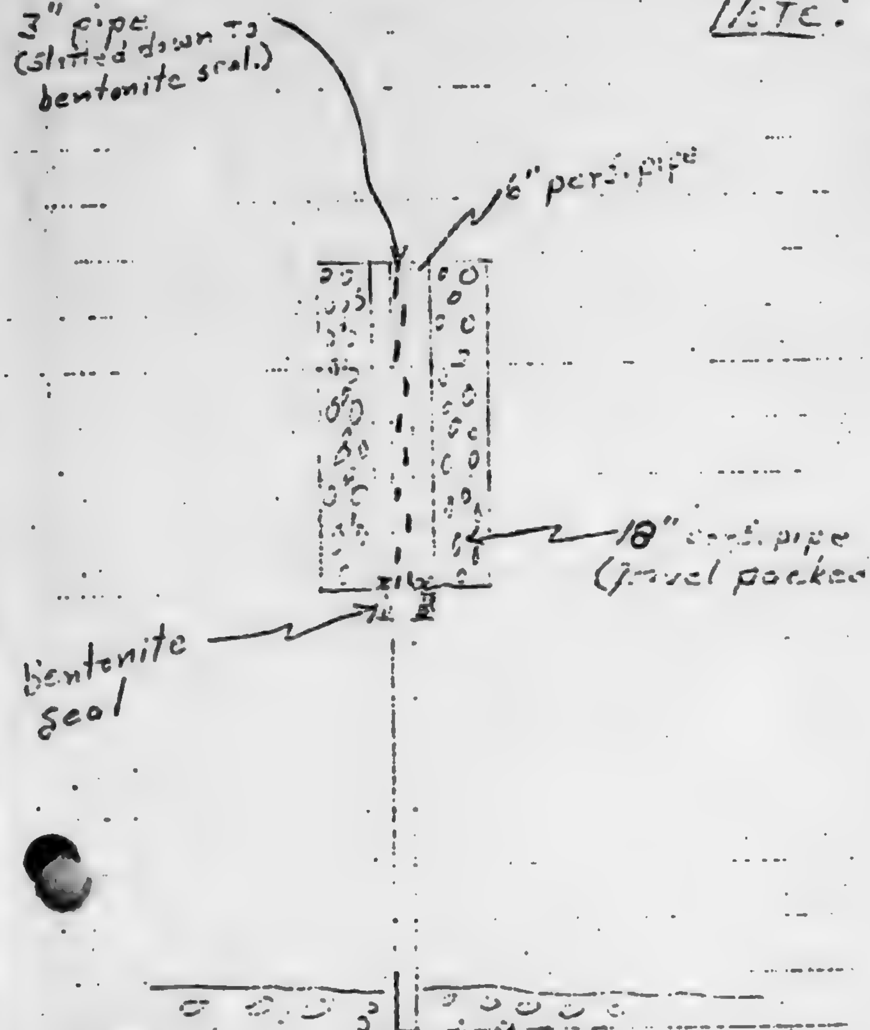
Weber Slide
Hwy I-5 (~MP 114.5)
Douglas County
Proposed Gravel Test Holes
Scale: 1" = 100'
27 March 1975
W610-1921-910
RB

Proposed Drain System

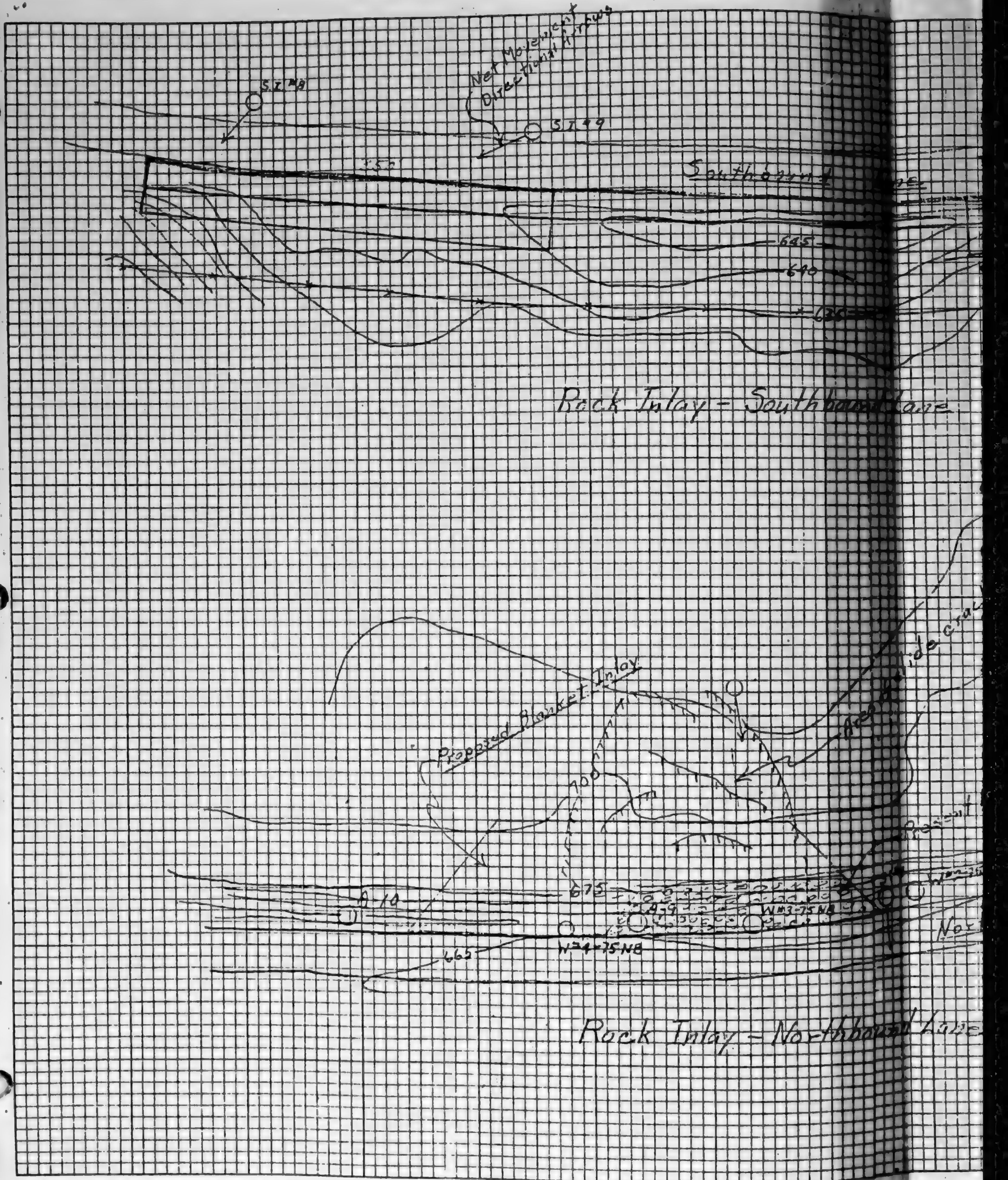

Gravel Pack
6" perf pipe
20" perf pipe
Vert rows 8" apart; holes 6" apart

Fit 6" perf pipe inside & gravel pack
Max depth 18 feet & try to hit w/ Lateral drains. (or close enough to be effective.)

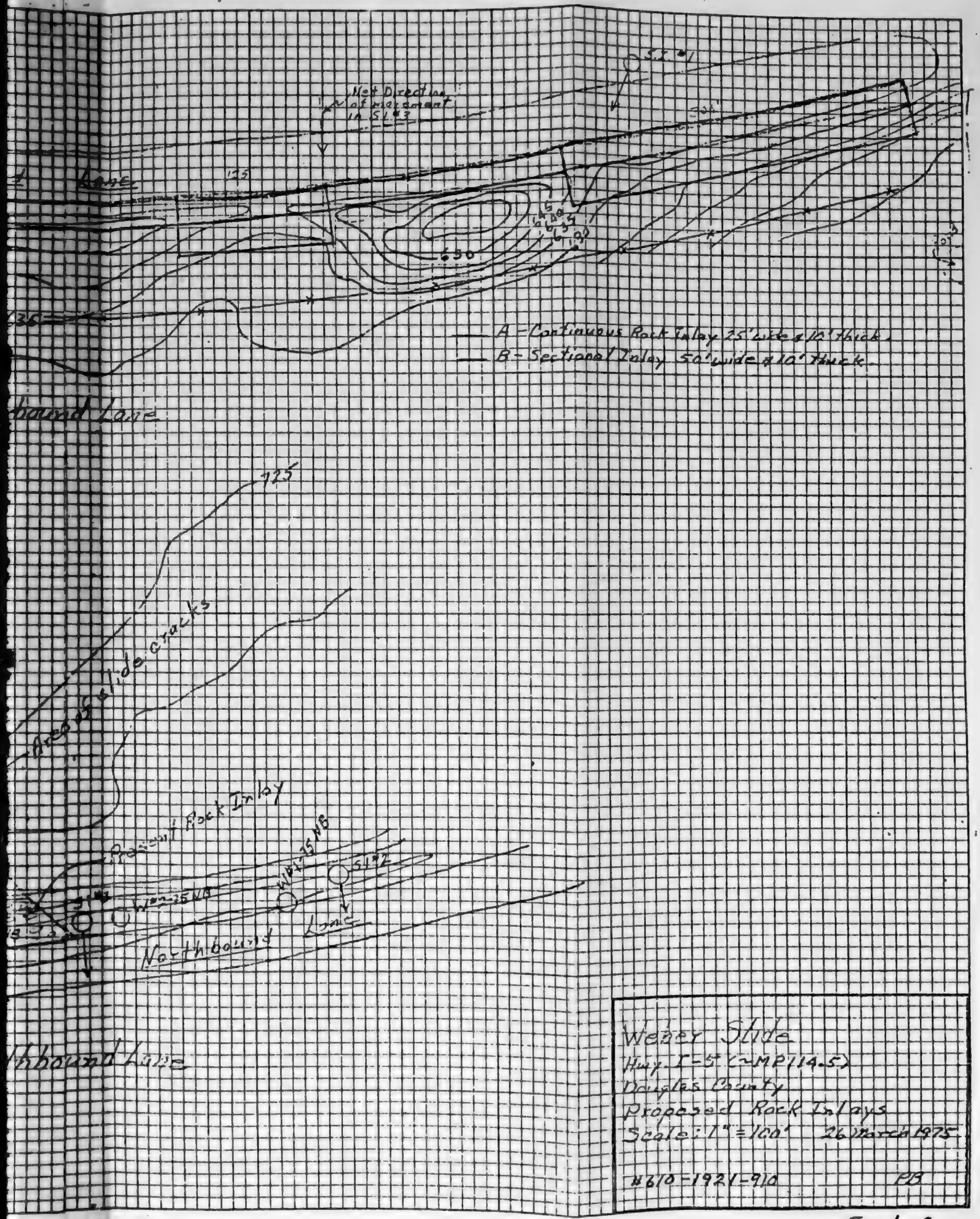
Note: Lateral drains, according to map, will of necessity have to be about 250± Length.


3" pipe (slitted down to bentonite seal.)
6" perf pipe
18" perf pipe (gravel packed)
Bentonite seal
Gravels

Note: If gravels below SB Lane were permeable one might punch a hole down into them & drain the water off in that manner. (Insufficient data avail. concerning permeability of gravels.)


Net Movement Directional Arrows
SI#8
SI#9
352
Southbound Lane
645
640
635
Rock Inlay - Southbound Lane
Proposed Blanket Inlay
700
675
A-10
A-9
WM3-75NB
W#4-75NB
665
Rock Inlay - Northbound Lane

1"=100'


SI #1
Net Direction of movement in SI #3
Lane
125
145
140
135
130
650
135
bound Lane
125
Area of slide cracks
Present Rock Inlay
WP-25 NB
WP-15 NB
SI #2
Northbound Lane
hbound Lane

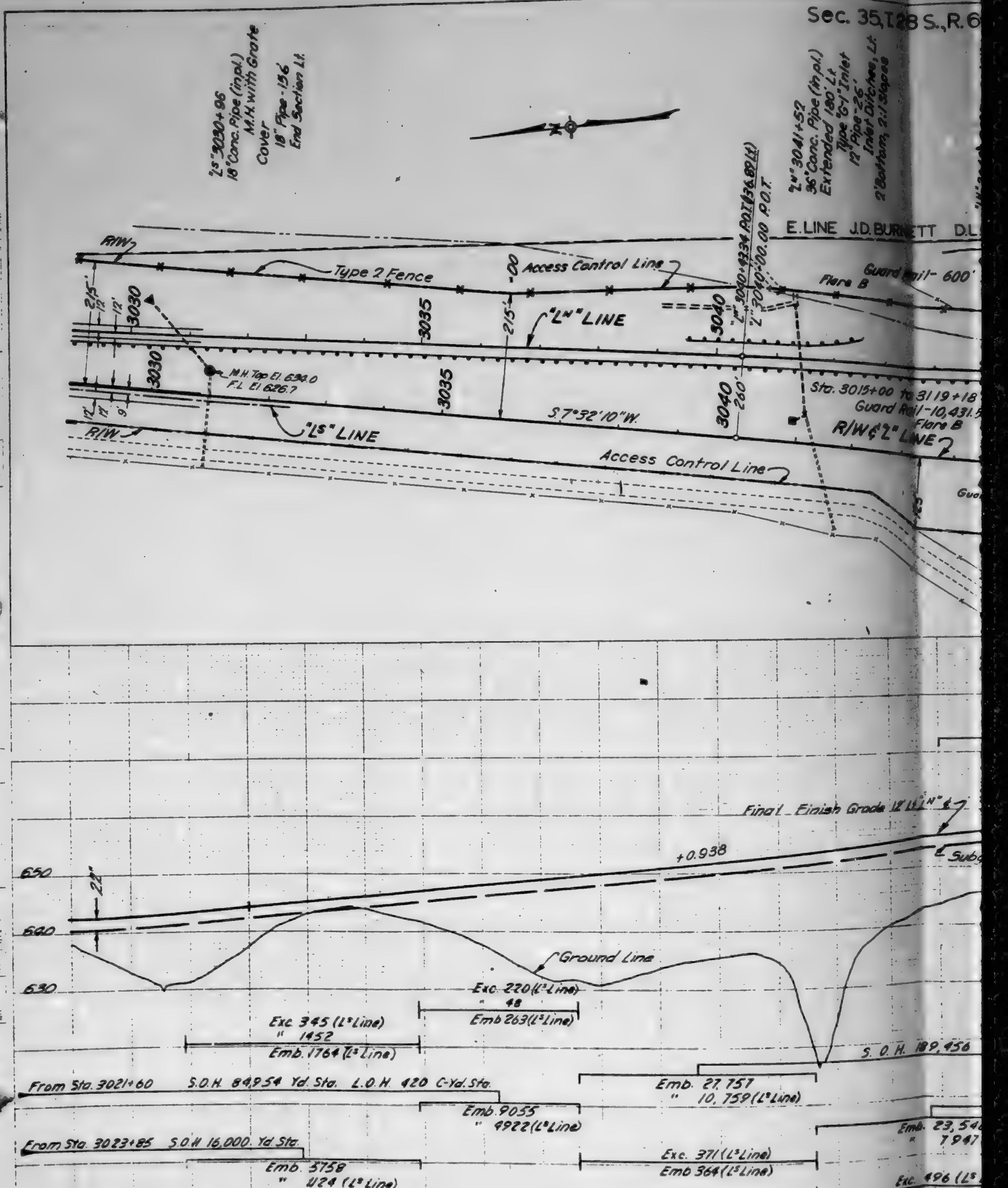
A - Continuous Rock Inlay 25' wide & 12' thick.
B - Sectional Inlay 50' wide & 10' thick.

Weber Slide
Hwy. I-5 (~MP114.5)
Douglas County
Proposed Rock Inlays
Scale: 1" = 100'   26 March 1975

#610-1921-910   PB

Encl. 4

113


Sec. 35,T.28 S.,R.6
"Ls" 3030+96
18" Conc. Pipe (inpl.)
M.H. with Grate
Cover
18" Pipe -136
End Section Lt.
"LN" 3041+52
36" Conc. Pipe (in pl.)
Extended 180' Lt.
Type "G-1" Inlet
12" Pipe -26'
Inlet Ditches, Lt.
2' Bottom, 2:1 Slopes
"LN" 3040+43.34 P.O.T. (136.89 Lt)
"L" 3040+00.00 P.O.T.
E. LINE J.D. BURNETT D.L.
R/W
Type 2 Fence
-00
Access Control Line
Guard Rail - 600'
Flare B
215'
12'
12'
3030
3035
3040
"LN" LINE
3030
3035
3040
260'
M.H. Top El. 630.0
F.L. El. 626.7
12'
11'
9'
S.7°32'10"W.
"Ls" LINE
R/W
Sta. 3015+00 to 3119+18
Guard Rail - 10,431.5
Flare B
R/W & "L" LINE
Access Control Line
Guar
Final Finish Grade 12' Lt. "LN" ¢
Subg
+0.938
22"
650
640
630
Ground Line
Exc. 220 (Ls Line)
" 48
Emb 263 (Ls Line)
Exc. 345 (Ls Line)
" 1452
Emb. 1764 (Ls Line)
S. O. H. 189,456
From Sta. 3021+60 S.O.H. 84,954 Yd. Sta. L.O.H. 420 C-Yd. Sta.
Emb. 27,757
" 10,759 (Ls Line)
Emb. 9055
" 4922 (Ls Line)
Emb. 23,54
" 7947
From Sta. 3023+85 S.O.H. 16,000 Yd. Sta.
Emb. 5758
" 1124 (Ls Line)
Exc. 371 (Ls Line)
Emb 364 (Ls Line)
Exc. 496 (Ls
Emb. 487 (Ls
3030
3035
3040

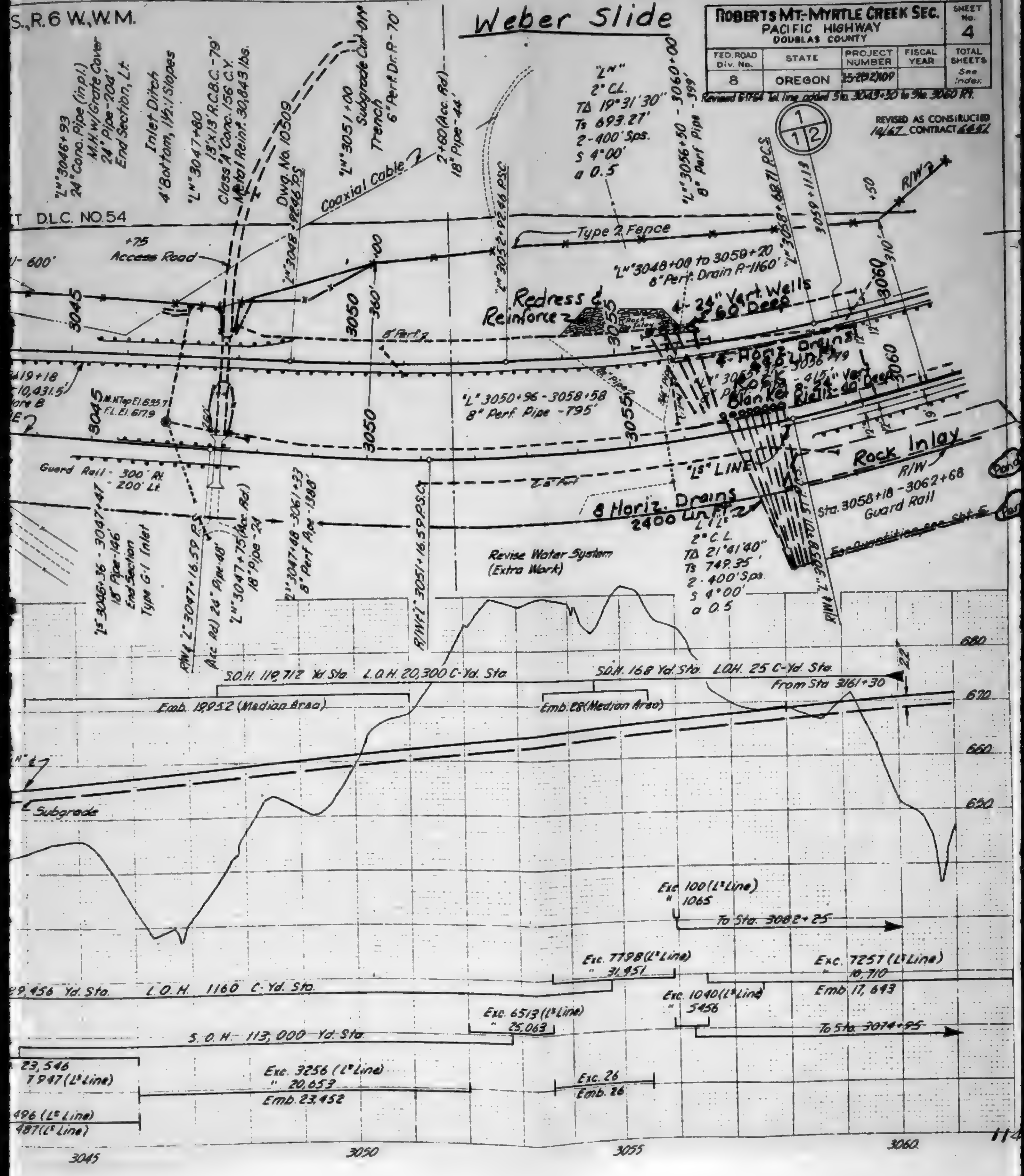
8V-109

ROBERTS MT.-MYRTLE CREEK SEC. PACIFIC HIGHWAY DOUGLAS COUNTY				SHEET No. 4
FED. ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
8	OREGON	15-2(32)109		See Index

Revised 6-17-64 Tel line added Sta. 3043+30 to Sta. 3060 Rt.

REVISED AS CONSTRUCTED 10/67 CONTRACT 6651

Weber Slide



S., R.6 W., W.M.
"L" 3046+93 24" Conc. Pipe (in pl.) M.H. w/Grate Cover 24" Pipe-204' End Section, Lt.
Inlet Ditch 4' Bottom, 1½:1 Slopes
"L" 3047+80 18'x13' R.C.B.C.-79' Class "A" Conc. 156 C.Y. Metal Reinf. 30,843 lbs.
Dwg. No. 10509
"L" 3051+00 Subgrade Cut-0.11' Trench 6" Perf. Dr. R-70'
2+60 (Acc. Rd) 18" Pipe-44'
Coaxial Cable
"L" 3048 P.S.
"L" 3052+92.46 P.S.C.
"L" 2° C.L. TΔ 19°31'30" Ts 693.27' 2-400' Sps. S 4°00' a 0.5
"L" 3056+50-3060+00 8" Perf Pipe-399'
"L" 3058+68.71 P.C.S.
3059+11.13
1/1 1/2
R/W
D.L.C. NO. 54
Type 2 Fence
+75 Access Road
-600'
3045
3050
360'
+00
"L" 3048+00 to 3059+20 8" Perf. Drain R-1160'
4-24" Vert. Wells 2-60' Deep
Redress & Reinforce
Rock Inlay
3055
3060
310'
+50
6-Horiz. Drains 1800 Lin.Ft.
"L" 3056+79 Rock 8-24" Vert. Blanket Drains-60' Deep
M.H. Top El. 635.7 F.L. El. 617.9
"L" 3050+96-3058+58 8" Perf. Pipe-795'
"Ls" LINE
8 Horiz. Drains 2400 Lin. Ft.
L & Ls 2° C.L. TΔ 21°41'40" Ts 749.35' 2-400' Sps. S 4°00' a 0.5
Sta. 3058+18-3062+68 Guard Rail
For Quantities see Sht. 5
Guard Rail - 300' Rt. - 200' Lt.
"Ls" 3046+36-3047+47 18" Pipe-146' End Section Type G-1 Inlet
R/W & "L" 3047+16.59 P.S.
(Acc. Rd) 24" Pipe-48'
"L" 3047+75 (Acc. Rd.) 18" Pipe-24'
"L" 3047+48-3061+33 8" Perf Pipe-1388'
R/W & "L" 3051+16.59 P.S.C.
Revise Water System (Extra Work)
R/W & "L" 3058+07.51 P.C.S.
S.O.H. 119,712 Yd. Sta. L.O.H. 20,300 C-Yd. Sta.
S.O.H. 168 Yd. Sta. L.O.H. 25 C-Yd. Sta.
From Sta. 3161+30
Emb. 19,952 (Median Area)
Emb. 28 (Median Area)
680
670
660
650
22
Subgrade
Exc. 100 (Ls Line) " 1065
To Sta. 3082+25
Exc. 7798 (Ls Line) " 31,451
Exc. 7257 (Ls Line) " 10,710 Emb. 17,643
29,456 Yd. Sta. L.O.H. 1160 C-Yd. Sta.
Exc. 1040 (Ls Line) " 5456
Exc. 6513 (Ls Line) " 25,063
To Sta. 3074+95
S.O.H. 113,000 Yd. Sta.
23,546 7947 (Ls Line)
Exc. 3256 (Ls Line) " 20,653 Emb. 23,452
Exc. 26 Emb. 26
496 (Ls Line)
487 (Ls Line)
3045
3050
3055
3060

SECTION E

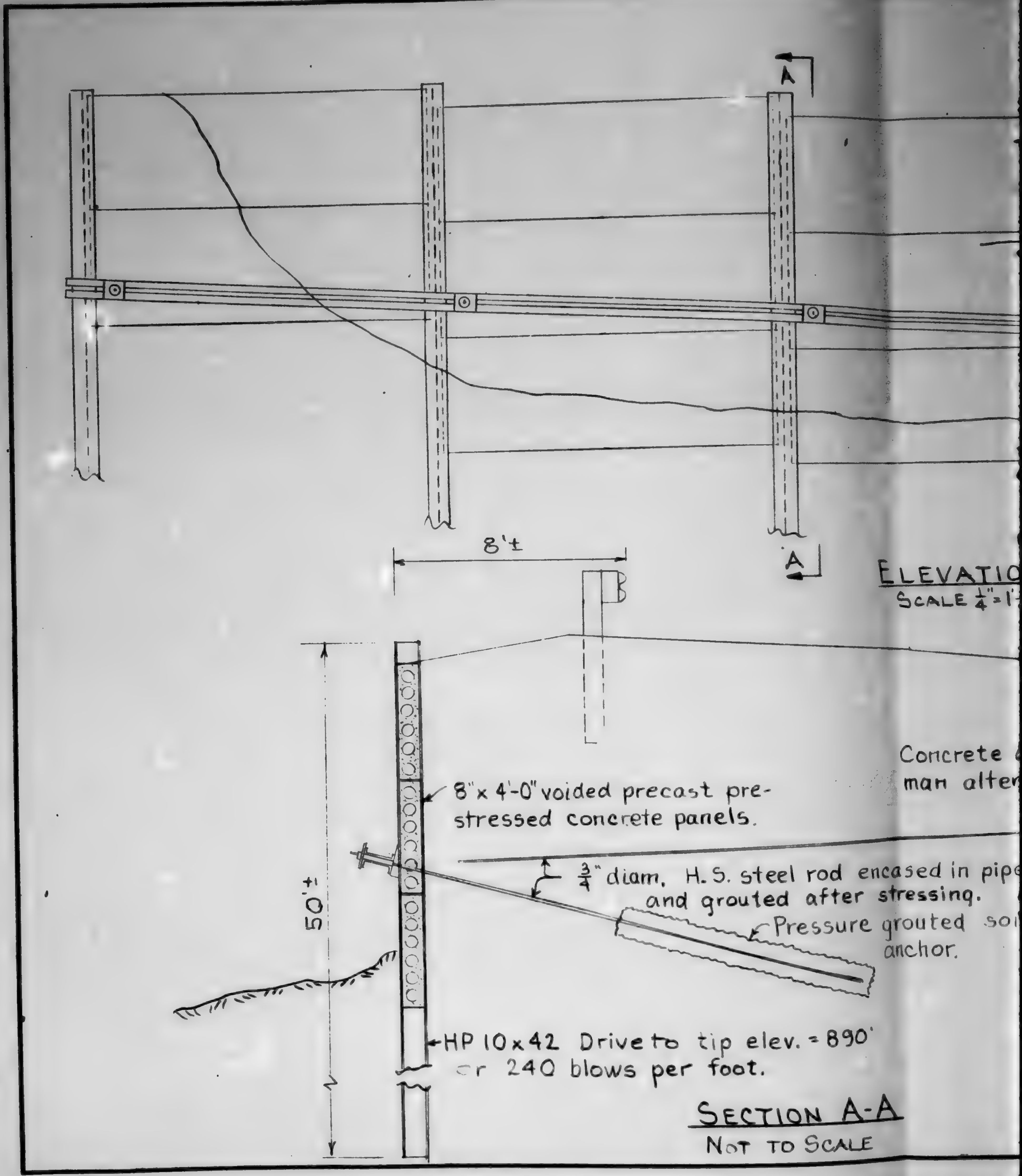
Fill Slide Stabilization

Preliminary Tieback Wall Design............115

Foundation Data............................116

Cut Slope Stabilization

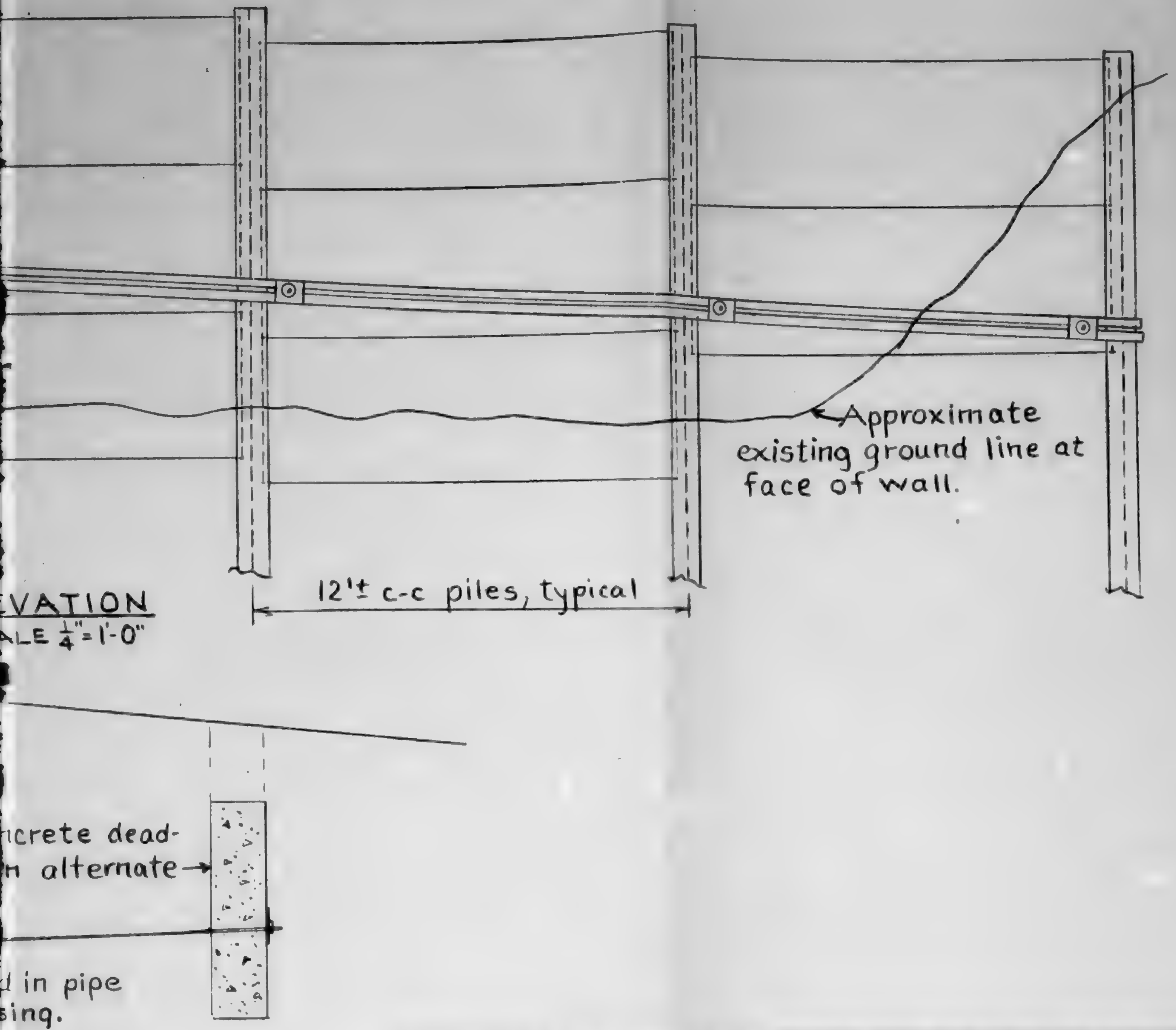
Westside and Eastside Cut Slopes...........121


A
A
8'±
50'±
8"x 4'-0" voided precast pre-stressed concrete panels.
3/4" diam. H.S. steel rod encased in pipe
and grouted after stressing.
Pressure grouted soi
anchor.
HP 10x42 Drive to tip elev. = 890'
or 240 blows per foot.
Concrete
man alter

ELEVATIO
SCALE 1/4"=1'

SECTION A-A
NOT TO SCALE

DIETERICH POST OF WASH.



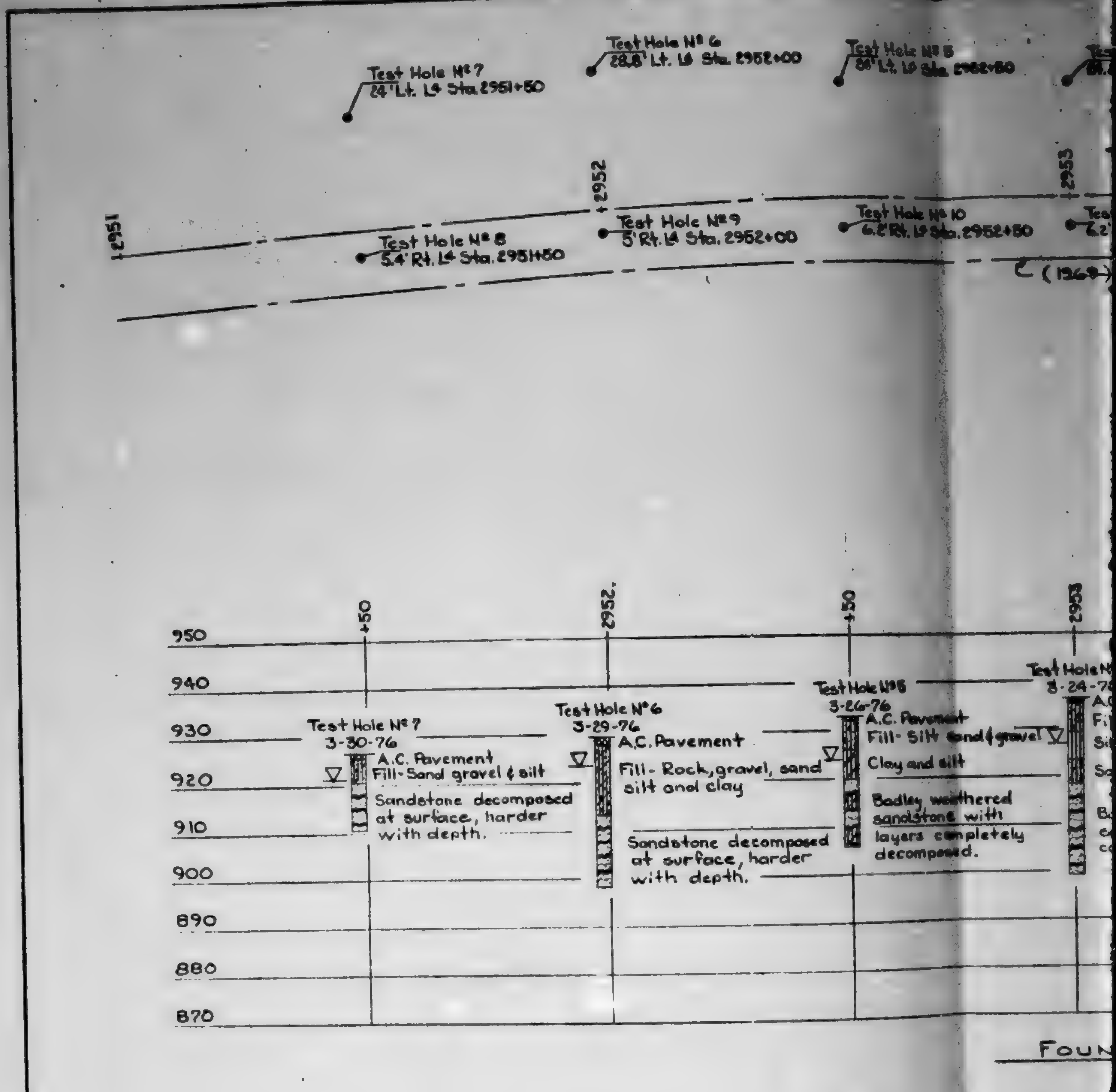
Approximate existing ground line at face of wall.
12'± c-c piles, typical
EVATION
ALE 1/4"=1'-0"
crete dead-
n alternate
d in pipe
sing.
ed soil
or.

OREGON STATE HIGHWAY DIVISION
BRIDGE SECTION

PRELIMINARY ELEVATION AND SECTION
ROBERTS MOUNTAIN SLIDE CORRECTION
PACIFIC HIGHWAY DOUGLAS COUNTY

APPROVED:
BRIDGE ENGINEER

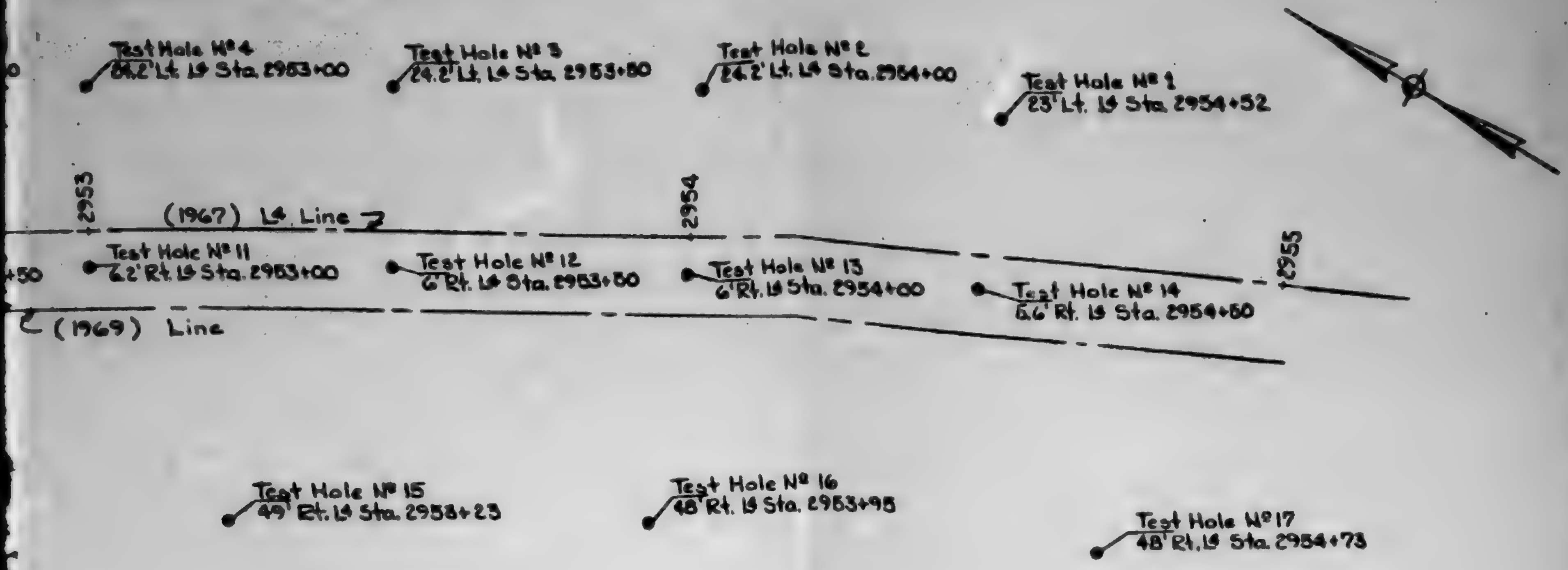
DATE 8-21-77
DESIGNED AB
DRAWN AB
BRIDGE NO. 16785
DRAWING NO. B-758


Test Hole Nº 7
24' Lt. L Sta. 2951+50
Test Hole Nº 6
28.8' Lt. L Sta. 2952+00
Test Hole Nº 5
26' Lt. L Sta. 2952+50
2951
2952
2953
Test Hole Nº 8
5.4' Rt. L Sta. 2951+50
Test Hole Nº 9
5' Rt. L Sta. 2952+00
Test Hole Nº 10
6.2' Rt. L Sta. 2952+50
℄ (1969)
950
940
930
920
910
900
890
880
870
+50
2952.
+50
2953
Test Hole Nº 7
3-30-76
A.C. Pavement
Fill- Sand gravel & silt
Sandstone decomposed at surface, harder with depth.
Test Hole Nº 6
3-29-76
A.C. Pavement
Fill- Rock, gravel, sand silt and clay
Sandstone decomposed at surface, harder with depth.
Test Hole Nº 5
3-26-76
A.C. Pavement
Fill- Silt sand & gravel
Clay and silt
Badley weathered sandstone with layers completely decomposed.
FOUN

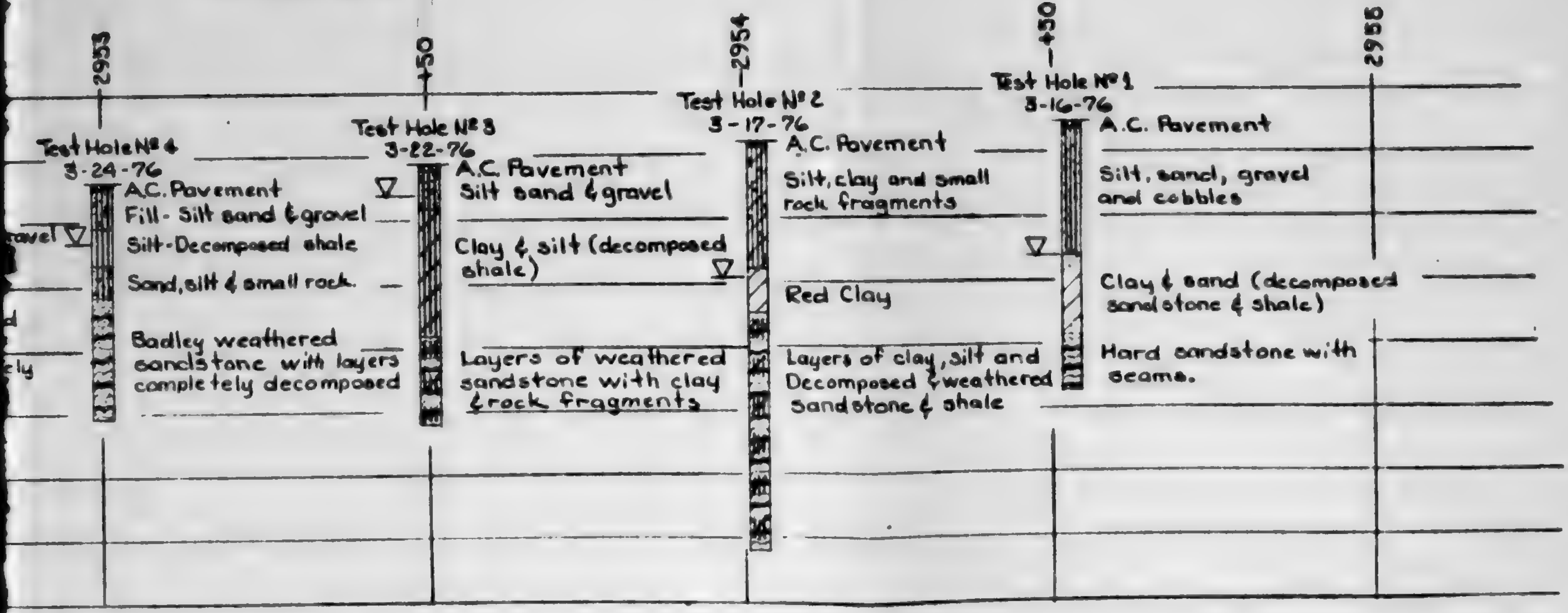
Foundation data shown on this drawing, in some instances, is a consolidation of and a revision in terminology from the original field drilling logs. The original field drilling logs are available for review in the office of the Bridge Engineer in Salem.

LEGEND OF MATERIALS

① Gravels, cobbles and boulders.	③ Silts.	⑤ Silty gravels, gravel-silt mixture.	⑦ Clayey gravel, gravel-clay mixture.	⑨ Silty clay.
② Sand.	④ Clays.	⑥ Silty sand, sand-silt mixture.	⑧ Clayey sand, sand-clay mixture.	⑩ Sand-silt-clay mixture, near equal proportions.

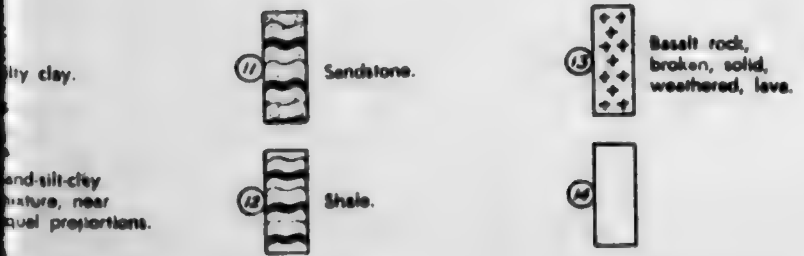

Test Hole Nº 4
24.2' Lt. L Sta. 2953+00
Test Hole Nº 3
24.2' Lt. L Sta. 2953+50
Test Hole Nº 2
24.2' Lt. L Sta. 2954+00
Test Hole Nº 1
23' Lt. L Sta. 2954+52
2953
2954
2955
(1967) L Line
+50
Test Hole Nº 11
6.2' Rt. L Sta. 2953+00
Test Hole Nº 12
6' Rt. L Sta. 2953+50
Test Hole Nº 13
6' Rt. L Sta. 2954+00
Test Hole Nº 14
5.6' Rt. L Sta. 2954+50
(1969) Line
Test Hole Nº 15
49' Rt. L Sta. 2953+23
Test Hole Nº 16
48' Rt. L Sta. 2953+95
Test Hole Nº 17
48' Rt. L Sta. 2954+73

PLAN
Scale: 1" = 15'-0"

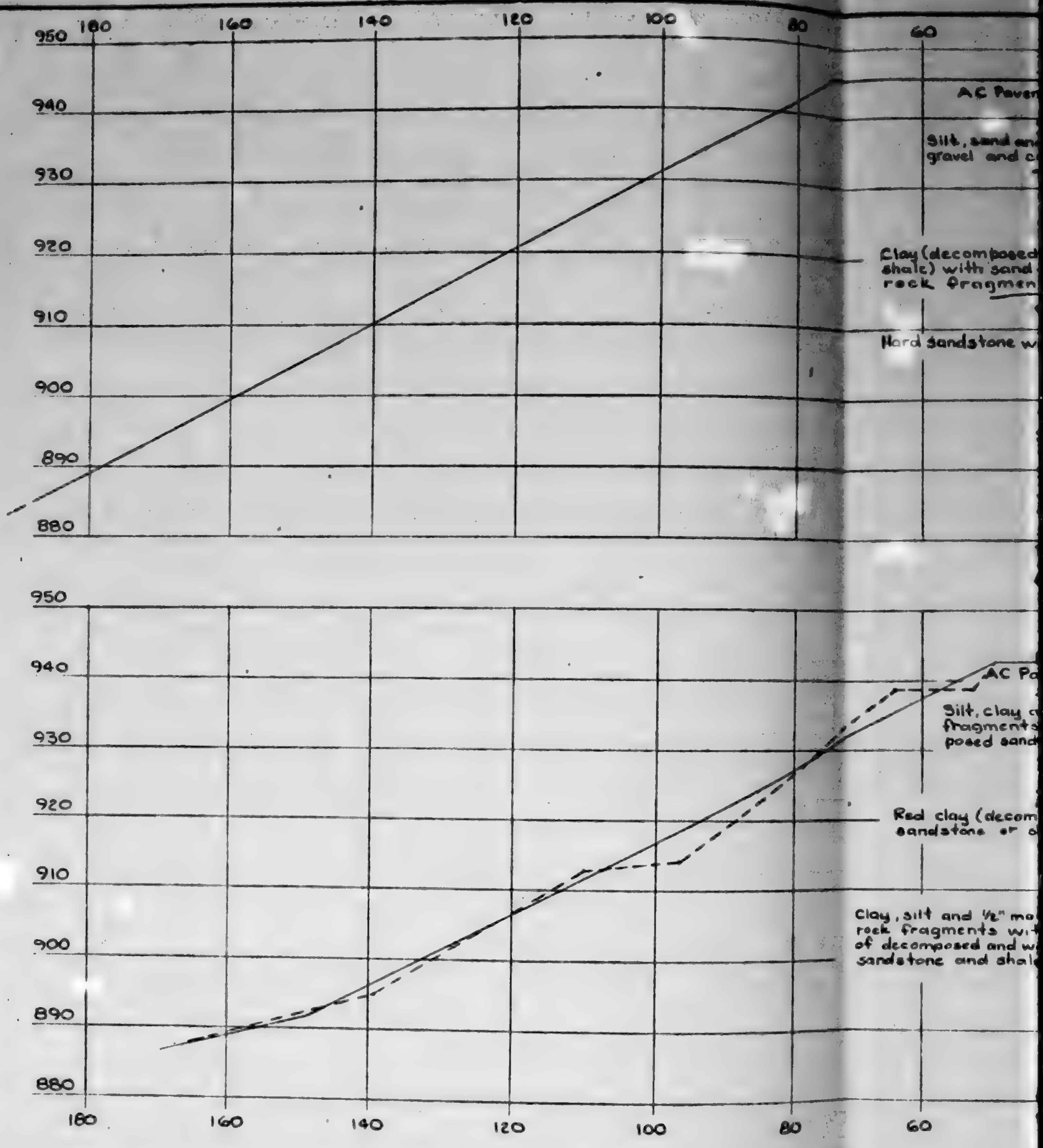

2953
+50
2954
+50
2955
Test Hole Nº 4
3-24-76
A.C. Pavement
Fill - Silt sand & gravel
Silt - Decomposed shale
Sand, silt & small rock.
Badley weathered sandstone with layers completely decomposed
Test Hole Nº 3
3-22-76
A.C. Pavement
Silt sand & gravel
Clay & silt (decomposed shale)
Layers of weathered sandstone with clay & rock fragments
Test Hole Nº 2
3-17-76
A.C. Pavement
Silt, clay and small rock fragments
Red Clay
Layers of clay, silt and Decomposed & weathered Sandstone & shale
Test Hole Nº 1
3-16-76
A.C. Pavement
Silt, sand, gravel and cobbles
Clay & sand (decomposed sandstone & shale)
Hard sandstone with seams.
ravel
d
ly

FOUNDATION DATA
Scale: 1" = 15'-0"

▽ Elevation ground water encountered


lty clay.
and-silt-clay
ixture, near
qual proportions.
11
Sandstone.
12
Shale.
13
Basalt rock, broken, solid, weathered, lava.
14

APPROVED: BRIDGE ENGINEER	OREGON STATE HIGHWAY DIVISION BRIDGE SECTION
DESIGNED DRAWN L.W. CHECKED J.L.D. REVIEWED REVIEWED CALC. BOOK	ROBERTS MT. FILL SLIDE
DATE / REVISION	FOUNDATION DATA
	DATE 5-3-76 BRIDGE NO. 16285
	SHEET ___ OF ___ DRAWING NO. 32879 1/6


180
160
140
120
100
80
60
950
940
930
920
910
900
890
880
AC Paven
Silt, sand an
gravel and c
Clay (decomposed
shale) with sand
rock fragmen
Hard sandstone w
AC Pa
Silt, clay a
fragments
posed sand
Red clay (decom
sandstone or o
Clay, silt and ½" ma
rock fragments wit
of decomposed and w
sandstone and shale

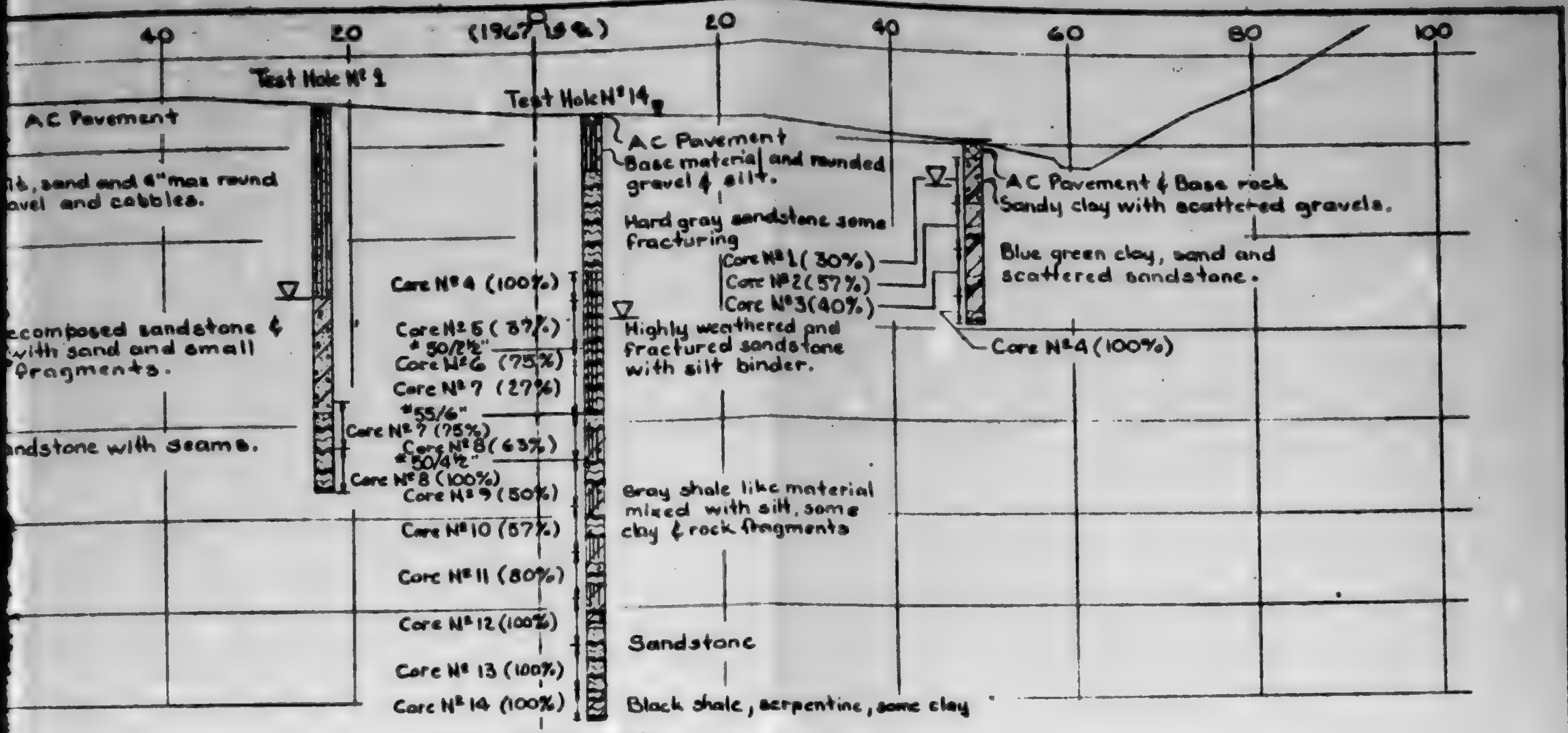
Foundation data shown on this drawing, in some instances, is a consolidation of and a revision in terminology from the original field drilling logs. The original field drilling logs are available for review in the office of the Bridge Engineer in Salem.

Scale
1" = 10'-0" Hor.
1" = 10'-0" Vert.

▽ Elevation ground water encountered.
* Standard 2" O.D. split tube test.

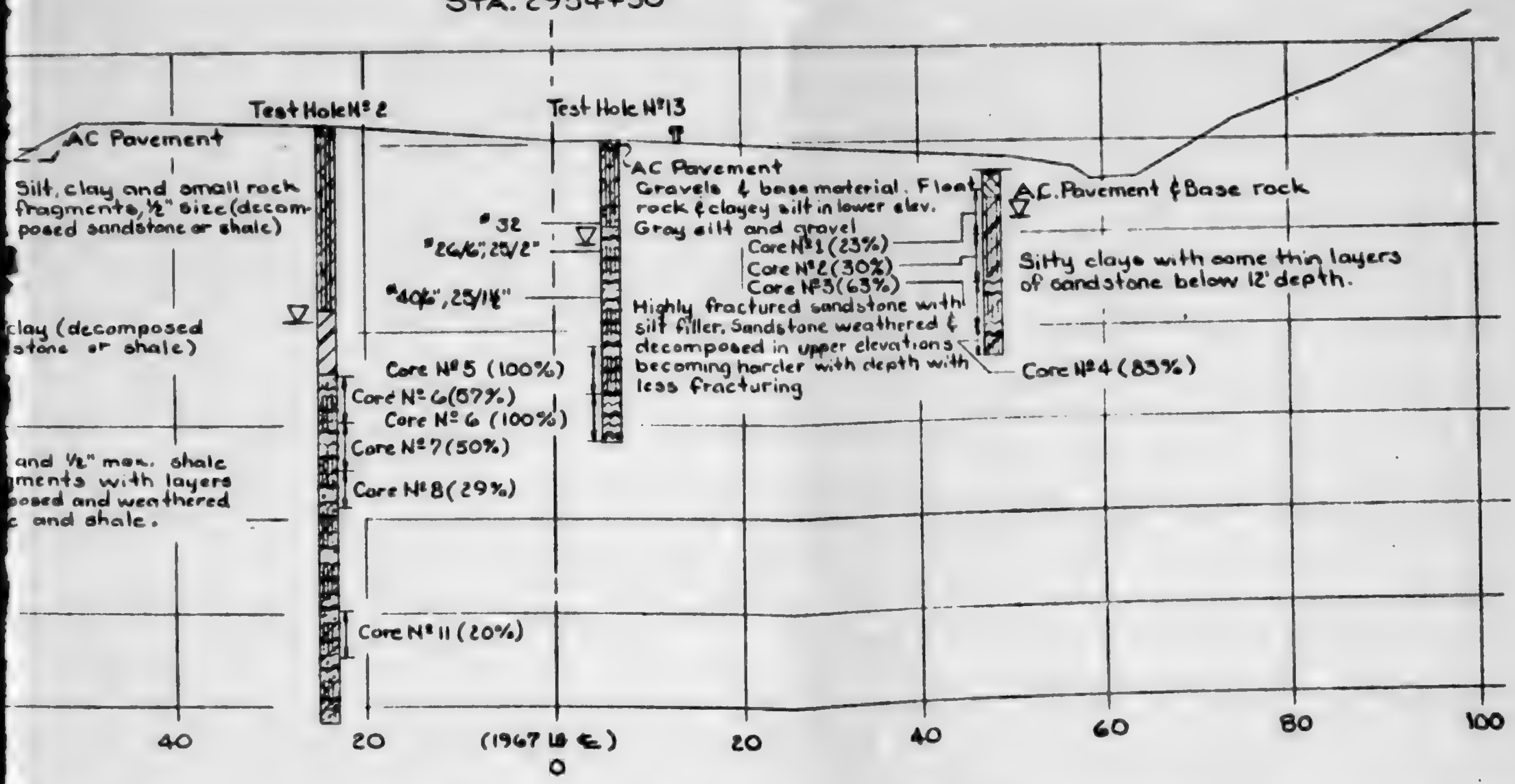
LEGEND OF MATERIALS

① Gravels, cobbles and boulders.
③ Silts.
⑤ Silty gravels, gravel-silt mixture.
⑦ Clayey gravel, gravel-clay mixture.
⑨ Silty clay.
② Sand.
④ Clays.
⑥ Silty sand, sand-silt mixture.
⑧ Clayey sand, sand-clay mixture.
⑩ Sand-silt-clay mixture, near equal proportions.



40
20
(1967 ℄)
0
20
40
60
80
100
Test Hole Nº 1
Test Hole Nº 14
AC Pavement
lt, sand and 6" max round
avel and cobbles.
ecomposed sandstone &
with sand and small
fragments.
ndstone with seams.
Core Nº 7 (75%)
"55/6"
Core Nº 8 (63%)
"50/4½"
Core Nº 8 (100%)
Core Nº 4 (100%)
Core Nº 5 (87%)
"50/2½"
Core Nº 6 (75%)
Core Nº 7 (27%)
Core Nº 9 (50%)
Core Nº 10 (57%)
Core Nº 11 (80%)
Core Nº 12 (100%)
Core Nº 13 (100%)
Core Nº 14 (100%)
AC Pavement
Base material and rounded
gravel & silt.
Hard gray sandstone some
fracturing
Highly weathered and
fractured sandstone
with silt binder.
Gray shale like material
mixed with silt, some
clay & rock fragments
Sandstone
Black shale, serpentine, some clay
Core Nº 1 (30%)
Core Nº 2 (57%)
Core Nº 3 (40%)
Core Nº 4 (100%)
AC Pavement & Base rock
Sandy clay with scattered gravels.
Blue green clay, sand and
scattered sandstone.

STA. 2954+50



Test Hole Nº 2
Test Hole Nº 13
AC Pavement
Silt, clay and small rock
fragments, ½" size (decomposed sandstone or shale)
clay (decomposed
stone or shale)
and ½" max. shale
gments with layers
posed and weathered
and shale.
"32
"26/6"; 25/2"
"40/6"; 25/1½"
Core Nº 5 (100%)
Core Nº 6 (57%)
Core Nº 6 (100%)
Core Nº 7 (50%)
Core Nº 8 (29%)
Core Nº 11 (20%)
AC Pavement
Gravels & base material. Float
rock & clayey silt in lower elev.
Gray silt and gravel
Highly fractured sandstone with
silt filler. Sandstone weathered &
decomposed in upper elevations
becoming harder with depth with
less fracturing
Core Nº 1 (23%)
Core Nº 2 (30%)
Core Nº 3 (63%)
Core Nº 4 (83%)
AC Pavement & Base rock
Silty clays with some thin layers
of sandstone below 12' depth.
40
20
(1967 ℄)
0
20
40
60
80
100

tered.

STA. 2954+00

11
Sandstone.
13
Basalt rock,
broken, solid,
weathered, lava.
12
Shale.
14
lay
near
portions.

APPROVED:

BRIDGE ENGINEER

DESIGNED
DRAWN L.W.
CHECKED J.L.D.
REVIEWED
REVIEWED
CALC. BOOK

DATE	REVISION

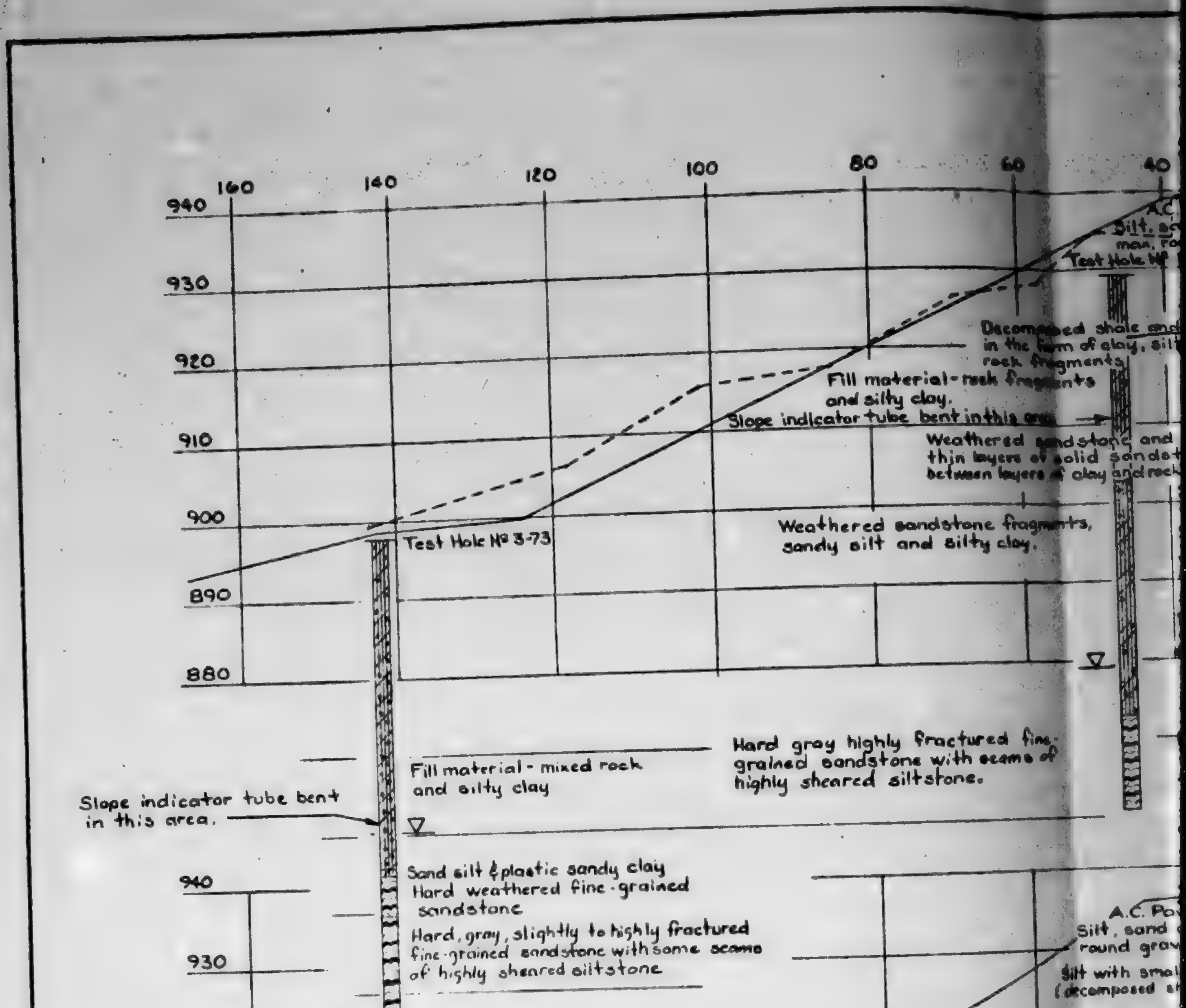
OREGON STATE HIGHWAY DIVISION
BRIDGE SECTION

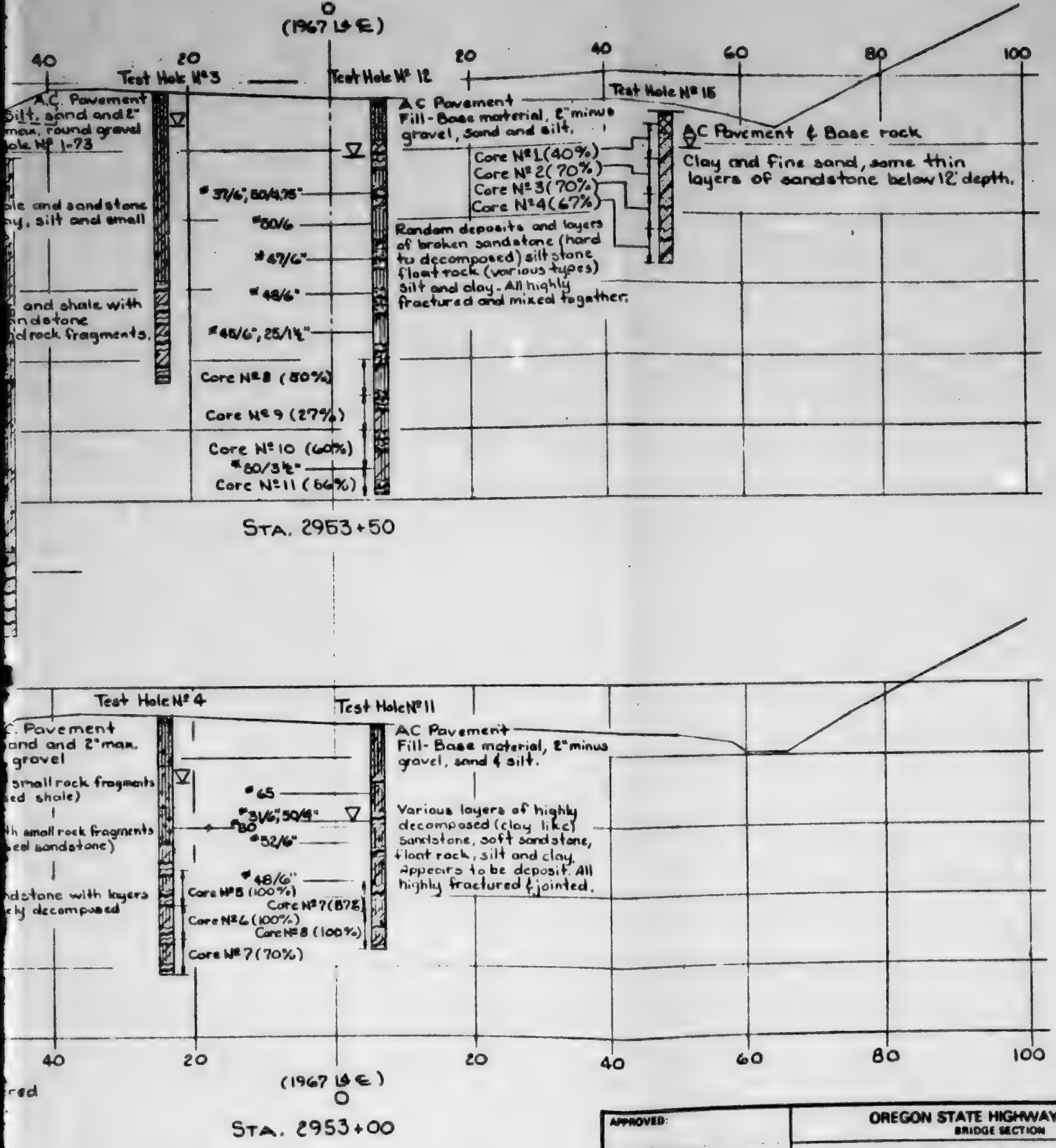
ROBERTS MT. FILL SLIDE

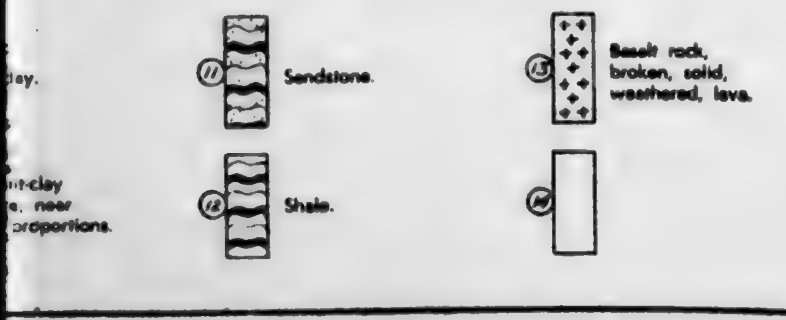
FOUNDATION DATA

DATE 5-13-76
BRIDGE NO. 16285
SHEET _ OF _
DRAWING NO. 32880

117

 160
140
120
100
80
60
40
940
930
920
910
900
890
880
A.C.
Silt, sa
max. ro
Test Hole Nº
Decomposed shale and
in the form of clay, silt
rock fragments
Fill material - rock fragments
and silty clay.
Slope indicator tube bent in this area
Weathered sandstone and
thin layers of solid sandst
between layers of clay and rock
Weathered sandstone fragments,
sandy silt and silty clay.
Test Hole Nº 3-73
Fill material - mixed rock
and silty clay
Hard gray highly fractured fine-
grained sandstone with seams of
highly sheared siltstone.
Slope indicator tube bent
in this area.
Sand silt & plastic sandy clay
Hard weathered fine-grained
sandstone
Hard, gray, slightly to highly fractured
fine-grained sandstone with some seams
of highly sheared siltstone
940
930
920
910
900
890
A.C. Pa
Silt, sand
round grav
Silt with smal
(decomposed s
Sand & silt with sma
(decomposed s
Weathered sandsto
that are completely d
160
140
120
100
80
60
Foundation data shown on this drawing, in some instances, is a compilation of and a revision in terminology from the original field drilling logs. The original field drilling logs are available for review in the office of the Bridge Engineer in Salem.
Scale
1" = 10'-0" Horz.
1" = 10'-0" Vert.
∇ Elevation ground water encountered
* Standard 2" OD split tube test.
LEGEND OF MATERIALS
① Gravels, cobbles and boulders.
② Sand.
③ Silts.
④ Clays.
⑤ Silty gravels, gravel-silt mixture.
⑥ Silty sand, sand-silt mixture.
⑦ Clayey gravel, gravel-clay mixture.
⑧ Clayey sand, sand-clay mixture.
⑨ Silty clay.
⑩ Sand-silt-cla mixture, ne equal propo


(1967 L E)
0
40
20
20
40
60
80
100
Test Hole Nº 3
Test Hole Nº 12
Test Hole Nº 15
A.C. Pavement
Silt, sand and 2" max. round gravel
Hole Nº 1-73
le and sandstone
ay, silt and small
and shale with
ndstone
d rock fragments.
#37/6", 50/4.75"
#50/6
#47/6"
#48/6"
#45/6", 25/1½"
Core Nº 8 (50%)
Core Nº 9 (27%)
Core Nº 10 (60%)
#50/3½"
Core Nº 11 (56%)
AC Pavement
Fill-Base material, 2" minus gravel, sand and silt.
Core Nº 1 (40%)
Core Nº 2 (70%)
Core Nº 3 (70%)
Core Nº 4 (67%)
Random deposits and layers of broken sandstone (hard to decomposed) siltstone float rock (various types) silt and clay. All highly fractured and mixed together.
AC Pavement & Base rock
Clay and fine sand, some thin layers of sandstone below 12' depth.
STA. 2953+50
Test Hole Nº 4
Test Hole Nº 11
C. Pavement
and and 2" max.
gravel
small rock fragments
sed shale)
h small rock fragments
sed sandstone)
ndstone with layers
ely decomposed
#65
#31/6", 50/4"
#80
#52/6"
#48/6"
Core Nº 5 (100%)
Core Nº 6 (100%)
Core Nº 7 (70%)
Core Nº 7 (87%)
Core Nº 8 (100%)
AC Pavement
Fill-Base material, 2" minus gravel, sand & silt.
Various layers of highly decomposed (clay like) sandstone, soft sandstone, float rock, silt and clay. Appears to be deposit. All highly fractured & jointed.
40
20
20
40
60
80
100
(1967 L E)
0
ered
STA. 2953+00


lay.
⑪ Sandstone.
⑫ Shale.
⑬ Basalt rock, broken, solid, weathered, lava.
⑭
ilt-clay
e, near
proportions.

APPROVED:

BRIDGE ENGINEER

DESIGNED
DRAWN L.W.
CHECKED J.L.D.
REVIEWED
REVIEWED
CALC. BOOK

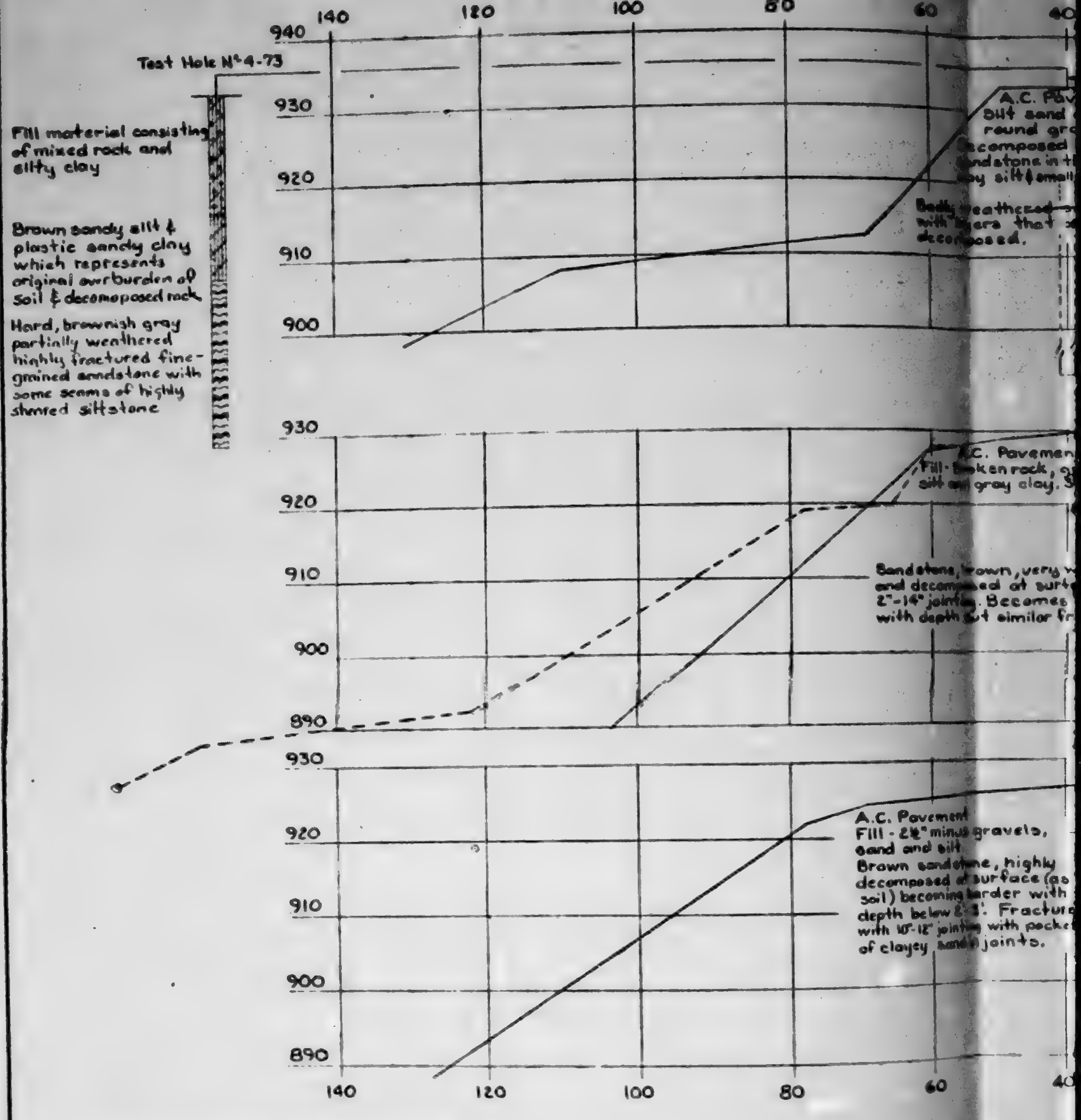
DATE	REVISION

OREGON STATE HIGHWAY DIVISION
BRIDGE SECTION

ROBERTS MT. FILL SLIDE

FOUNDATION DATA

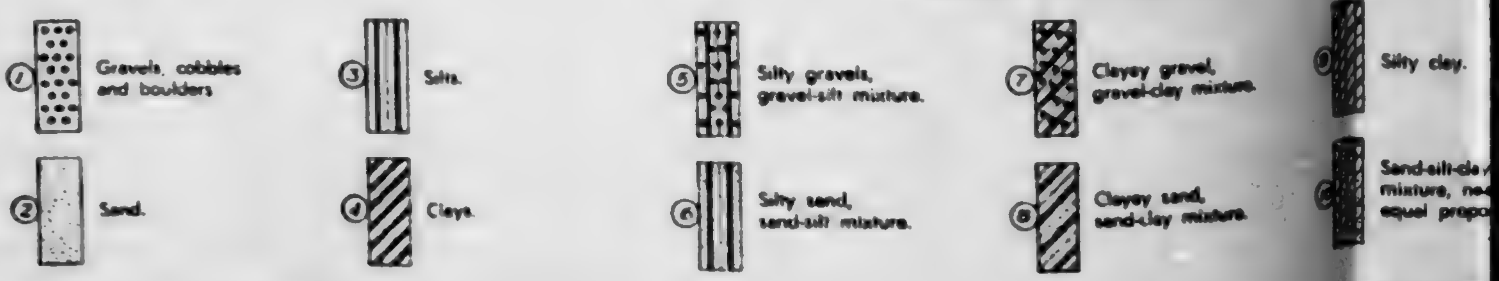
DATE 5-12-76
BRIDGE NO. 16285
SHEET ___ OF ___
DRAWING NO. 32881

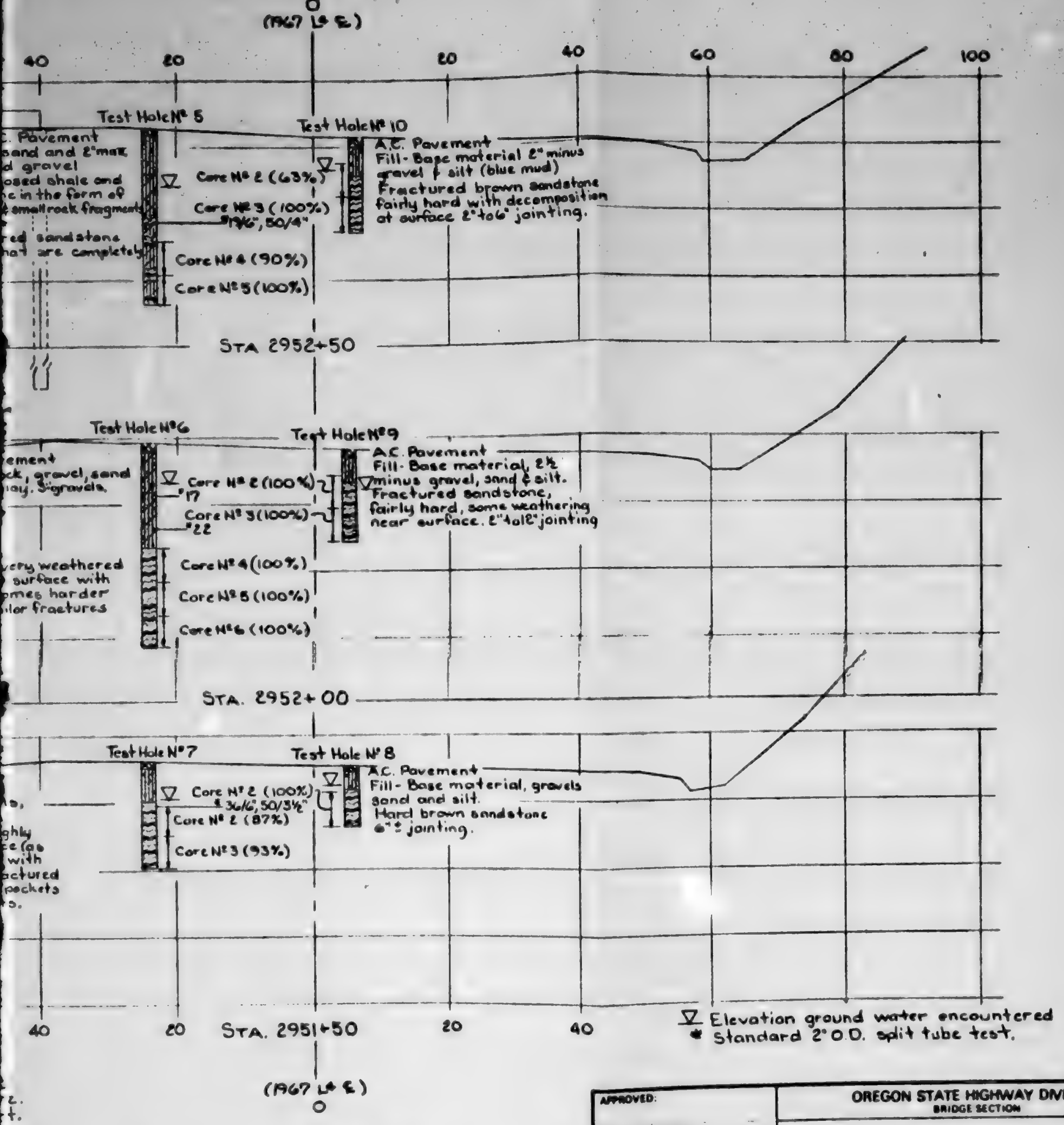

140
120
100
80
60
40
940
930
920
910
900
Test Hole Nº 4-73
Fill material consisting of mixed rock and silty clay
Brown sandy silt & plastic sandy clay which represents original overburden of soil & decomposed rock
Hard, brownish gray partially weathered highly fractured fine-grained sandstone with some seams of highly sheared siltstone
A.C. Pav
Silt sand
round gr
Decomposed
Sandstone in t
clay silt & small
Badly weathered s
with layers that
decomposed.
930
920
910
900
890
A.C. Pavemen
Fill-Broken rock,
silt and gray clay.
Sandstone, brown, very w
and decomposed at surf
2"-14" jointing. Becomes
with depth but similar fr
930
920
910
900
890
A.C. Pavement
Fill - 2½" minus gravels, sand and silt
Brown sandstone, highly decomposed at surface (as soil) becoming harder with depth below 2-3'. Fracture with 10"-12" jointing with pocket of clayey sand in joints.
140
120
100
80
60
40

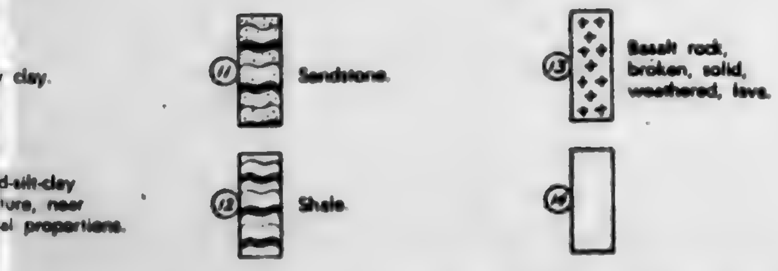
Foundation data shown on this drawing, in some instances, is a consolidation of and a revision in terminology from the original field drilling logs. The original field drilling logs are available for review in the office of the Bridge Engineer in Salem.

Scale
1"=10' Horz.
1"=10' Vert.

LEGEND OF MATERIALS

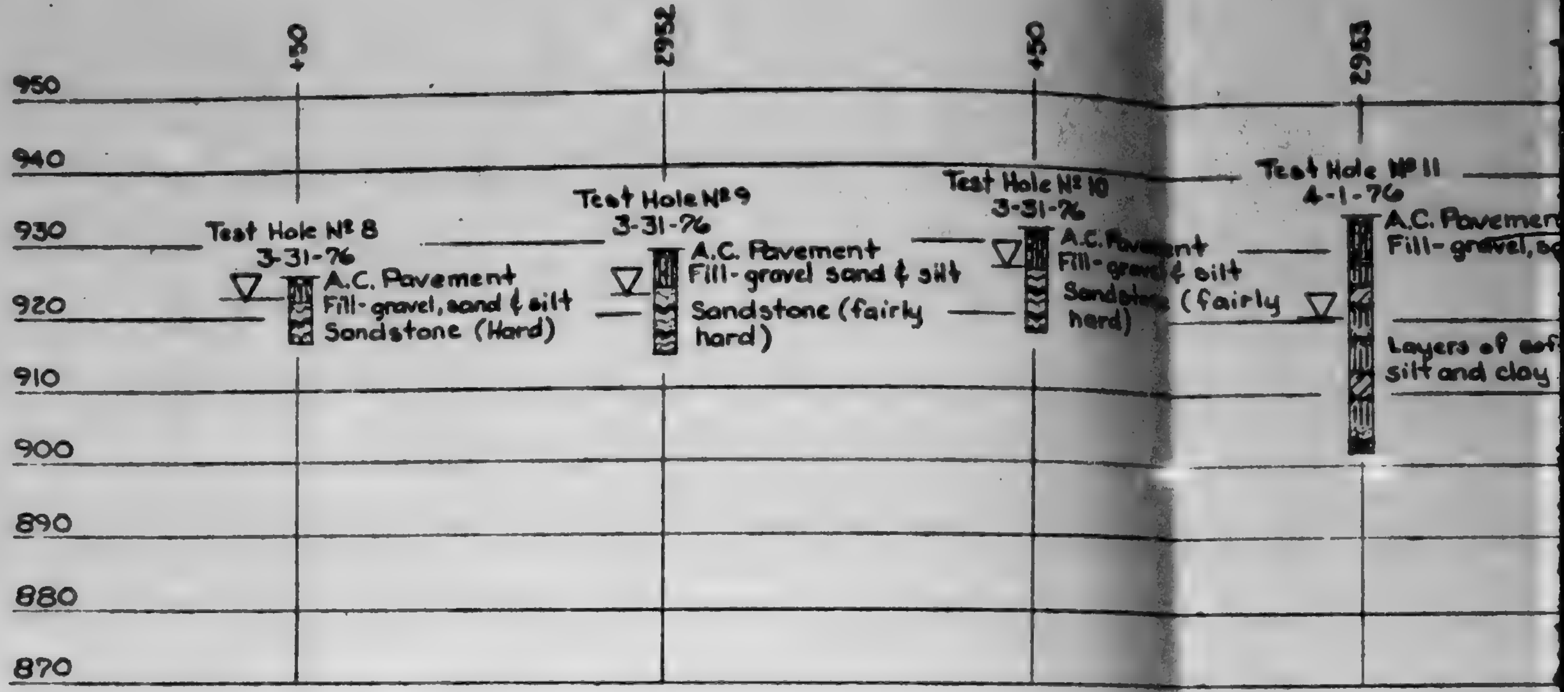

①
Gravels, cobbles and boulders
②
Sand.
③
Silts.
④
Clays.
⑤
Silty gravels, gravel-silt mixture.
⑥
Silty sand, sand-silt mixture.
⑦
Clayey gravel, gravel-clay mixture.
⑧
Clayey sand, sand-clay mixture.
⑨
Silty clay.
Sand-silt-cla
mixture, ne
equal propo

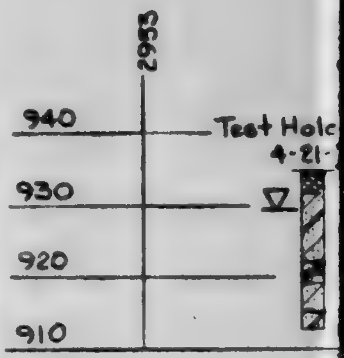

0
(1967 L^ℓ ℰ)
40
20
20
40
60
80
100
Test Hole Nº 5
Test Hole Nº 10
C. Pavement
sand and 2" max
d gravel
osed shale and
c in the form of
small rock fragments
red sandstone
hat are completely
Core Nº 2 (63%)
Core Nº 3 (100%)
*19/6", 50/4"
Core Nº 4 (90%)
Core Nº 5 (100%)
A.C. Pavement
Fill - Base material 2" minus
gravel & silt (blue mud)
Fractured brown sandstone
fairly hard with decomposition
at surface 2" to 6" jointing.
STA 2952+50
Test Hole Nº 6
Test Hole Nº 9
ement
ck, gravel, sand
lay. S gravels.
Core Nº 2 (100%)
*17
Core Nº 3 (100%)
*22
very weathered
surface with
omes harder
ilar fractures
Core Nº 4 (100%)
Core Nº 5 (100%)
Core Nº 6 (100%)
A.C. Pavement
Fill - Base material, 2½
minus gravel, sand & silt.
Fractured sandstone,
fairly hard, some weathering
near surface. 2" to 12" jointing
STA. 2952+00
Test Hole Nº 7
Test Hole Nº 8
Core Nº 2 (100%)
*36/6", 50/3½"
Core Nº 2 (87%)
Core Nº 3 (93%)
ghly
ce (as
with
actured
pockets
s.
A.C. Pavement
Fill - Base material, gravels
sand and silt.
Hard brown sandstone
6" ± jointing.
40
20
STA. 2951+50
20
40
▽ Elevation ground water encountered
* Standard 2" O.D. split tube test.
(1967 L^ℓ ℰ)
0


z.
t.
y clay.
d-silt-clay
ture, near
al proportions.
⑪ Sandstone.
⑫ Shale.
⑬ Basalt rock, broken, solid, weathered, lava.
⑭

APPROVED: BRIDGE ENGINEER	**OREGON STATE HIGHWAY DIVISION** BRIDGE SECTION
DESIGNED DRAWN L.W. CHECKED ULD REVIEWED REVIEWED CALC. BOOK	ROBERTS MT. FILL SLIDE
DATE | REVISION	**FOUNDATION DATA**
	DATE 5-12-76 BRIDGE NO. 16285 | SHEET OF DRAWING NO. 32882

119

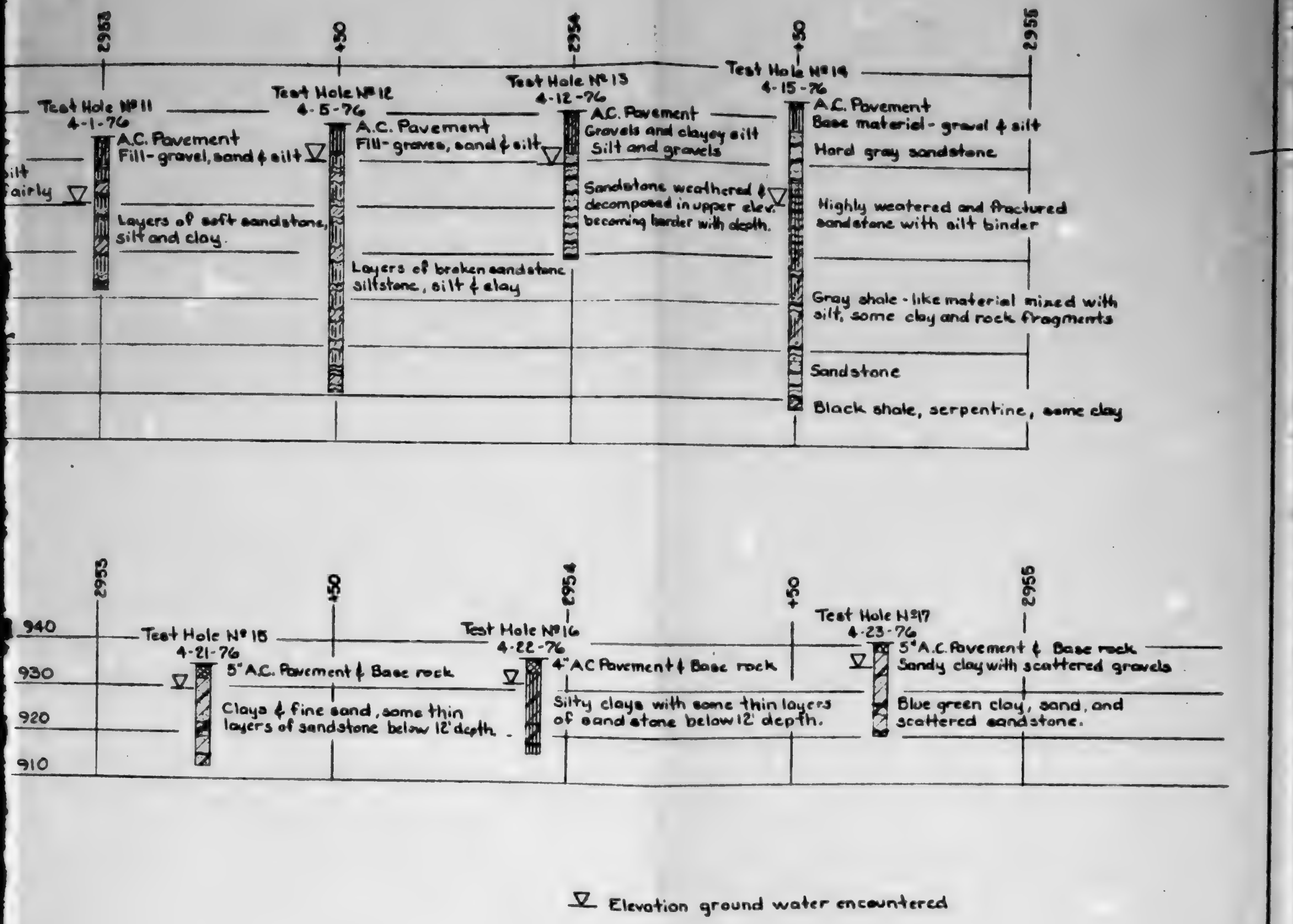

+50
2952
+50
2953
950
940
930
920
910
900
890
880
870
Test Hole Nº 8
3-31-76
A.C. Pavement
Fill-gravel, sand & silt
Sandstone (Hard)
Test Hole Nº 9
3-31-76
A.C. Pavement
Fill-gravel sand & silt
Sandstone (fairly hard)
Test Hole Nº 10
3-31-76
A.C. Pavement
Fill-gravel & silt
Sandstone (fairly hard)
Test Hole Nº 11
4-1-76
A.C. Pavemen
Fill-gravel, sa
Layers of sof
silt and clay

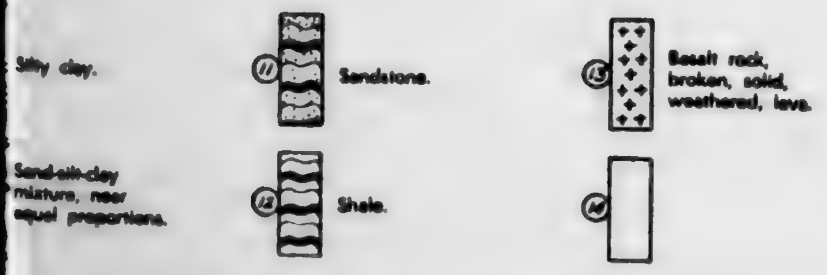

2953
940
930
920
910
Test Hole
4-21-

Foundation data shown on this drawing, in some instances, is a consolidation of and a revision in terminology from the original field drilling logs. The original field drilling logs are available for review in the office of the Bridge Engineer in Salem.

LEGEND OF MATERIALS

① Gravels, cobbles and boulders.
② Sand.
③ Silts.
④ Clays.
⑤ Silty gravels, gravel-silt mixture.
⑥ Silty sand, sand-silt mixture.
⑦ Clayey gravel, gravel-clay mixture.
⑧ Clayey sand, sand-clay mixture.
⑨ Silty clay.
⑩ Sand-silt-clay mixture, near equal proportions.
⑪
⑫


2953
+50
2954
+50
2955
Test Hole Nº 11
4-1-76
A.C. Pavement
Fill-gravel, sand & silt
Layers of soft sandstone, silt and clay.
silt
fairly
Test Hole Nº 12
4-5-76
A.C. Pavement
Fill-graves, sand & silt
Layers of broken sandstone siltstone, silt & clay
Test Hole Nº 13
4-12-76
A.C. Pavement
Gravels and clayey silt
Silt and gravels
Sandstone weathered & decomposed in upper elev. becoming harder with depth.
Test Hole Nº 14
4-15-76
A.C. Pavement
Base material - gravel & silt
Hard gray sandstone
Highly weatered and fractured sandstone with silt binder
Gray shale-like material mixed with silt, some clay and rock fragments
Sandstone
Black shale, serpentine, some clay
2953
+50
2954
+50
2955
940
930
920
910
Test Hole Nº 15
4-21-76
5" A.C. Pavement & Base rock
Clays & fine sand, some thin layers of sandstone below 12' depth.
Test Hole Nº 16
4-22-76
4" A.C Pavement & Base rock
Silty clays with some thin layers of sandstone below 12' depth.
Test Hole Nº 17
4-23-76
5" A.C. Pavement & Base rock
Sandy clay with scattered gravels
Blue green clay, sand, and scattered sandstone.
∇ Elevation ground water encountered


Silty clay.
11
Sandstone.
13
Basalt rock, broken, solid, weathered, lava.
Sand-silt-clay mixture, near equal proportions.
12
Shale.
14

APPROVED

BRIDGE ENGINEER

DESIGNED
DRAWN L.W.
CHECKED J.L.D
REVIEWED
REVIEWED
CALC. BOOK

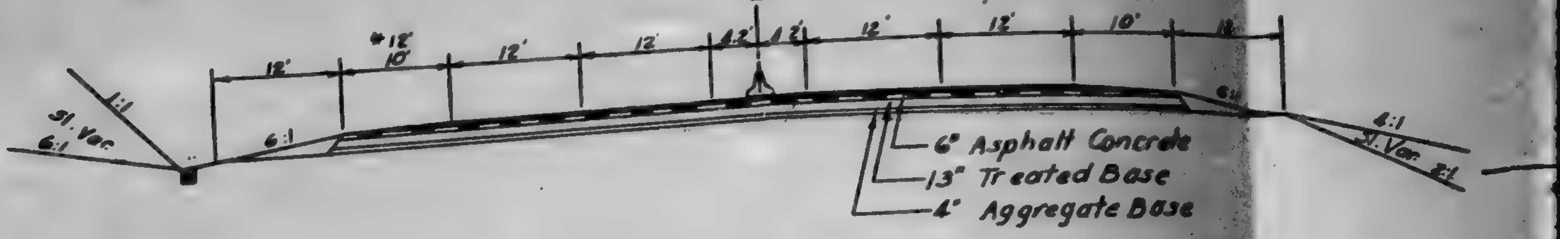
DATE	REVISION

OREGON STATE HIGHWAY DIVISION
BRIDGE SECTION

ROBERTS MT. FILL SLIDE

FOUNDATION DATA

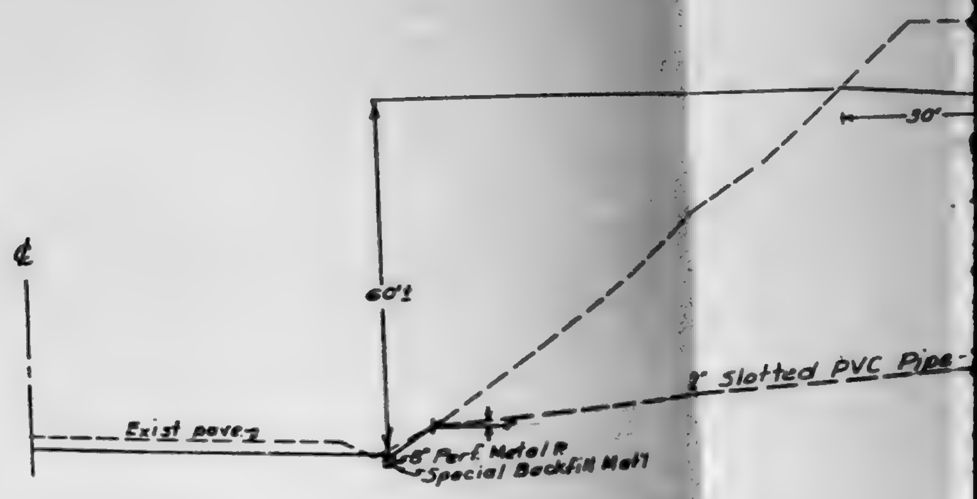
DATE 5-4-76
BRIDGE NO. 16285
SHEET __ OF __
DRAWING NO. 32883 120



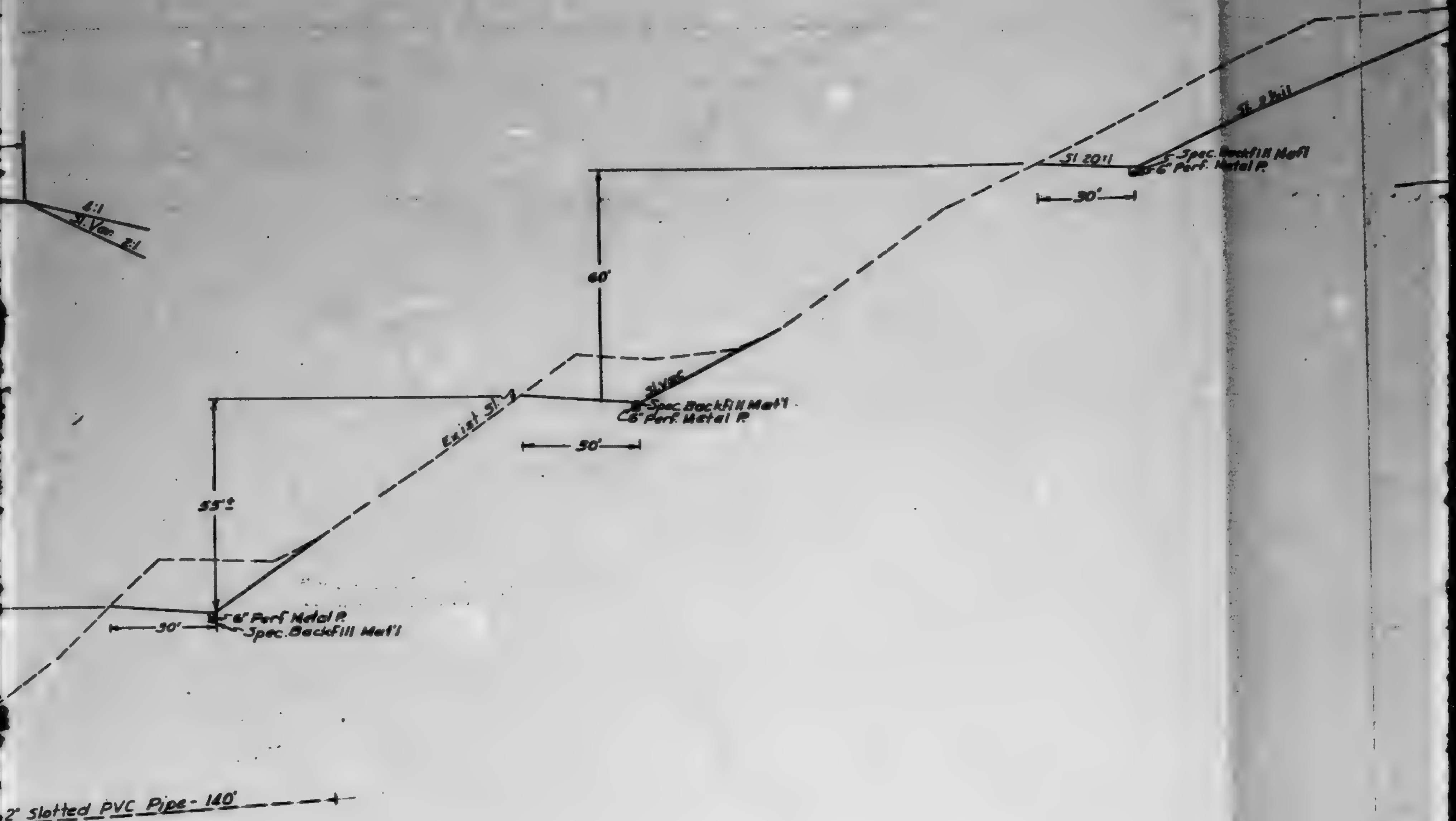
℄
12'
*18'
10'
12'
12'
12'
12'
12'
12'
12'
10'
18'
1:1
Sl. Var.
6:1
6:1
6:1
6:1
Sl. Var. 2:1
6" Asphalt Concrete
13" Treated Base
4" Aggregate Base

TYPICAL SECTION
*Sta. 2953+00 - Sta 3011+50

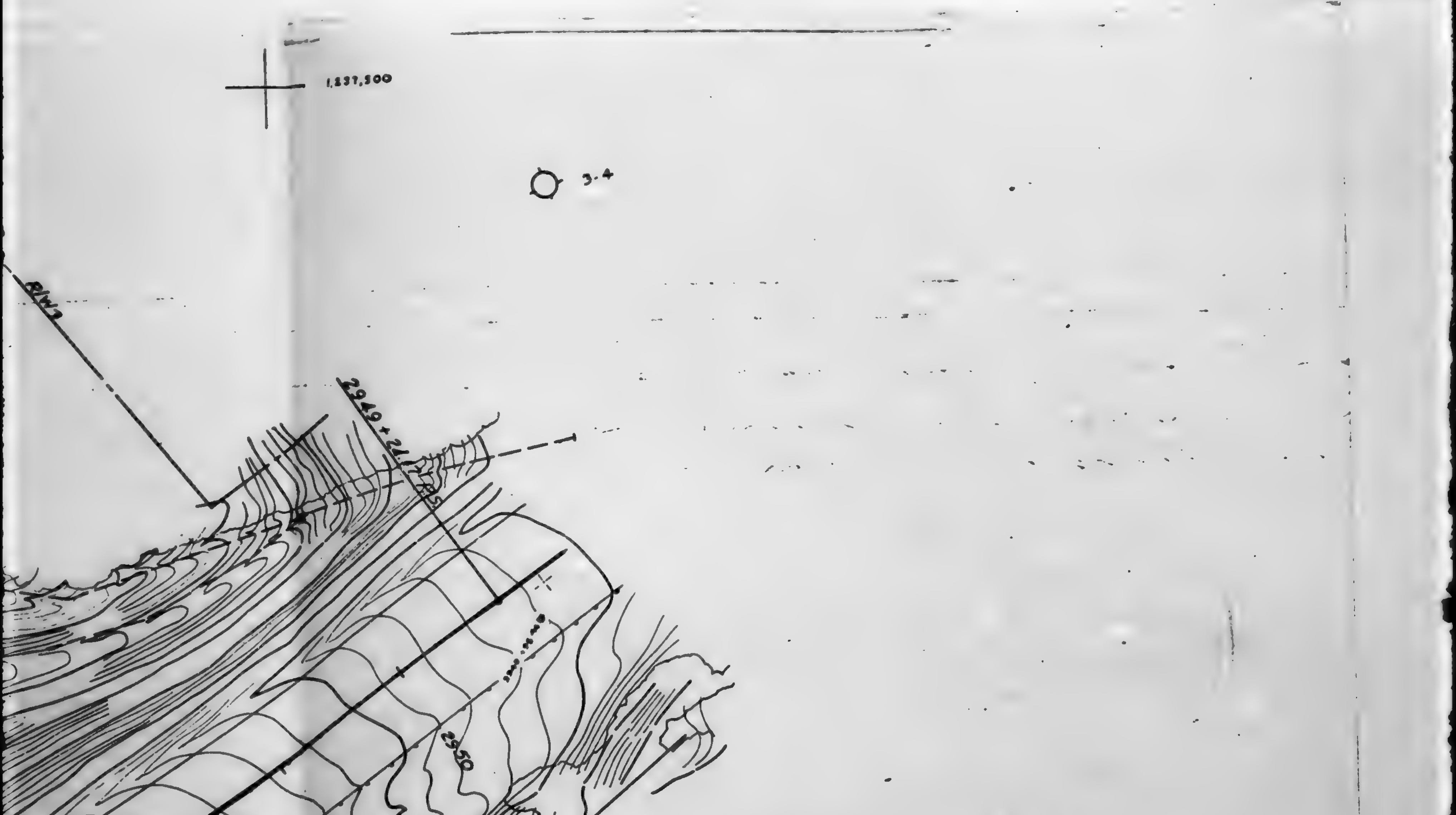
OREGON STATE HIGHWAY DIVISION
SLOPE STABILIZATION
ROBERTS MOUNTAIN SECTION
PACIFIC HIGHWAY
DOUGLAS COUNTY
Scale: 1" = 50'   Oct. 1977

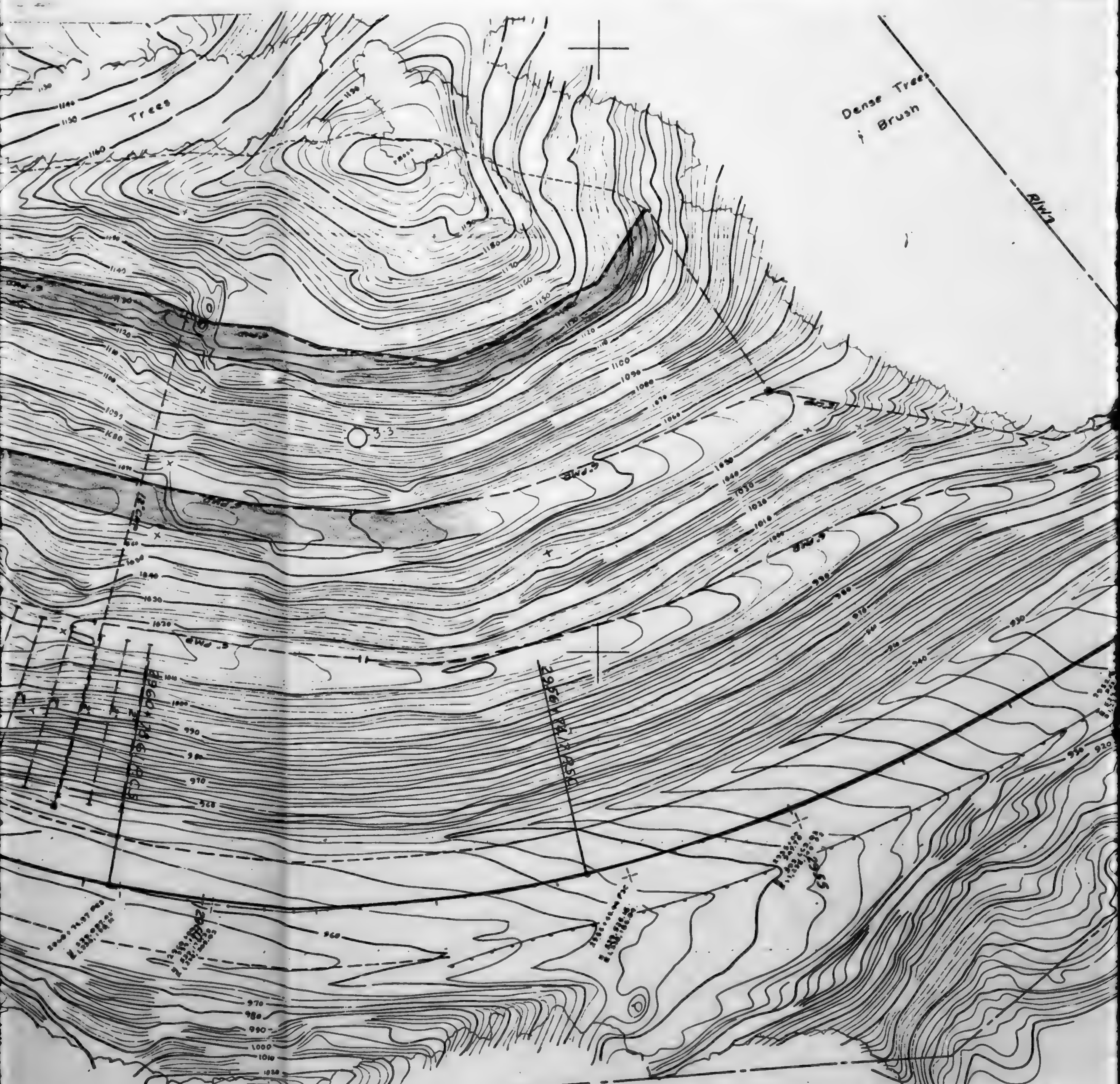


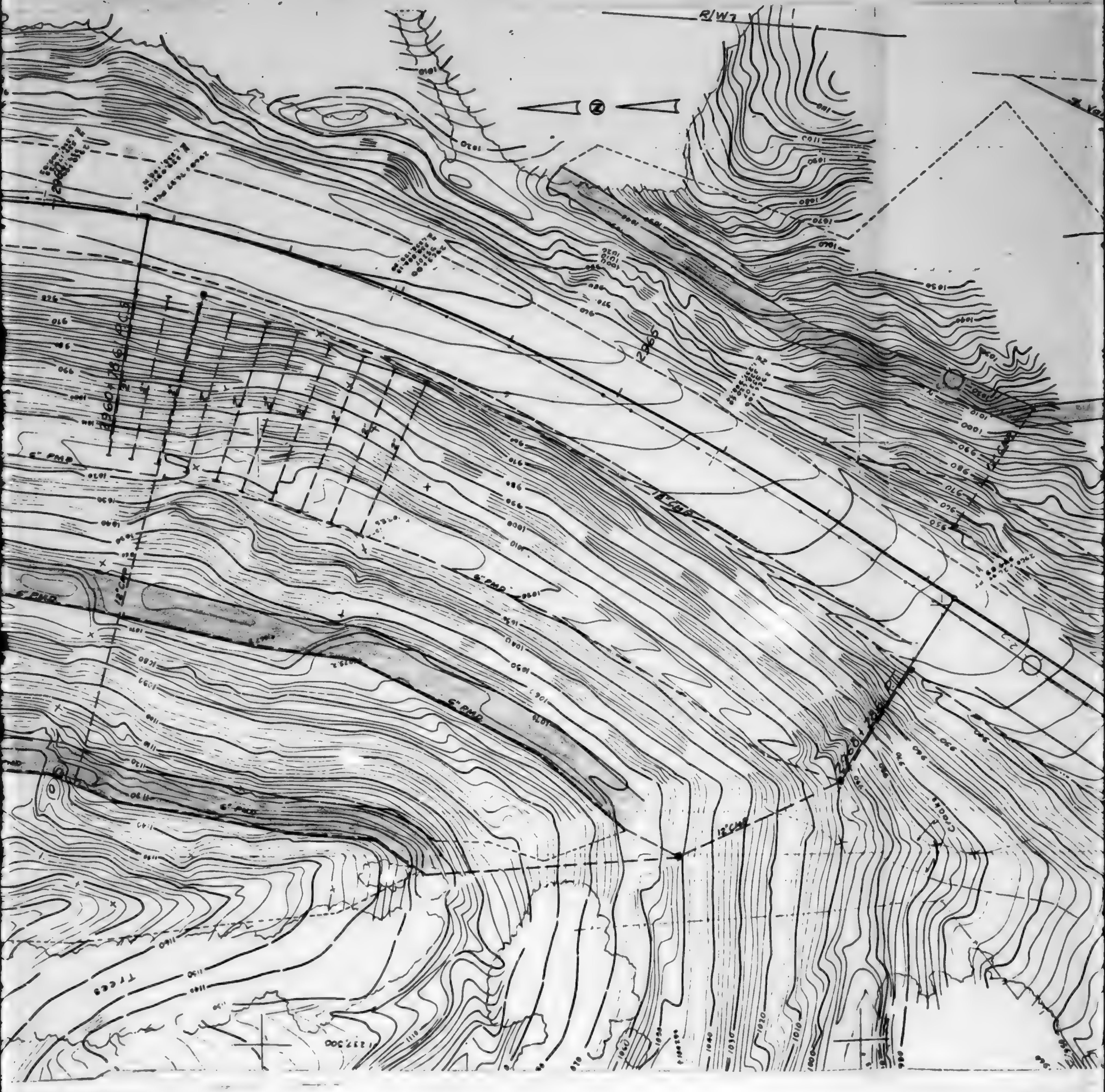
℄
60'±
30'
Exist pave.
8" Perf. Metal P.
Special Backfill Mat'l
Slotted PVC Pipe

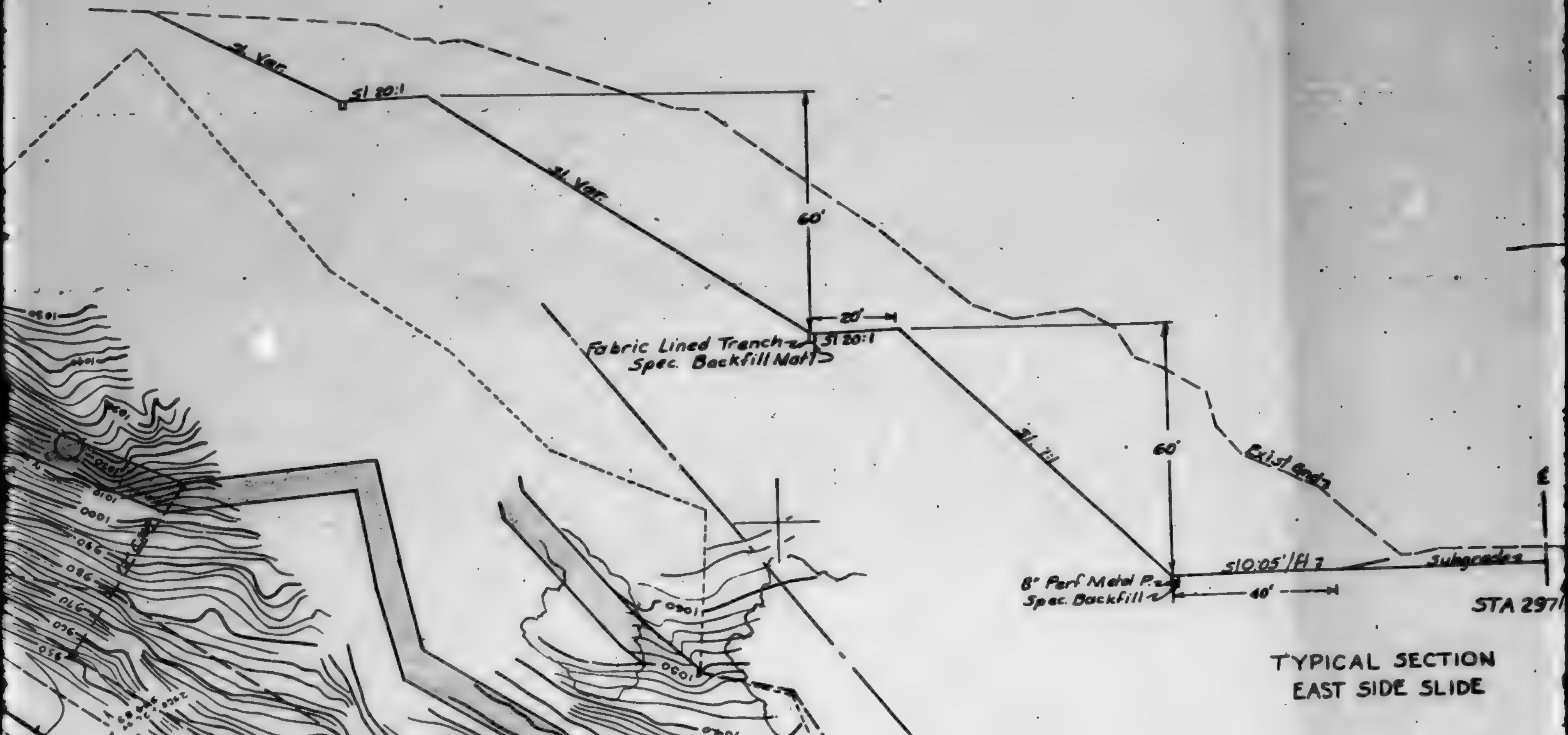

4:1
Vac. 2:1
Sl 20:1
Spec. Backfill Mat'l
6" Perf. Metal P.
30'
60'
Exist Sl.
Spec. Backfill Mat'l
6" Perf. Metal P.
30'
55'±
6" Perf Metal P.
Spec. Backfill Mat'l
30'
2" Slotted PVC Pipe - 140'

TYPICAL SECTION
WEST SIDE SLIDE

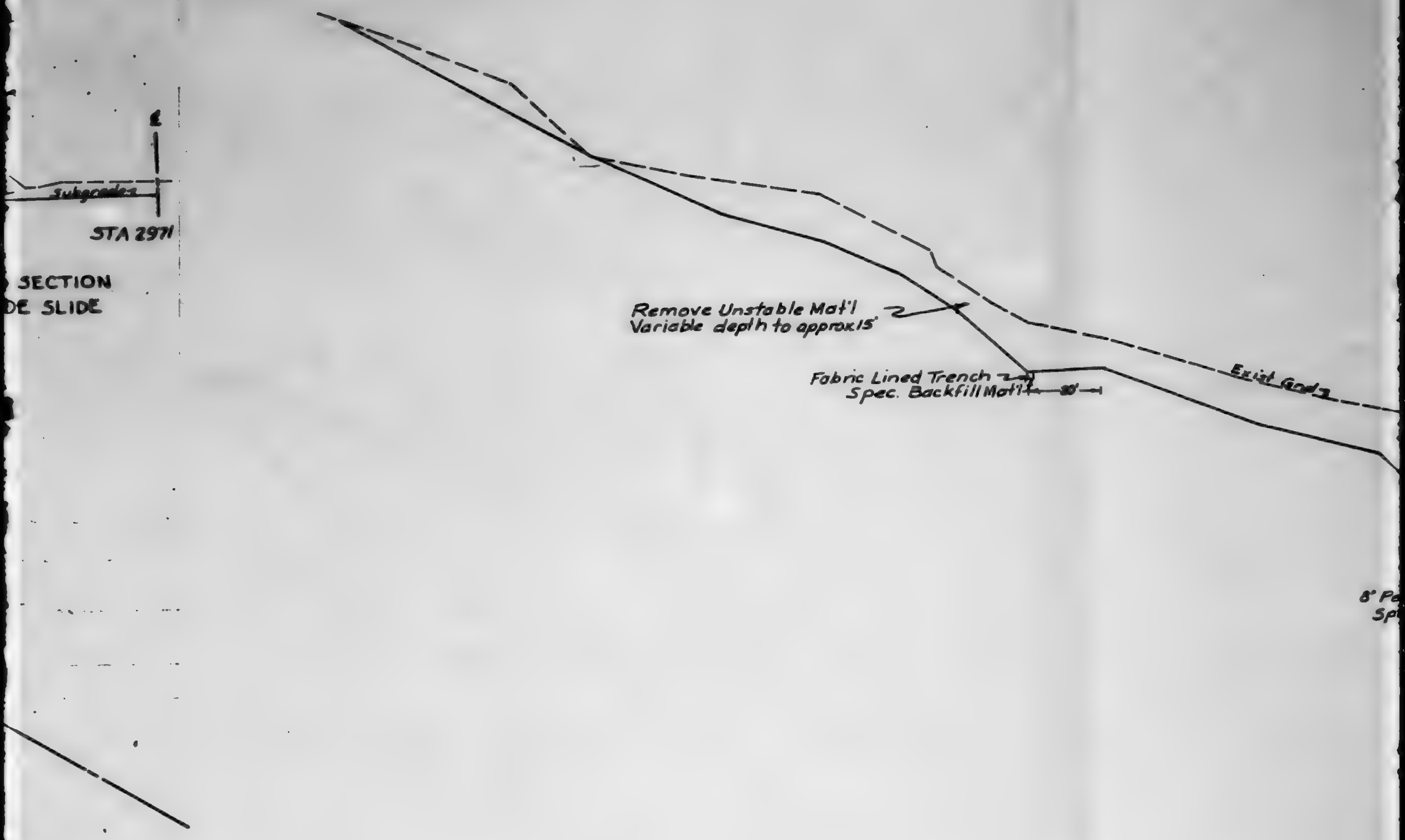

1,237,500
3.4
R/W
2949+21.17 P.S.
2950
1,238,000
Trees & Brush
R/W
920
910
900
890
880

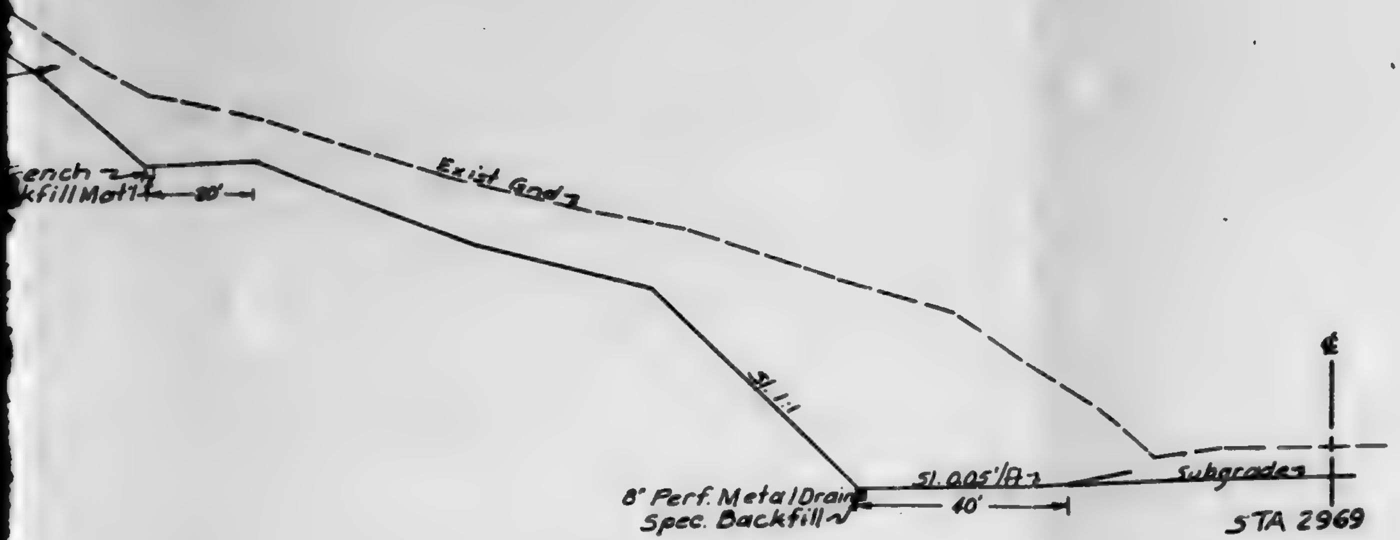

Dense Trees
& Brush
R/W
Trees
1160
1150
1140
1130
1120
1110
1100
1090
1080
1070
1060
1050
1040
1030
1020
1010
1000
990
980
970
960
950
940
930
920
3.3
6" PMP
12" ACS
2956+74.8 PSC
2960+74.6 ACS


R/W
2965
6" PMD
12" CMP
18" CMP
Trees
1000
1010
1020
1030
1040
1050
1060
1070
1080
1090
1100
910
920
930
940
950
960
970
980
990


3:1 Var.
Sl 20:1
3:1 Var.
60'
20'
Fabric Lined Trench
Spec. Backfill Mat'l
Sl 20:1
3:1 1:1
60'
Exist Grd
8" Perf Metal P.
Spec. Backfill
Sl 0.05'/Ft
40'
Subgrade
STA 2971
R/W
8" Perf Metal Drain P.
18" CAP
S 33° 25' 00" W
2971+93.75 P.S.
18" CAP

TYPICAL SECTION
EAST SIDE SLIDE


℄
Subgrade
STA 2971
SECTION
DE SLIDE
Remove Unstable Mat'l
Variable depth to approx 15'
Fabric Lined Trench
Spec. Backfill Mat'l
20'
Exist Grd
8' Pe
Sp


Bench
Backfill Mat'l
30'
Exist Grd
Sl. 1:1
8" Perf. Metal Drain
Spec. Backfill
Sl. 0.05'/ft
40'
Subgrade
℄
STA 2969

TYPICAL SECTION
EAST SIDE SLIDE

1981 Roberts Creek-Dillard Int. 936
Sec. of the Pac. Hwy. (Grad.,
Pav., Barriers, Struc. & Sign.) #1

9363 Yellow 15

9-13-77

ROBERTS MOUNTAIN SAFETY PROJECT AND SLIDE STABILIZATION

Roberts Mountain Unit
McLain Avenue-Dillard Junction Section
Pacific Highway
Douglas County

1 Versteeg ✓
Christensen
George
2 [illegible] ad.
Turpin
Sullivan
Scott
Savage

RECEIVED
SEP 13 1977
ENGINEERING SECTION

Trout
Do Not File ☐
Return To
Bring Up / /
Action

This study covers that portion of the McLain Avenue-Dillard Junction Section from Station 2948+00 to Sta. 3032+00. The purpose of the study is to prepare preliminary plans, quantity summary and cost estimate to update the freeway to present design and safety standards and to stabilize slide conditions at three locations one of which is actually outside the limits of this unit. The estimated cost of construction is $3,000,000 exclusive of slide stabilization work. The estimated cost of slide stabilization work is as follows:

1. Sta. 2949 to Sta. 2969--West side slide--$532,000

2. Sta. 2966 to Sta. 2972--East side slide--$155,000

3. Sta. 3053 to Sta. 3063--"Weber" Slide----$198,000

SAFETY PROJECT:

The alignment of the 6° curve right at the summit is essentially the same to the P.C.S. From this point ahead, a 750' spiral is used in place of the existing 650' spiral and the line shifted to the left. The following 6° curve right is flattened to a 5°30' curve with 700' spirals and the last 6° curve left is flattened to a 5°30' curve with 700' spirals. From Sta. L^n 3013+27.51 ahead existing alignment is used.

It is proposed to limit the work north of the summit to pavement overlay, drainage repair and corrections to super rates as required to meet design standards. From the summit south, profile grade, which is carried at centerline, is flattened to 5.8%. Carrying profile grade at centerline minimizes the effect of super run-off at the edge of pavement and results in a maximum uphill gradient of 6.2025% and a maximum downhill gradient of 6.1571%. The existing maximum gradient occurs in the southbound lanes and is approximately 8%.

Shifting the line to the left confines the required widening to the cut side of the roadbed and keeps to a minimum any fill widening throughout the marginally stable fill areas. Except through the cut at the summit from Sta. 2964 to Sta. 2977, which encompasses the "East side" slide, raising the grade keeps the cut slope excavation from being excessive. Fill widening is required from Sta. 3008 to Sta. 3018. In this area the use of Gabions is proposed to contain the fill and to avoid the purchase of additional right-of-way. It is proposed to extend the 13 x 13 Equipment Pass at Sta. 3013+41 24' Lt. and 34' Rt. to accommodate the added fill.

The 48" pipe under the roadbed fill at Sta. 2980+60 is badly damaged. It is proposed to abandon this pipe, random fill to a higher elevation and install new drainage farther down grade. Random filling the area would require approximately 70,000 c.y. which coupled with the roadbed fill deficit of approximately 60,000 c.y. makes a total deficit of approximately 130,000 c.y. for this project. It is proposed to obtain this material from slide stabilization work.

WEST SIDE SLIDE:

Following the recommendations of the Region 3 Geologists and Engineers for stabilization of the "West Side" cut slide at the summit, it is proposed that only drainage repair and minor bench shaping be performed at the north end of the benched summit cut section. The proposal is to lower or "unload" the remaining portions of the two existing benches and to provide further unloading with the construction of a third bench. The installation of 6" perforated drains on each bench, piping the collected water to suitable disposal points and lime treating the bench surfaces to a depth of 3" is also proposed.

A rock inlay is proposed at Sta. 2962+20 to Sta. 2963+00. The ends of the inlay are on approximately 2:1 slopes and tie into existing hard stable material. The base of the inlay lies approximately 10' above the ditch line leaving the lower portion of the slope intact since it appears to be stable and excavation for the inlay is minimized. About 13,500 c.y. of rock are needed to construct the inlay. A drainage system involving eight horizontal drains is also proposed at the inlay site.

Lowering the existing benches, constructing a third bench and constructing the rock inlay involves excavation of approximately 100,000 c.y. of material 60,000 c.y. of which would go to roadbed fill and 40,000 to random fill at Sta. 2980.

EAST SIDE SLIDE:

Stabilization of the slide on the east side from Sta. 2967 to Sta. 2971 involves different treatment than for the West Side Slide. This slide is mainly landslide requiring a considerable quantity of water to activate it. A large lateral force does not appear to exist so the installation of a rock toe is not deemed appropriate. It is proposed therefore to improve drainage with filter fabric lined ditches, piping the water out to suitable disposal points and to excavate out the main slide mass. This requires excavating approximately 26,000 c.y. of material not excavated as the result of the alignment change. This material would also go to the random fill.

WEBER SLIDE:

Beyond the southerly limits of the Roberts Mountain Unit is a slide area referred to as the "Weber Slide". The "active" portion of this slide, involving the northbound and southbound lanes of the freeway, is an area affected by an excessive high water table. Water slowly courses through this problem area in irregular flow channels. Because of this and the silty nature of the material the area does not lend itself to the use of small diameter horizontal drains. It is proposed to install a series of four vertical wells on 10' centers, 24" in diameter, 60' deep and backfilled with gravel along the northbound outside shoulder at Sta. 3055+70 to Sta. 3056+70 and another series of eight vertical wells 40' deep on southbound inside shoulder Sta. 3056+80 to Sta. 3057+80. A system of horizontal drains is used to tap these wells and carry collected water away from the slide. In addition to lowering the water table there is an indicated need for a weighted toe. It is proposed to place approximately 9,000 c.y. of rock on the right of the southbound lanes at Sta. 3058 to Sta. 306.2. A 3' thick rock blanket in the median from Sta. 3056+00 to Sta. 3059+50 involving approximately 4,000 c.y. is also proposed along with redressing and reinforcing the existing rock inlay between Sta. 3054 and Sta. 3056+50.

RP:az

9363 1-5

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION FILE: LOC 17

INTER-OFFICE CORRESPONDENCE

Roseburg, Oregon

July 29, 1977

FROM: JAMES J. GIX
Regional Construction Engineer

SUBJECT: Slide Corrections
Roberts Creek-Dillard Jct.
Pacific Highway
Douglas County

TO: J. H. Versteeg
Road Design Engineer

Attached you will find two reports covering the recommendations by our Region Geologist on the subject proposed project. One covers the west side cut slide at the summit and the other the "Weber" slide.

The proposal for the west side slide has been worked out using all of Elliott's past knowledge of the slide movement and extensive new testing information. We at region believe that it represents a conservative but positive approach to stabilize the slide. We recommend that this corrective work be included in the freeway safety work.

The basic correction involves unloading the two lower benches and creating an upper third bench. In addition, some material would be moved in the ruptured area and replaced with a rock toe. The Weber slide correction is principally horizontal and vertical drainage plus some minor rock blanket revisions.

Your consideration and approval of these needed corrective measures is solicited.

jjg/cw
Attach.

cc Elliott Parker
A. W. Bates

1 Versteeg
2 Olson
3 Christensen Doc
Scott

RECEIVED
AUG 0 1 1977

Requires Reply
Requires Approval
Receiver Keep
Return To
Bring Up

REFERRED TO

Beard
Cole
Eriksen F.E.
Hager
Reed
Sample
Watson
Wolfe

[✓ Return] Discuss Do File Copy Due
BY FINAL DESIGN ENGINEER

FORM E-30

OREGON STATE HIGHWAY DIVISION

INTER-DEPARTMENT CORRESPONDENCE

ROSEBURG, OREGON 97470

DATE July 12,1977

TO Alfred Shirley, Jr.
Region 3 Engineer

Elliott Parker

FROM Elliott Parker
Region 3 Engineering Geologist

30 C

SUBJECT ROBERT'S MOUNTAIN WESTSIDE CUT SLIDE
ROBERTS CREEK-DILLARD JCTN. SECTION
Pacific Highway Douglas County

Attn: Review of Report Dated June 30,1977 (same subject)

The statement made in the June 30th report concerning the corrective action recommended by A.W. Bates (Last two sentences in Paragraph two) requires some explanation of the items proposed after making the statement. Additional data was obtained from exploratory activity that took place after Mr. Bates' proposal was submitted. The additional recommendations (in the June 30,1977 report) were made after reviewing the new information.

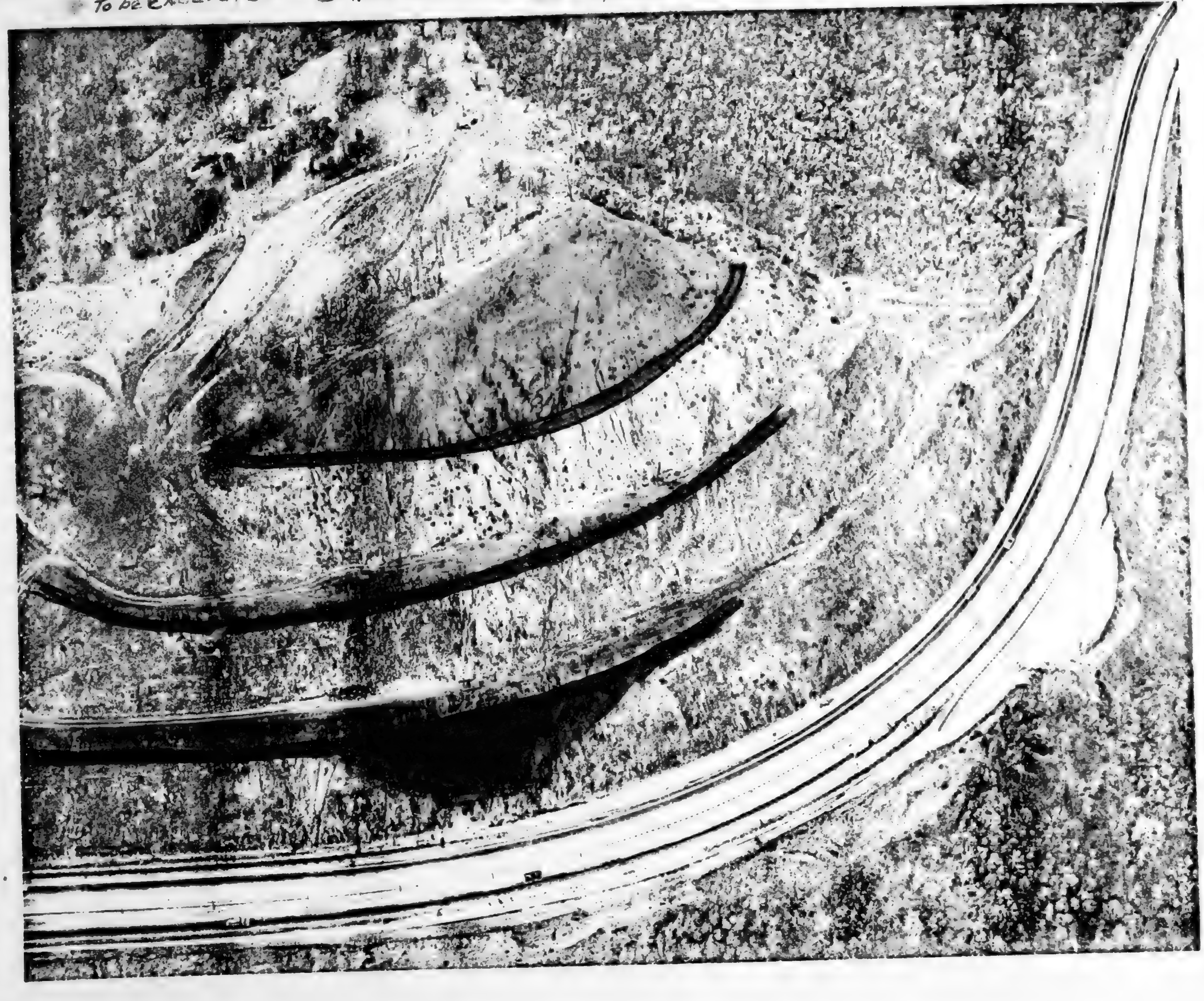
Further discussion with our Regional Construction Engineer, Jim Gix, has convinced me that the recommendation for placing a rock toe should be modified since there is insufficient room between the existing edge of pavement and the back slope of the "rock toe" to allow placement without extensive excavation. Leaving the lower portion of the existing slope in tact will be very beneficial. In view of those discrepancies in the earlier proposal, I recommend that modifications be made as are illustrated on the attached cross sectional and photographic sketches.

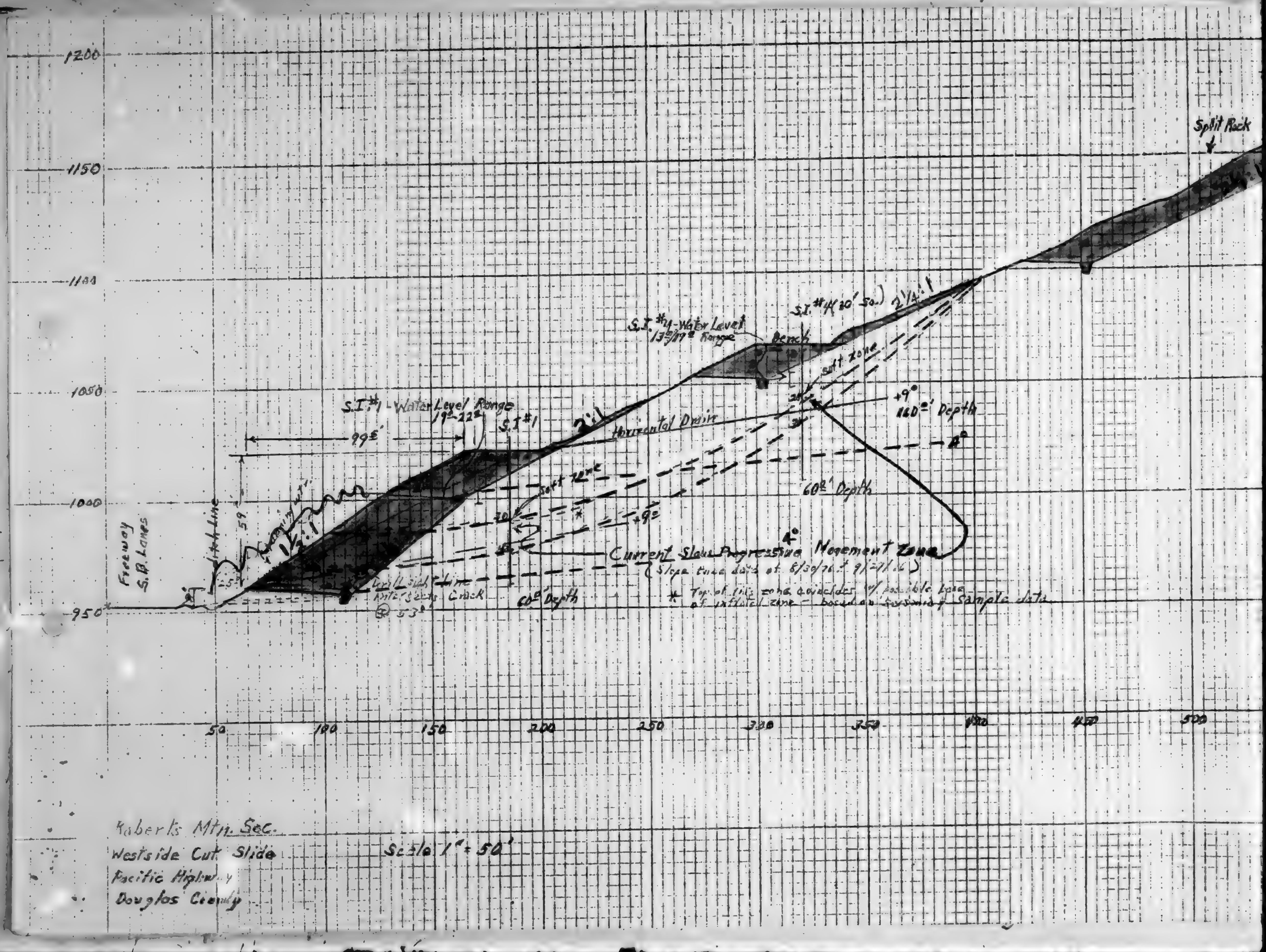
Particularly note that the bottom of the excavation for the "Rock Inlay" should be about ten feet (10') above the existing ditch line and that it (the bottom of the inlay) should extend from approximate station 2962+20 to 2963+00. The ends should be constructed on a 2:1 slope so as to make the top of the inlay extend from approximate station 2961+40 to 2963+80. ~~Five~~ Three (3) of the horizontal drains proposed for installation on top of the inlay should be scratched in favor of installing four (4) horizontal drains at the bottom of the excavation--before placement of the rock inlay. Suggested stationing for the four (4) lower drains would be 2962+30, 2962+50, 2962+70, and 2962+90. Two horizontal drains will still be beneficial near the ends of the top at the inlay. Suggested stationing for the upper drains are: 2961+70, 2962+00, 2963+30, and 2963+60. This arrangement would result in placement of eight (8) drains, two hundred feet (200') deep, with a total footage of sixteen hundred feet (1600').

In addition to the "drilled" drains, a six inch (6") perf pipe system must be installed under the inlay and the outlet to that system should connect to another six inch (6") perf pipe installed about two (2') feet under the ditch line at the outside shoulder of the SB lanes.

c.c. F.W. Yarbrough
A.W. Bates
Ron Chassie (FHWA)
file

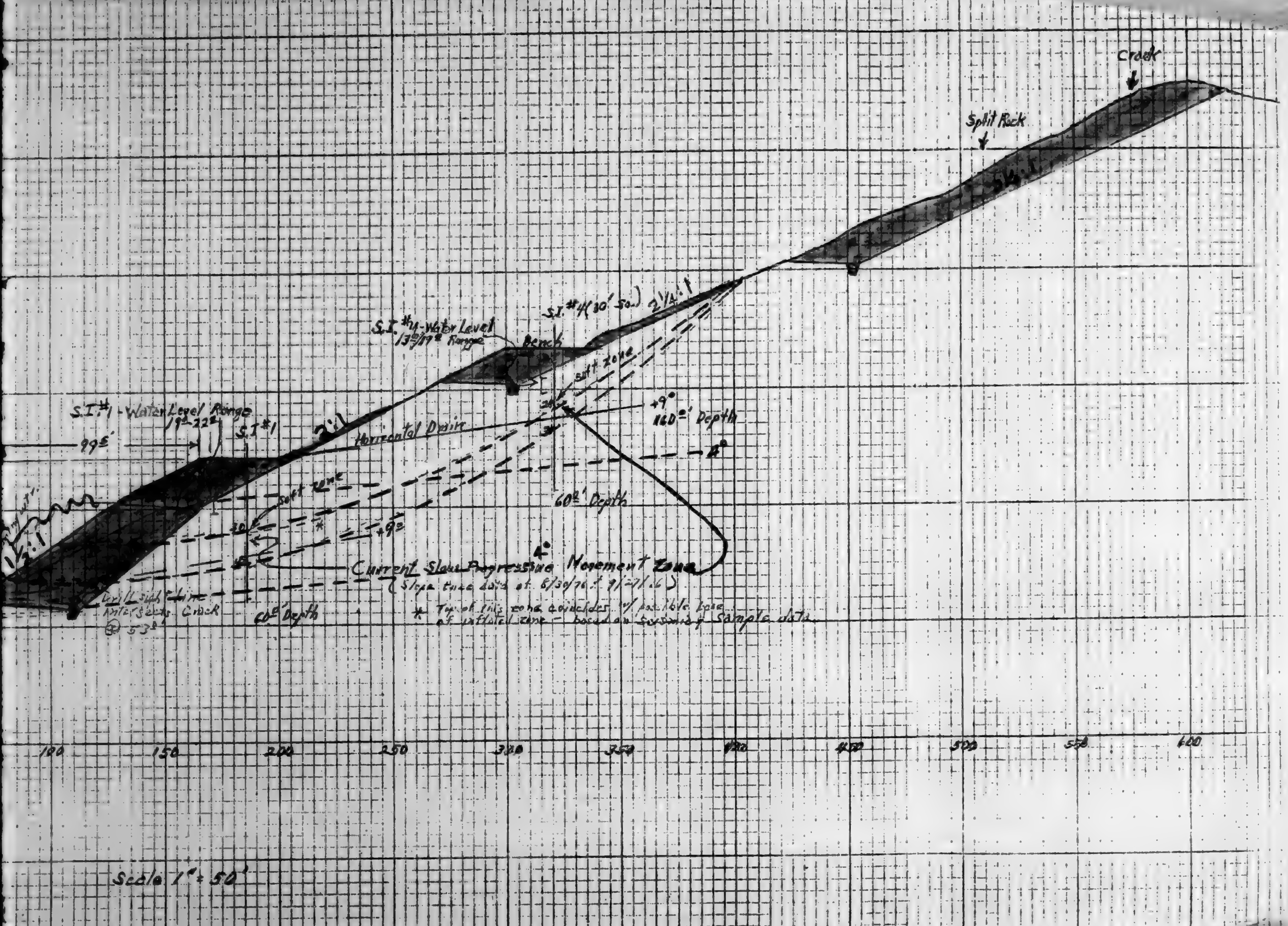
▨ To be excavated ● New benches ● Proposed Rock Inlay == Subdrains W/ perf. pipe




1200
1150
1100
1050
1000
950
50
100
150
200
250
300
350
400
450
500
Freeway
S.B. Lanes
Ditch Line
25'
59'
99±'
1½:1
S.I.#1 - Water Level Range
19±-22±
S.I.#1
Drill Side Line
Intersects Crack
⊕ 53'
60± Depth
Soft Zone
20
+9±
2:1
Horizontal Drain
4°
Current Slow Progressive Movement Zone
(Slope Ind. data of 8/30/76 & 9/27/76)
* Top of this zone coincides w/ possible base of inflated zone - based on [illegible] Sample data
60±' Depth
S.I.#4 - Water Level
13±/17± Range
Bench
S.I.#4 (30' So.)
2¼:1
Soft Zone
20
30
+9°
160±' Depth
8°
Split Rock

Roberts Mtn. Sec.
Westside Cut Slide
Pacific Highway
Douglas County

Scale 1" = 50'


Crack
Split Rock
5¼:1
S.I. #4 (30' So.) 2¼:1
S.I. #4 - Water Level
13±/17± Range
Bench
soft zone
+9°
160±' Depth
4°
S.I. #1 - Water Level Range
19±-22±
S.I. #1
99±'
2:1
Horizontal Drain
soft zone
30
+9°
60±' Depth
4°
Current Slow Progressive Movement Zone
(Slope tube data of 8/30/76 & 9/27/76)
* Top of this zone coincides w/ possible base of saturated zone – based on boring sample data
1½:1
Drill sight line intersects Crack @ 53±'
60±' Depth
100
150
200
250
300
350
400
450
500
550
600
Scale 1" = 50'

OREGON STATE HIGHWAY DIVISION
INTER-DEPARTMENT CORRESPONDENCE
ROSEBURG, OREGON 97470

DATE July 18,1977

TO Alfred Shirley, Jr.
Region 3 Engineer

FROM Elliott Parker
Region 3 Engineering Geologist
by Peter W. Bowers, Jr. Eng'r. Geologist
Peter W. Bowers Jr.

SUBJECT WEBER SLIDE - Final Update
Shady Interchange - Dillard Jct. Sec.
Pacific Hwy. Douglas County

Analysis of Slope Tube Readings, Water Levels and Horizontal Drilling Data at Weber Slide has resulted in several data supported conclusions. The slide mass is highly silty with irregular water flow channels, and does not react favorably to installation of small diameter horizontal drains that are intended to function freely over a prolonged period of time. Movement is very slow and progressive with current instability largely due to the inability of the water to pass uniformly through or out of the slide mass. Movement of the total slide mass is indicated to be segmental with the divisions being made into lower, middle, and upper segments, which to date have adjusted individually. The lower segment, which involves both lanes of the freeway, is indicated to be the key target toward which our efforts should be currently directed in working to achieve increased stability.

PIEZOMETER INSTALLATION:

Surface water influence on some of the holes used in monitoring water levels in the lower segment had been previously observed. It was believed necessary to obtain positive evidence that water was possibly moving along the slip plane, pressuring up, and spreading out under the southbound lane. Using slope indicator data as a guide, three piezometers were installed in which bentonite seals were placed a short distance above the slip plane. (Enclosure # 1)

P.S.# 1-77, located near S.I.#3 on the outside northbound shoulder, was drilled to a depth of 59.5 feet but caved back to 48.5 feet. The Piezometer Tube was set @ 48.5' with 10.0 feet of perforations 36.0-46.0 feet and the 2.0 foot bentonite seal @ 32.0 feet. P-gravel was used as packing below the seal with the remainder of the hole random backfilled. The water level range since completion of 3-4-77 to date is 14.0 to 15.0 feet from ground level.

P.S.# 2-77, located near S.I.# 1 on the inside southbound shoulder, was drilled to a depth of 42.0 feet but caved back to 36.0 feet. The Piezometer Tube was set at 36.0 feet with 10.0 feet of perforations 24.0-34.0 feet and the 2.0 foot bentonite seal at 22.0 feet. P-gravel was used as packing below the seal with the remainder of the hole random backfilled. The Water Level Range since completion on 3-7-77 to date is 5.0 to 6.0 feet from ground level.

P.S. # 3-77, located near S.I. # 2 on the northbound outside shoulder, was drilled to a depth of 58.0 feet but caved back to 50.5 feet. The Piezometer Tube was set at 50.5 feet with 10.0 feet of perforations 40.5-50.5 feet and the 2.0 foot bentonite seal at 38.0 feet. P-gravel was used as packing below the seal with the remainder of the hole random backfilled. The Water Level Range since completion of 3-10-77 to date is about 32.0 to 35.0 feet from ground level.

Although the ground water is in motion, the rate is believed so slow that the pressure may be considered hydrostatic varying from point to point.

HORIZONTAL DRAINS:

As shown on the Weber Slide Location Map the main water course, from above leading into the designated Water Problem Area is indicated to be from the vicinity above A-8 trending diagonally northwestward down into the vicinity of Slope Tube #3 where it then moves into and along the disturbed area associated with the most northerly crack of the 1971-73 movement. Based on Water Level Data indicating the necessity of a water course leading into the lower segment through a possible tear zone marking the division between the Lower and Middle Segments, three (3) horizontal drains were installed. (See Rate of Penetration Graphs - Enclosure #2.)

Horizontal Drain #6-77, located at about Sta. 3058+05 N.B. was completed on 4-22-77 at a total depth of 239.0 feet, is believed to have intersected several extensive small cracks. This was evidenced when the drill water return was lost at 149.0 feet and the water level in Vertical Well #3-75 N.B. raised visibly and Horizontal Drain #1-76, with which it has a direct connection, started flowing. The slip plane is believed to have been cut by the drill at approximately 203 feet and the encountered water flowed through 235 feet of slotted 2 inch PVC pipe and apparently overcame the effects of the cracks previously encountered. The drain initially flowed 2.5 GPM and is currently flowing about ½ GPM.

Horizontal Drain #7-77 located at about Sta. 3057+30 N.B. was completed on 4-28-77 at a total depth of 261.0 feet, is believed to have been drilled predominantly in disturbed material. The material was very silty and drilled extremely fast (soft) in most of the hole with numerous points where drill water return was lost with subsequent partial return until completely lost at about 195 feet. Upon completion of the drilling the hole was making about 1 GPM through the drill steel but after installation of 258 feet of slotted 2 inch O.D. PVC pipe this dropped to only a small water seep. No water was ever recovered from the drain pipe but instead was captured by the cracks encountered as indicated during the drilling.

Horizontal Drain #8-77, located at about Sta. 3057+70 S.B. was completed on 5-6-77 at a total depth of 267.0 feet. Drill water return was partial from about 69 feet to the total depth. Drilling was predominantly soft (fast) from 84.0 feet to 247.0 feet with relatively short sections of irregular more resistant (slow) drilling ranging from 2.0 to about 15 feet in length. At 260.0 feet during the drilling operation a small stream of water (about ½GPM) was flowing through the drill steel, but after completion of the drilling at 267.0 feet and installation of 270.0 feet of slotted 2 inch O.D. PVC drain pipe only a very slow drip remained. The tube was dry when checked a couple of days later.

Horizontal Drains no's. 6 & 7 appear to support the presence of a water course, as previously mentioned, which is essentially wandering through a tear zone resulting from segmental adjustment.

SLOPE INDICATOR INSTALLATION:

Based on Water Levels, Slope Indicator Data, drill data and surface information there was indicated a need for a weighted toe in the specific area which has been defined through a time permitting continual program of exploration and evaluation. It was decided to drill four (4) holes three of which were to be used both for Foundation Investigation (See profile-Enclosure #3) and Slope Indicator Installation on the toe of the current problem area. (Logs-Enclosure #4)

FDH #1-77 completed on 5-18-77 is located on the inside shoulder of the southbound lane at about Sta. 3057+50. Continuous drive samples were taken from 3.0 feet to 54.0 feet at which point refusal was encountered, with the total depth of 54.3 feet. The material as encountered is plastic slayey silty sand matrix with an estimated 30%-50% variably weathered sandstone and siltstone rock fragments. The essentially high blow count is believed due to driving rock fragments ahead in the matrix and this is also indicated by sample recovery.

FDH #2-77 completed on 5-19-77 and located at about Sta. 3061+27 (60' Rt.) was drilled to a total depth of 33.0 feet. Continuous drive samples were taken from 3.0 feet to about 29 feet where refusal was encountered. Blow count and sample examination reveal the possible problem material to go from 3.0 feet to 15.0 feet with a potential of extending to 23.0 feet. (See Enclosure #3) Slope Indicator Tubing was set on bottom with 2.5 sacks of P-gravel. The current water level is 8.7 feet from ground level.

FDH #3-77 (also S.I.#17) completed on 5-26-77 and located about Sta. 3059+92 (60' Rt.) was drilled to a total depth of 49.0 feet. Continuous drive samples were taken 3.0 feet to 39.0 feet and 39.0 feet to 49.0 feet was drilled with a tricone bit. Blow count and sample examination reveal the possible problem material to go from 7.0 feet to 9.0 feet and from 13.0 feet to 17.0 feet with a potential of from 3.0 feet to 23.0 feet. (See Enclosure #3) Slope Indicator tubing was set on bottom with 4.5 sacks of P-gravel. The current water level is 8.9 feet from ground level.

FDH #4-77 (also S.I.# 18) completed on 6-7-77 and located at about Sta. 3058+33 (45' Rt.) was drilled to a total depth of 70.0 feet. Continuous drive samples were taken as much as possible from 2.0 feet to 62 feet with the remainder of the hole being drilled with wireline core and bicone rock bit. Blow count and sample examination reveal the possible problem material to go from 8.0 feet to 18.0 feet with a potential of from 2.0 feet to 24.0 feet.(See Enclosure #3) Slope Indicator tubing was set on bottom with 11.5 sacks of P-gravel. The current water level is 33.2 feet from ground level.

Evidence derived from the foundation drilling and visual observation indicates a probable gradual progressive deterioration of resistance in the toe area.

CONCLUSIONS:

The continued on-going exploration program of the Weber Slide over the past couple of years has resulted in what is believed to be a defined problem area.

The Slide appears to be divided into three (3) segments with each adjusting individually. This is indicated by the apparent accelerated time lag between monitored individual slope tube adjustments. Prior to the latter part of 1974, Tube #1 which is located on the inside shoulder of the southbound lane, showed a major adjustment. This was followed by Tube #3, which is located on the outside shoulder of the northbound lane, which adjusted in May 1976, and subsequently Tube #5, located about 250.0 feet above the barn (near the center of the old 1964 slide) showed an adjustment in May 1977. The indications here may be inferred to signify that a gradual loss of toe support allowed the lower segment to start adjustment initially in the area of the old rock blanket above the culvert and the Humbert ponds. This was followed closely by that of Tube #1 on the southbound inside shoulder, near the toe area. Subsequent different segmental adjustments occurred in the Lower and Middle segments from the base upward at shorter time intervals.

Piezometers with seals set a short distance above the "Slope Tube indicated slip plane" shows the presence of free water under variable head pressures.

Horizontal Drains #'s 6&7 seem to indicate the presence of the water course as mapped as well as the existence of a tear zone marking the division between the lower and middle segments of the slide. The horizontal drain drilling program and overall results has indicated that small diameter horizontal drains which are intended to function freely for a prolonged period of time will perform best if used in conjunction with vertical gravel packed wells.

Foundation Holes #2,3,&4 (which are now S.I.# 16,17&18 respectively) show the toe area to consist of soft to stiff material in about the upper 24 feet. About 3.0 feet to 15.0 feet appears to be the current problem zone. The entire upper 24.0 feet can be considered potential problem material as it is believed the essential ingredients necessary to make the alteration are time and added moisture under stress conditions. The alteration process is believed to be currently in progress as indicated visibly and by recent exploration data.

RECOMMENDATIONS:

Recommended remedial measures confined within or adjacent to the defined problem area, which are believed necessary to work toward stabilization of the slide mass, are shown on the proposed work map except for a more encompassing recommendation for an improved effective surface water drainage system which should have lined or sealed ditches where nesessary. (Enclosure #6)

DRAINAGE - It is recommended consideration be given to the drilling and installation of eight (8) gravel packed 24" vertical wells 40 feet deep, on ten (10) foot centers along the inside shoulder of S.B. lanes from approximately Sta. 3056+80 to 3057+80 and four (4) gravel packed 24" vertical wells, 60 feet deep on 25 foot centers along the outside shoulder of the Northbound lane from approximate Sta. 3055+70 to 3056+70. These wells would cut the slip plane in both cases and would serve as targets for about 12 horizontal drains to effectively transport a considerable quantity of water directly to an improved and maintained surface drainage system or directly out of the problem area. This would hopefully lower the water table in the general area.

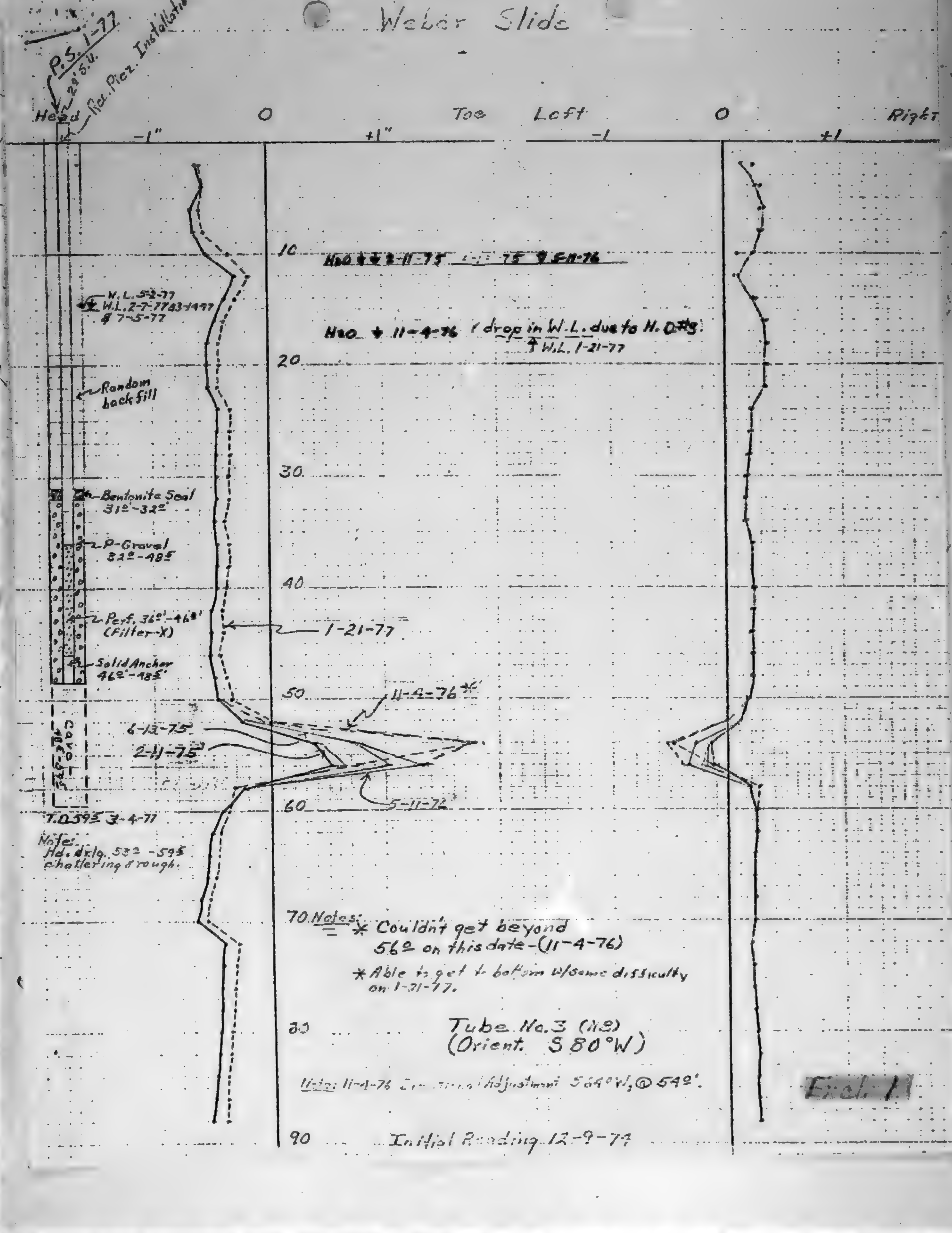
ROCK INLAY - Slope Indicator monitoring, surface evidence and foundation exploration data indicate the need for a weighted toe. It is recommended consideration be given to the installation of a Rock Inlay in the area shown on the proposed work map. (Encl.#6)

It is further recommended the cut slope of the Northbound lane involving the older rock blanket be redressed and the rock blanket repaired as necessary.

It is also recommended a Rock Blanket with a perpendicular thickness of 3.0 feet be installed on the median slope between Sta. 3056+00 to Sta. 3059+50.

c.c. F.W. Yarbrough
A.W. Bates
FHWA (Ron Chassie)
file

Weber Slide



Note:
Hd. drlg. 53.0 - 59.5
chattering & rough.

70 Notes:
* Couldn't get beyond
56.0 on this date - (11-4-76)

* Able to get to bottom w/some difficulty
on 1-21-77.

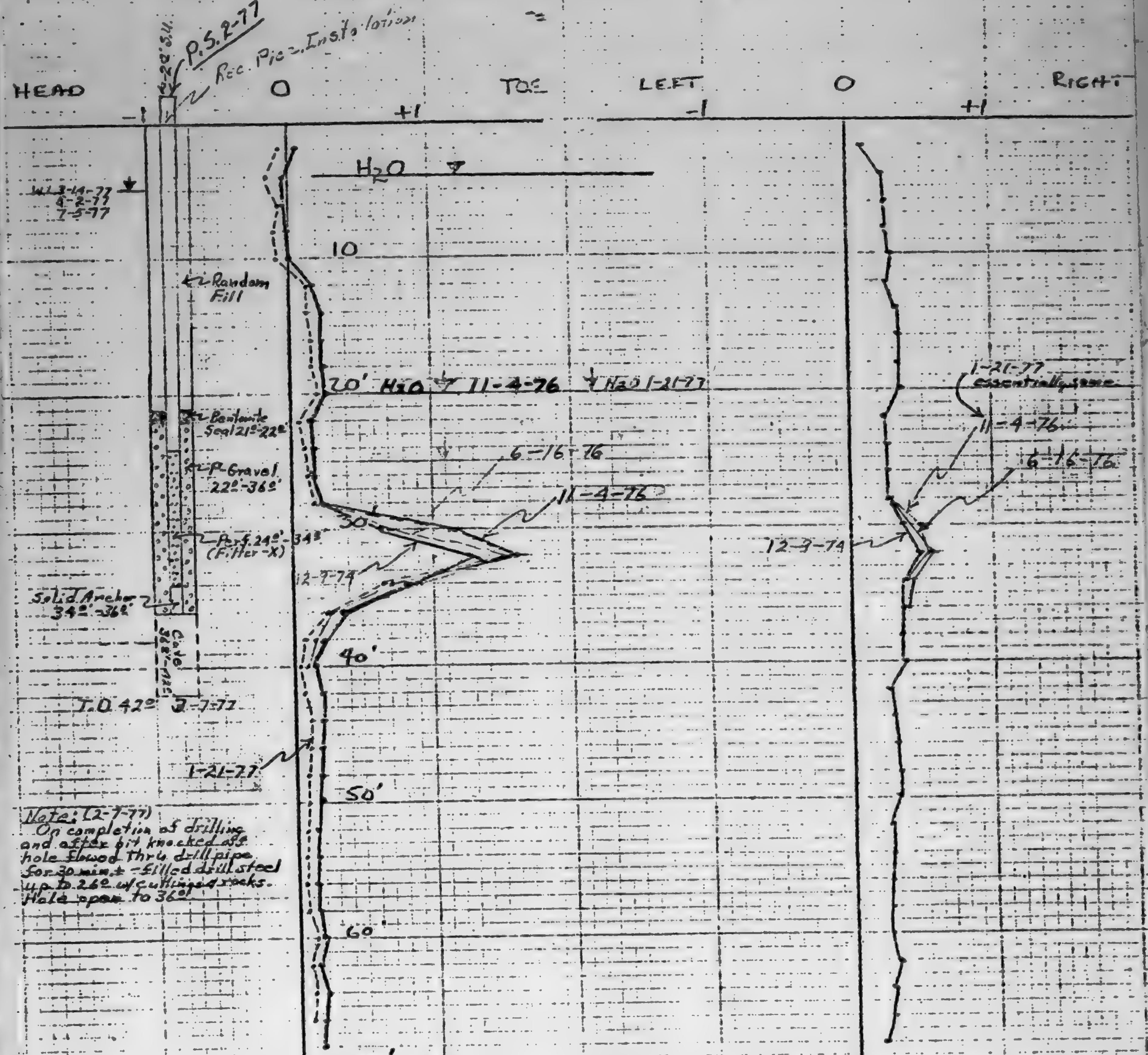
80 Tube No. 3 (N.2)
(Orient. S 80° W)

Note: 11-4-76 [illegible] Adjustment S 64° W, @ 54.0'.

90 Initial Reading 12-9-74

Encl. 1

Weber Slide



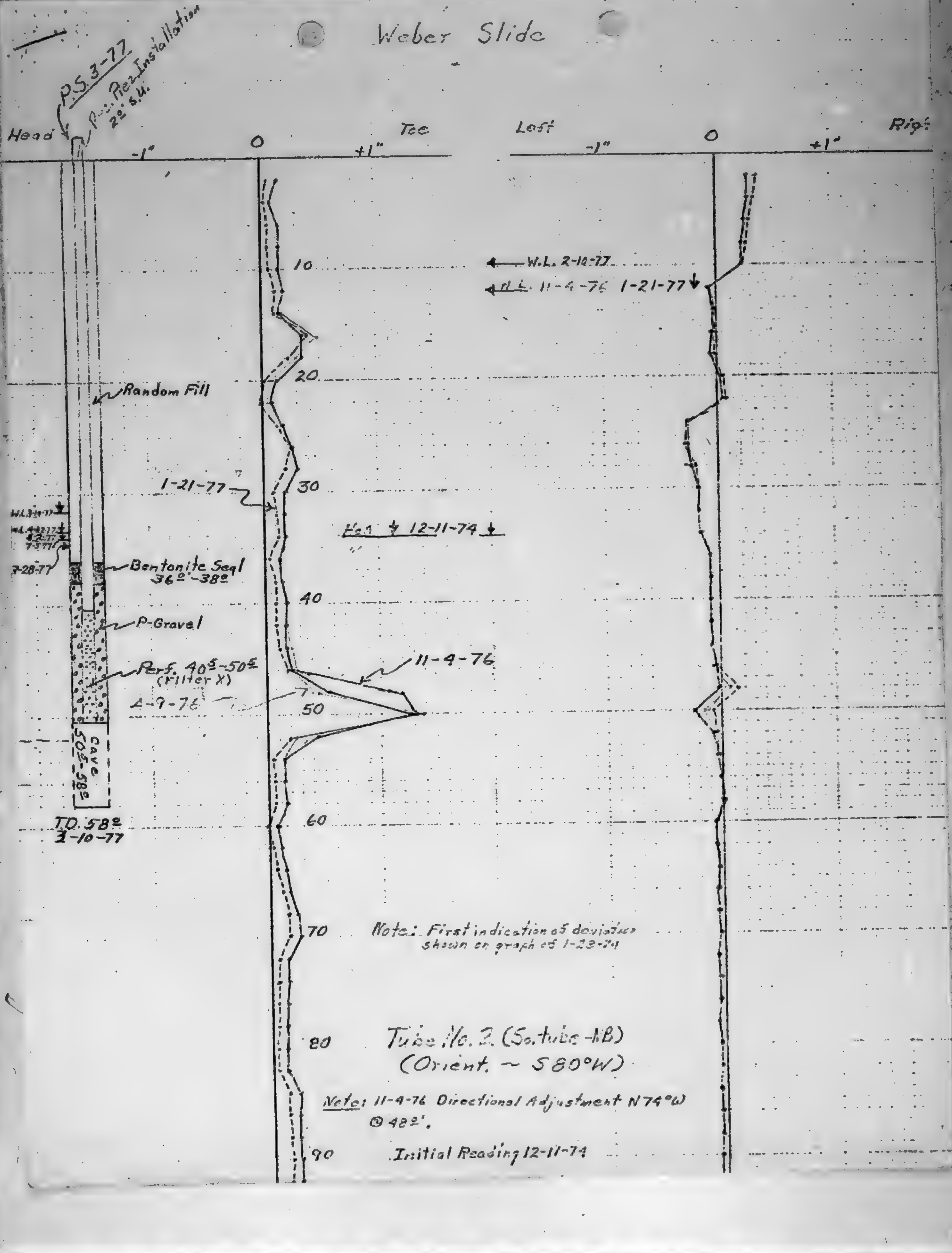
Note: (2-7-77)
On completion of drilling and after bit knocked off hole flowed thru drill pipe for 30 min ± - filled drill steel up to 26º w/ cuttings & rocks. Hole open to 36º!

Note: 11-4-76 Directional Adjustment S 78° W.

TUBE NO. 1 (So. B)
So. TUBE.
S 59° W

WEBER SLIDE
Initial Reading
Collar El. 2⁰³

Weber Slide



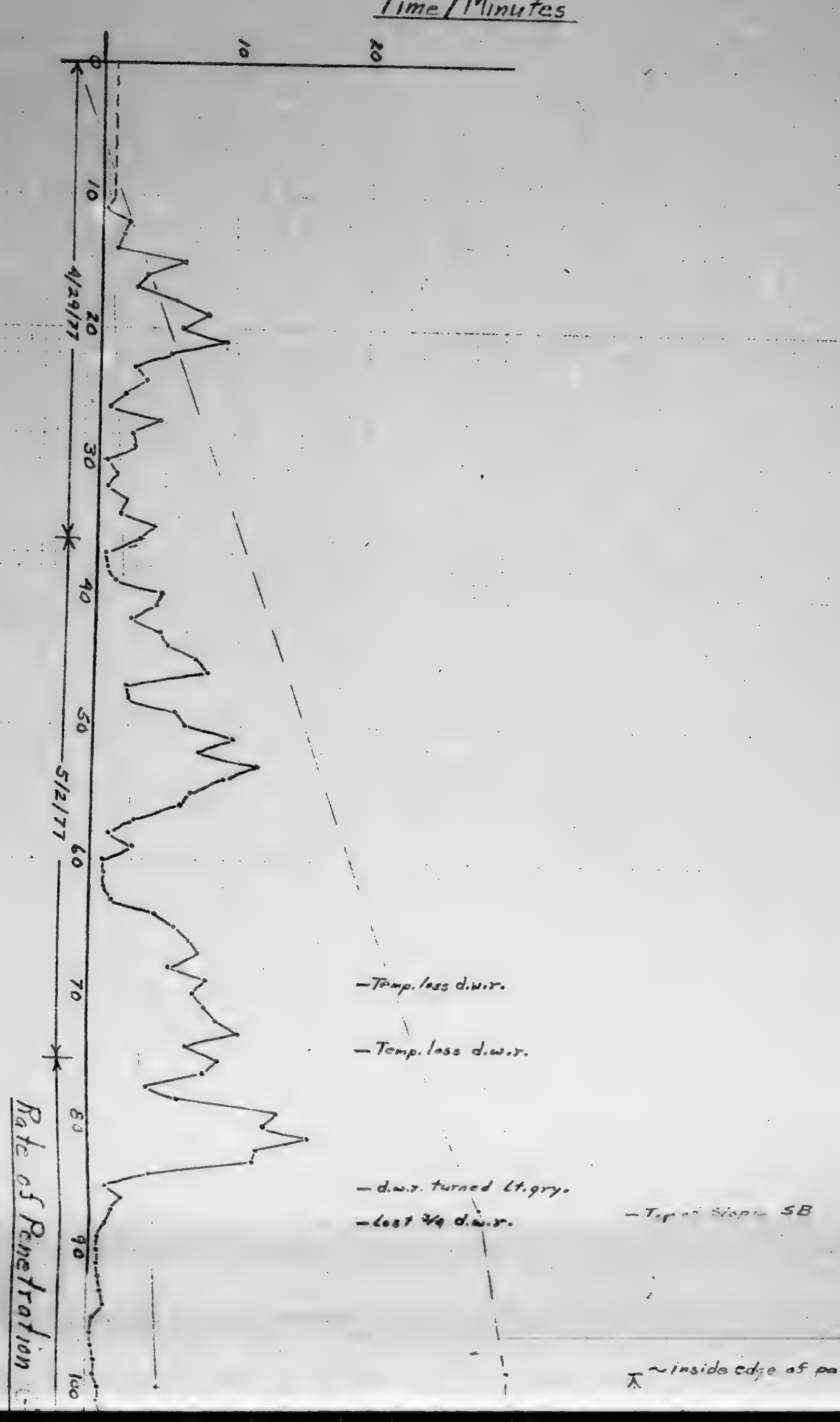
Note: First indication of deviation shown on graph of 1-23-74

Tube No. 2 (So. tube -NB)
(Orient. ~ S80°W)

Note: 11-4-76 Directional Adjustment N74°W @ 48⁰'.

Initial Reading 12-11-74

H.D. #8-77



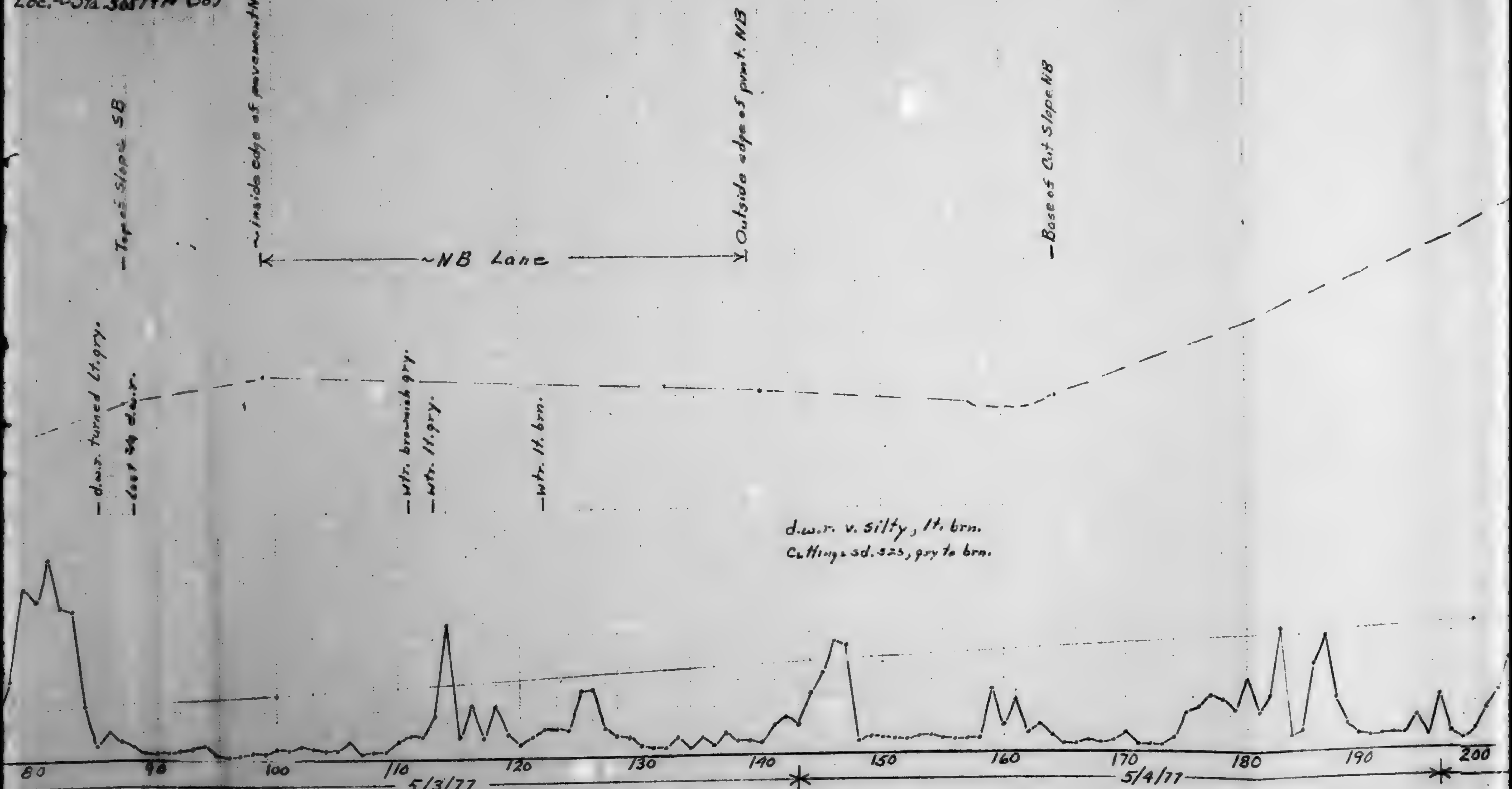
Weber Slide

Horizontal Drain #8-

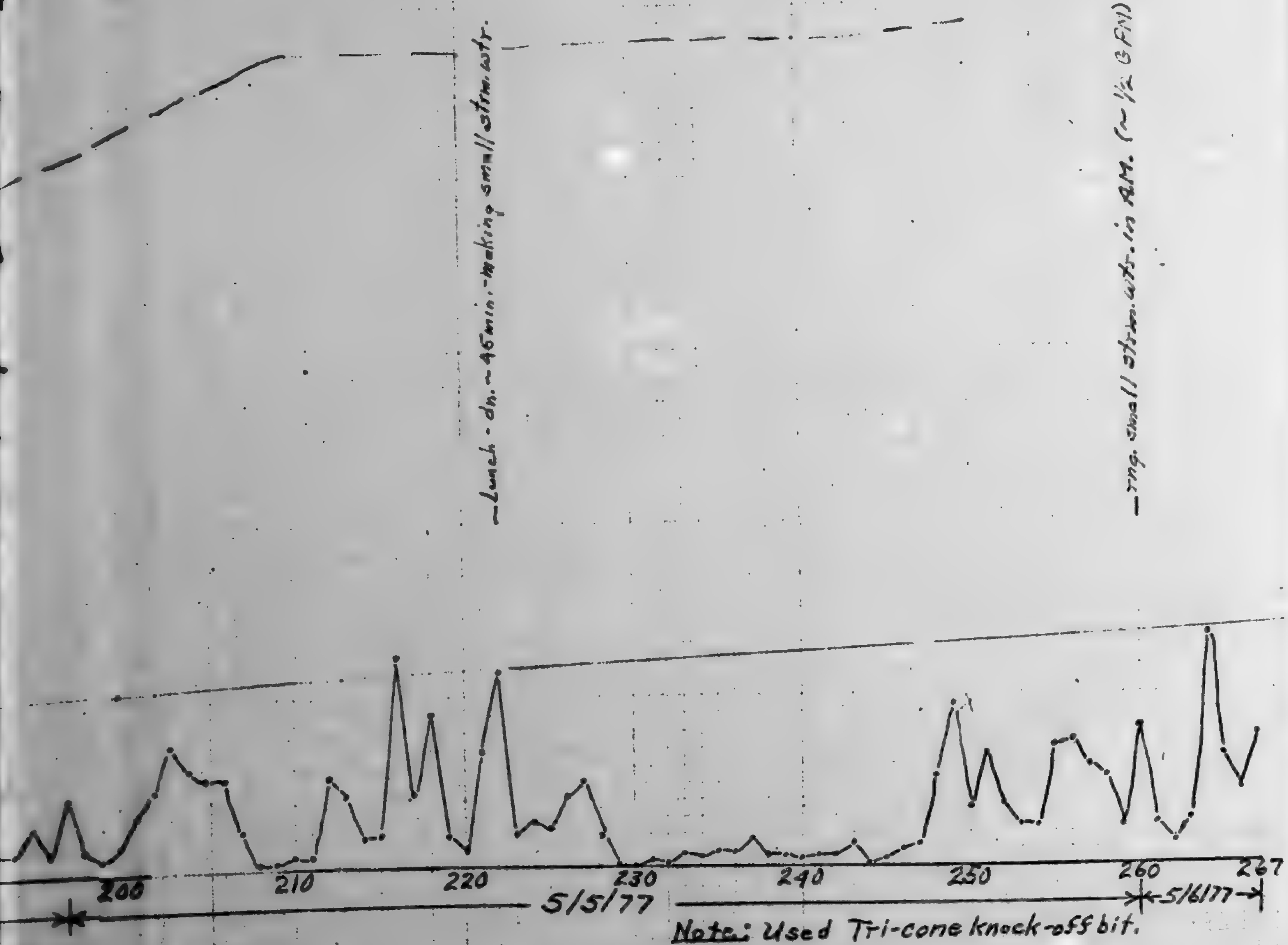
Loc. ~Sta. 305+70 (SB)

Weber Slide

Horizontal Drain #8-77
Loc.~Sta 3057+70 (SB)



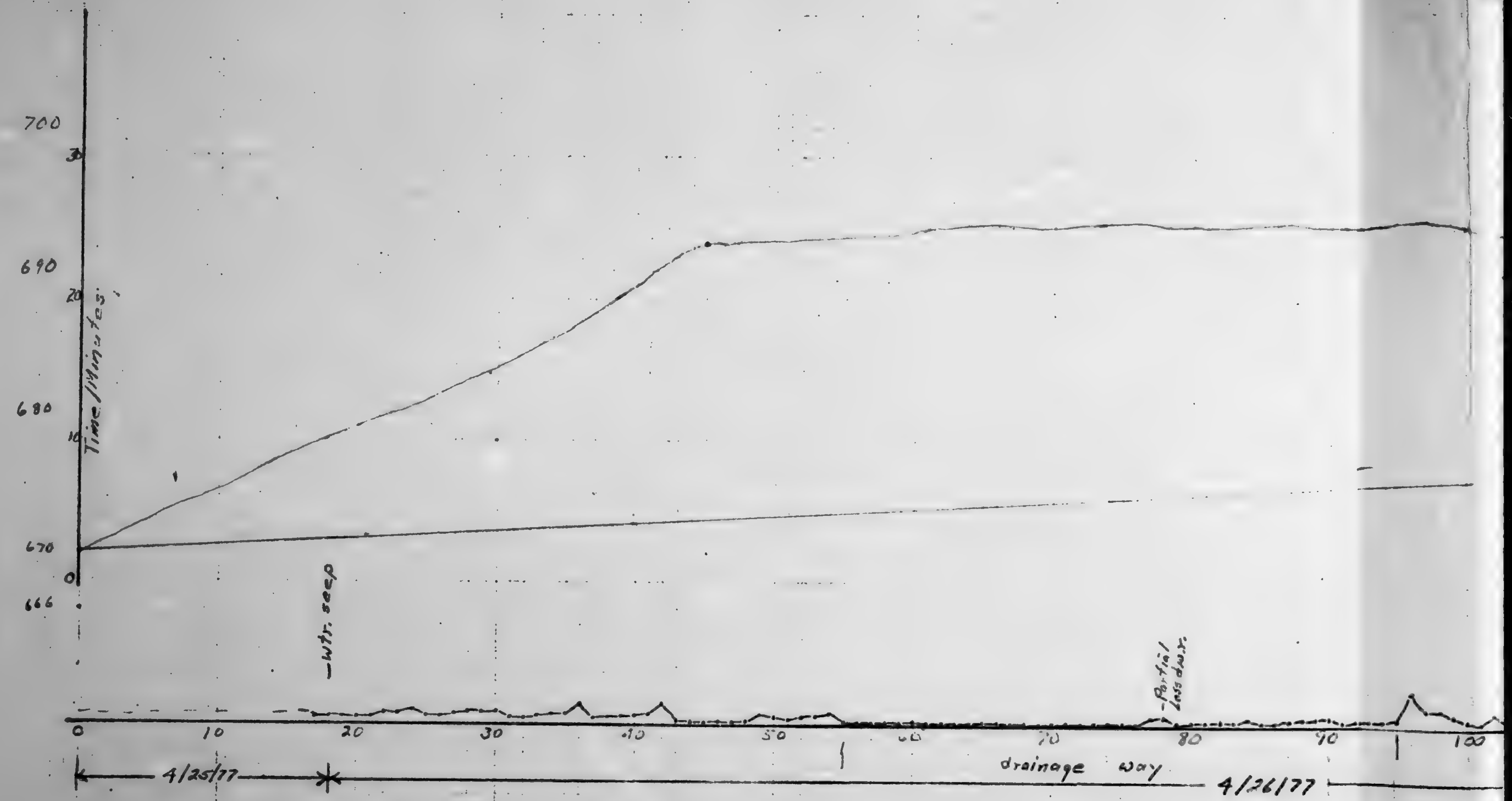
Rate of Penetration Graph



Note: Used Tri-cone knock-off bit.

TD. 267±'
Installed 270±' PVC. -
V. slow drip.

H.D. #7-77

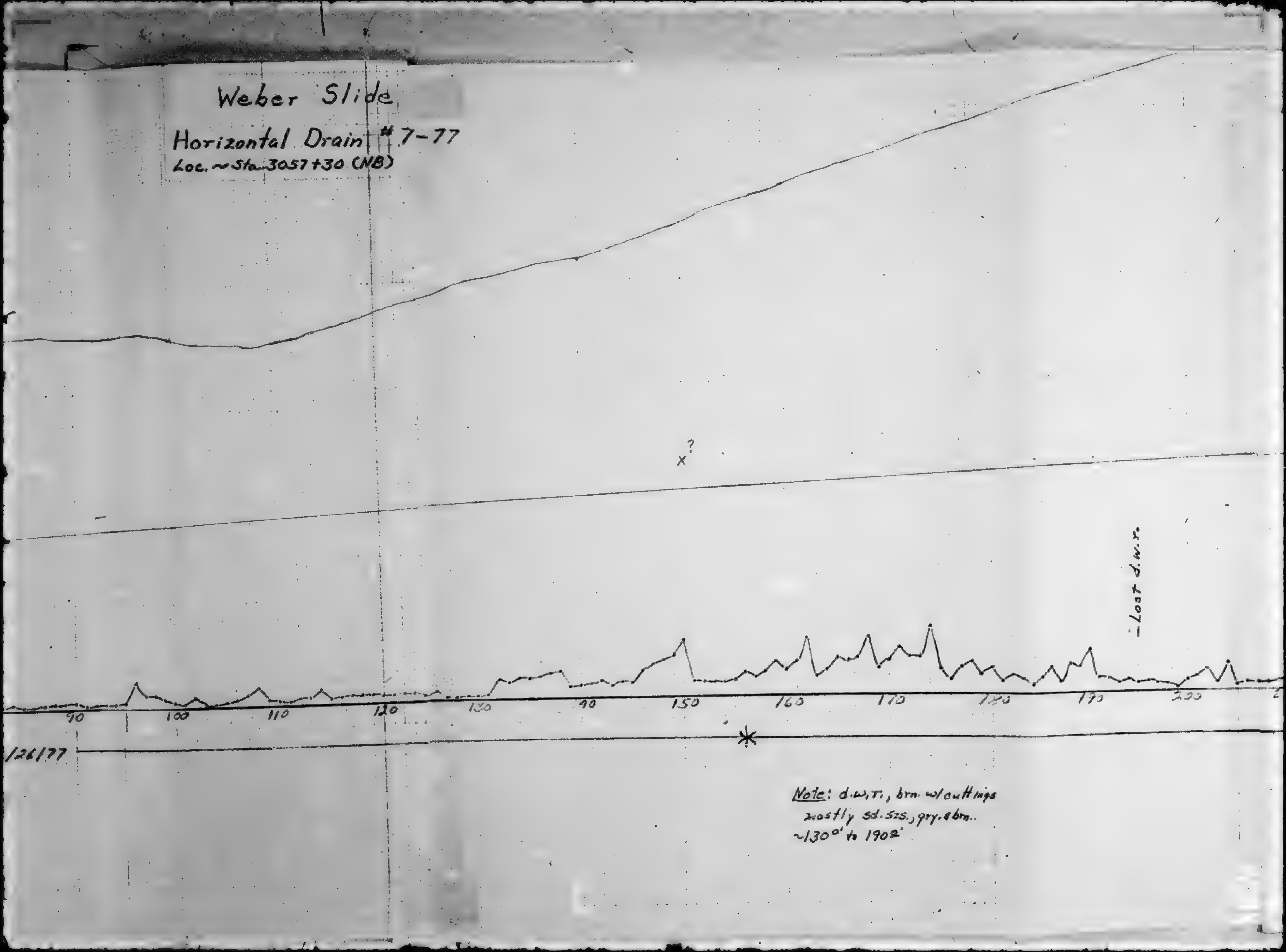


Note: dwr. yel-brn. v. silty, soupy mud., (sdy. slt.),
. little cuttings recovered to 131°.

H
Lo

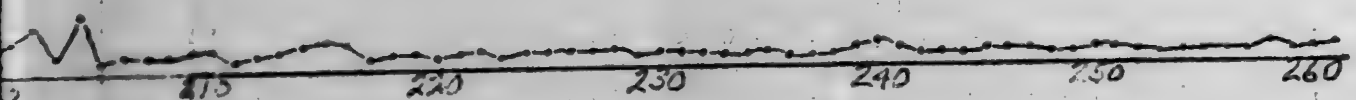
Weber Slide

Horizontal Drain #7-77
Loc. ~Sta. 3057+30 (NB)



Note: d.w.r., brn. w/cuttings
mostly sd.szs., gry. & brn.
~130°' to 1902'

drill steel binding
from ~195 - had to
use cheater to break
about every joint coming
out of hole.



4/27/77 →

T.D. 261º'

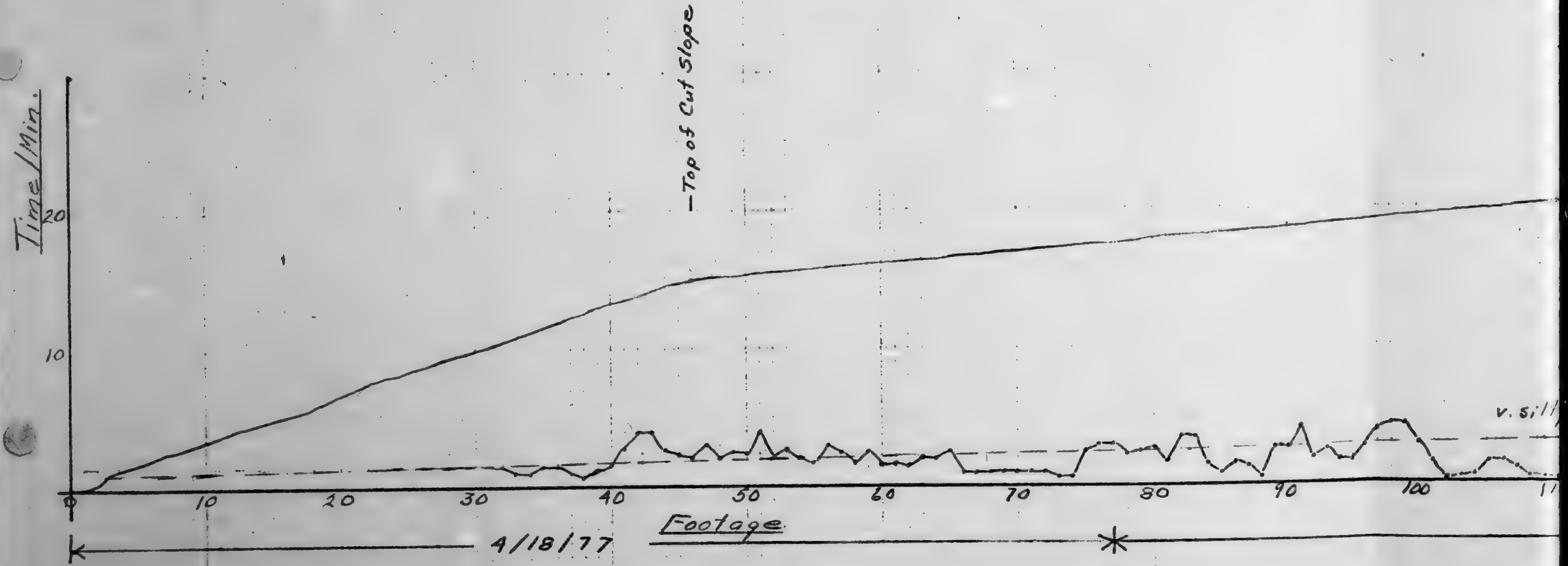
4/28/77 **Note:** Installed 258º' PVC - pipe parted - reglued back to ~120º'+ but was also parted farther back - always pushed back to same point - believed plugged due to pulling & pushing ~6º' when taking joints of drill pipe off. - Making small stream of wtr. mostly coming out on hole btm. instead of pipe.

Used knock-off Hawthorne (Blade Bit)

H.D. #6-77

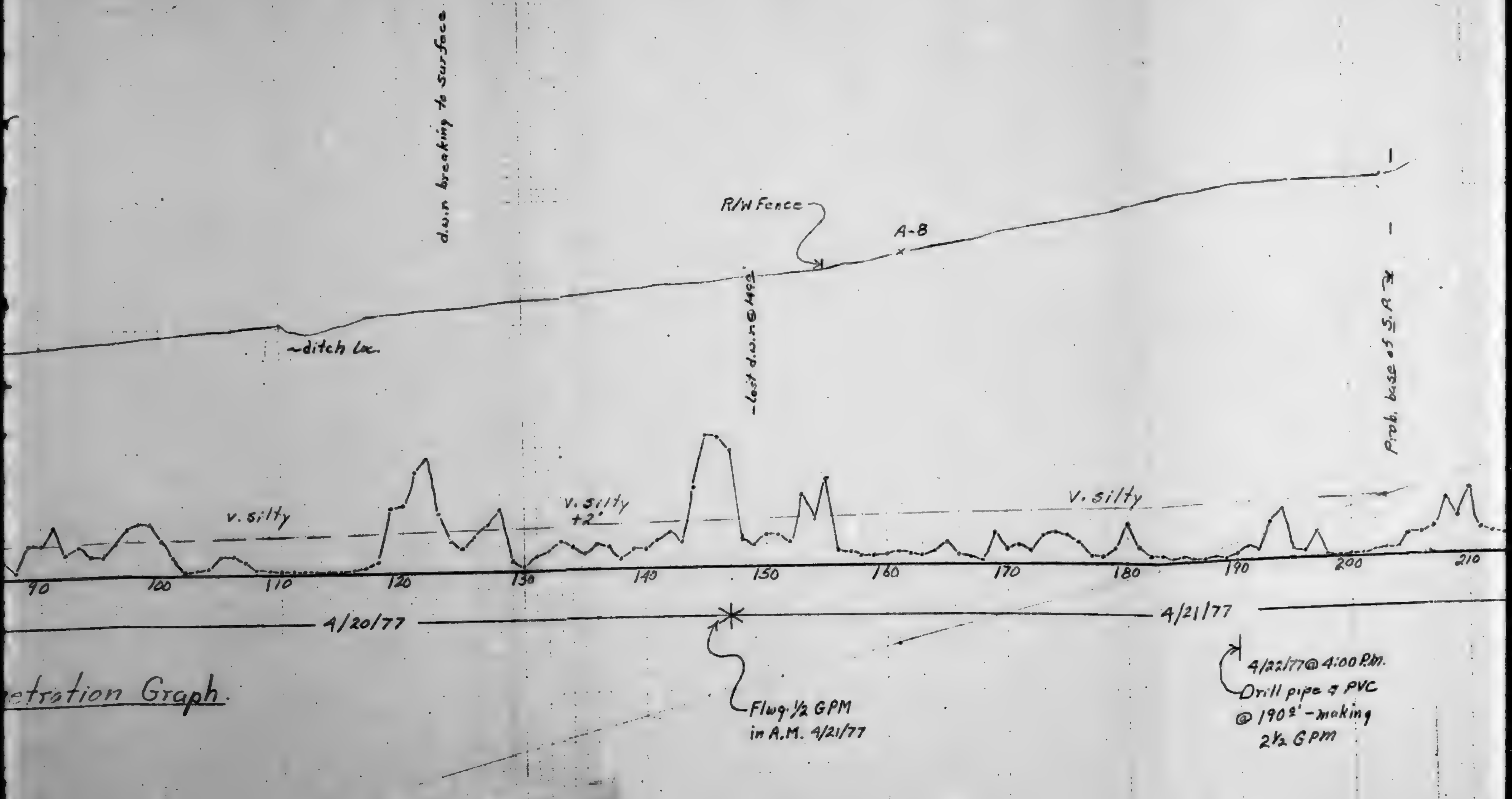
Weber Slide

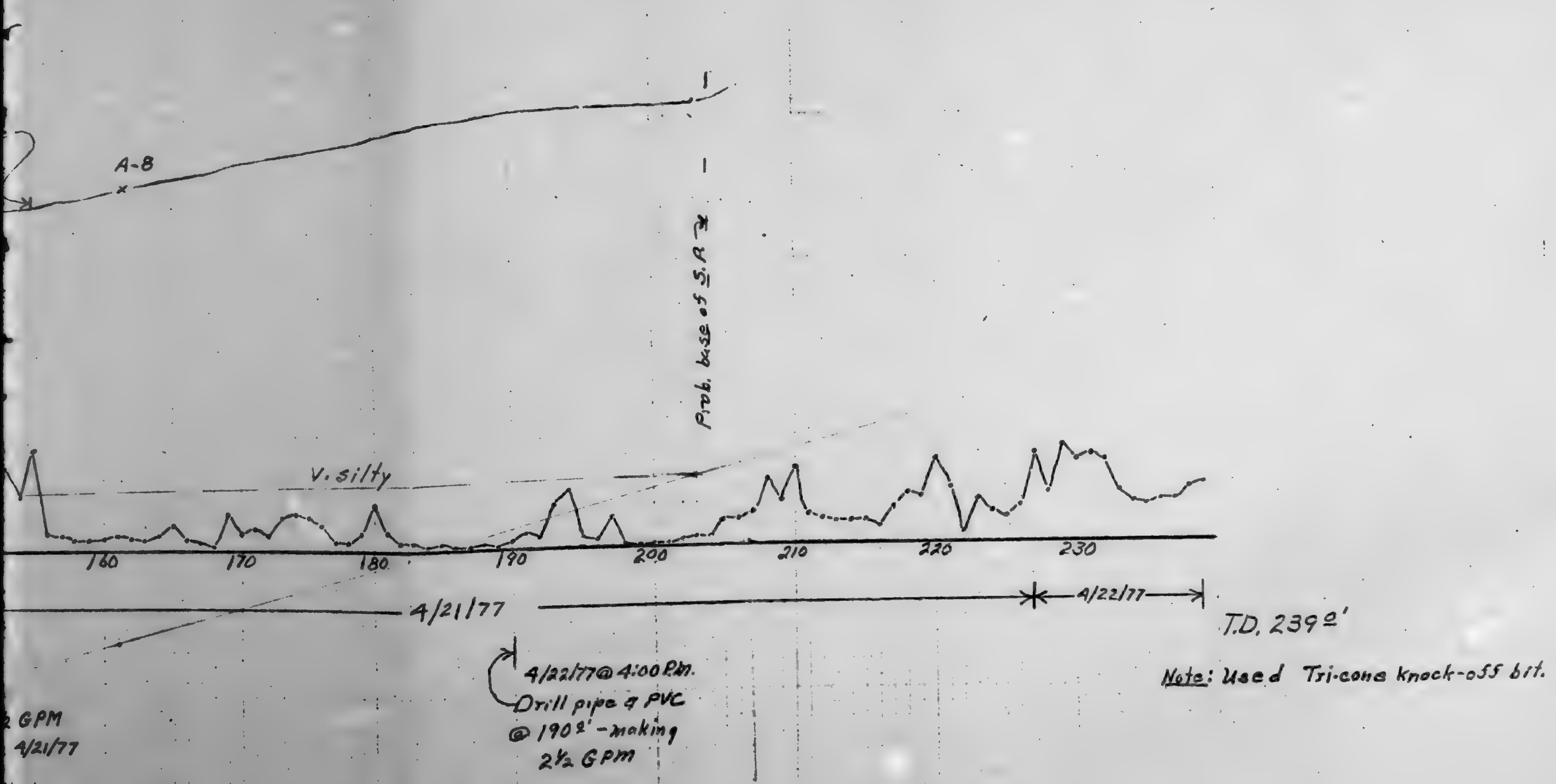
Shady Interchange - Dillard Jct. Sec.
Pacific Highway - Douglas Co.



Rate of Penetration Graph.

Horizontal Drain # 6-77
Loc. ~ Sta. 3058+05 (NB)

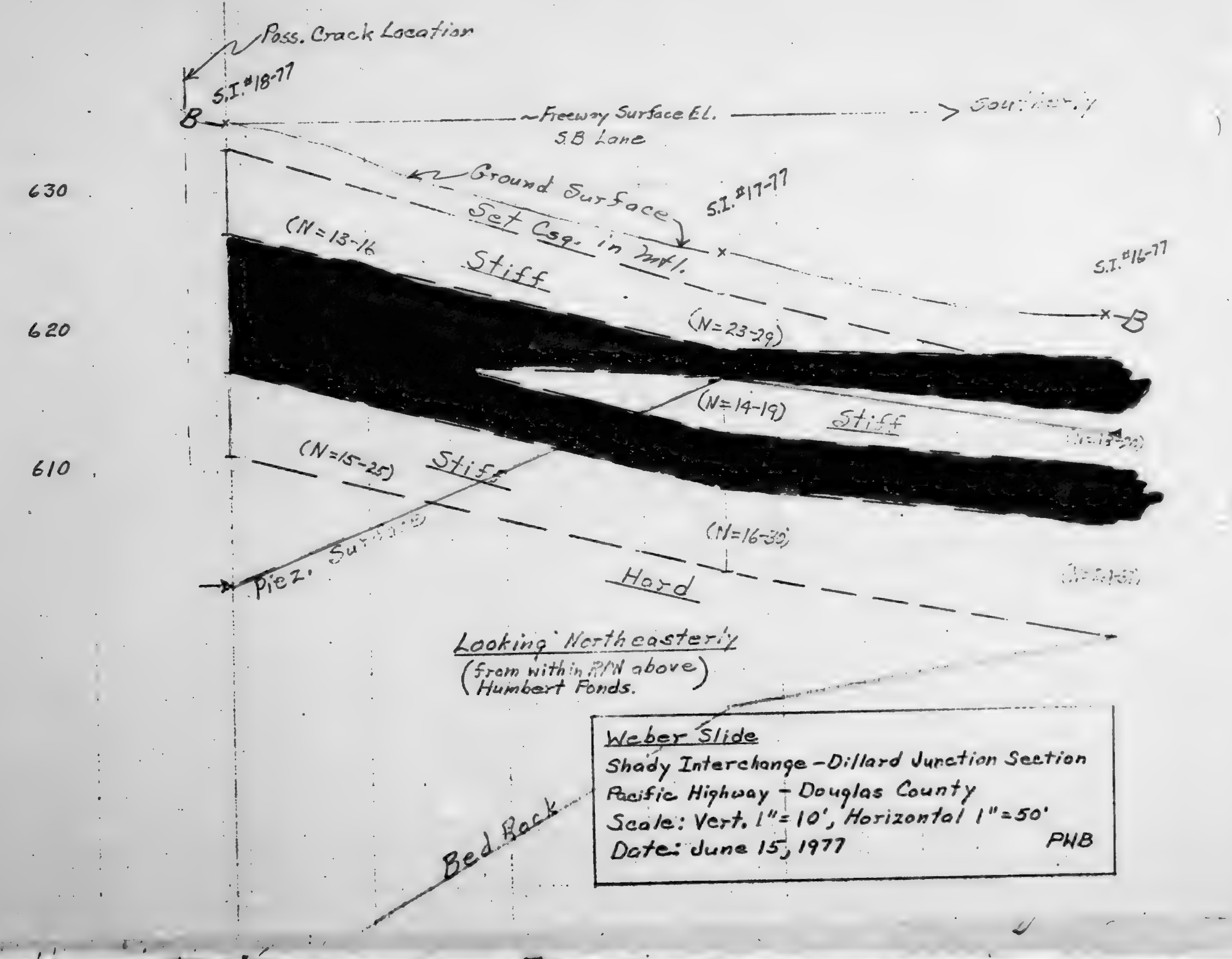




Note: Used Tri-cone knock-off bit.

Encl. 2

Weber Slide


Poss. Crack Location
S.I.#18-77
B
Freeway Surface El.
S.B Lane
Southerly
Ground Surface
S.I.#17-77
Set Csg. in Mtl.
S.I.#16-77
B
630
620
610
(N=13-16
Stiff
(N=23-29)
(N=14-19)
Stiff
(N=13-20)
(N=15-25)
Stiff
(N=16-30)
Piez. Surface
Hard
Bed Rock

Looking Northeasterly
(from within R/W above)
(Humbert Ponds.

Weber Slide
Shady Interchange – Dillard Junction Section
Pacific Highway – Douglas County
Scale: Vert. 1" = 10', Horizontal 1" = 50'
Date: June 15, 1977 PWB

[illegible]regon State Highway Division
[illegible] SOILS & GEOLOGY EXPLORATION LOG

Hole No. 1-7[illegible] Sheet 1 of 1
Project S[illegible] D[illegible]
Highway [illegible] County D[illegible]
Location Weber Slide ~ Sta 3057+50 (Inside Shoulder SB) Prefix 610-1931-910
Purpose of Hole Slide Investigation
Driller [illegible] Crew Logged by R. Kobernik
Drill Mob. B-50 Angle Vertical
Casing [illegible] Core
Drive Sampler OD 2" ID Hammer Wt 140 lb Fall 30 inches
Undisturbed Sampler —

LEGEND

GRAPHIC LOG

- Decomposed rock (hand crushable)
- Mixed decomposed and weathered rock
- Weathered rock (color, hardness, strength, etc., modified by weathering)
- X Zone of fragmental core
- Mixed weathered and fresh rock
- Bedding dip
- Slickensides
- Joint

NOTES

Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fingernail
Hard - difficult to scratch with knife
Very Hard - cannot be scratched with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type	Blows / Inches	N Value	Recovered / Sampled	% Recovery	Water Level	% Moisture
	1	12,13,13,15	26	10/24	42	Stiff	
	2	16,16,16,21	32	0/24	0		
	3	7,12,22,23	34	15/24	62		
	4	9,13,18,25	31	17/24	71		
	5	19,21,23,28	44	16/24	67	HARD	
	6	9,13,19,28	32	14/24	58	St[illegible]	
	7	7,27,17,24	44	18/24	75	HARD	
	8	9,19,20,25	39	12/24	50		
	9	8,17,23,25	40	12/24	50		
	10	8,15,19,28	34	10/24	42	St[illegible]	
	11	8,17,23,33	40	12/24	50	[illegible]	
	12	9,15,20,26	35	11/24	46	[illegible]	
	13	7,14,26,30	40	14/24	58	HARD	
	14	15,19,25,28	44	10/24	42		
	15	9,15,21,33	36	[illegible]/24	58		
	16	12,16,19,20	45	8/24	33		
	17	11,16,21,22	37	11/24	46		
	18	7,17,23,25	40	8/24	33		
	19	7,9,14,16	23	10/24	42	STIFF	
	20	6,11,12,16	23	8/24	33		
	21	15,11,29,44	40	7/24	29	HARD	2.5
	22	16,24,30,36	54	24/24	100		
	23	18,29,40,43	67	14/24	58		[illegible]
	24	18,29,37,47	61	?/24	?		—
	25	10,14,17,24	31	24/24	100	STIFF	20
	26	14,15,50/3½		16/15	100	HARD	—
		BOTTOM OF HOLE					

Depth: 1, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55

Description / Remarks / Date

5-18-7[illegible]

Rocky Slope Wash
Clayey, Silty Sand plastic
with yellow, brown, + red
rx frag. mostly sub-angular
+ weathered, 5mm minus
% of rx. frag. varies from
30 - 50 [illegible] 3'-43'

gray rx frag.

some rx frag crush to sand + silt

41-43 sample color changes from
red. brn to lt. gray
43-45 [illegible], pebbly, Clayey, Silty, Sand
45-49 [illegible] to med. brn.
$49-54^3$ gray, pebbly, Silty Sand
weathered OTTER POINT

Bottom of Hole @ 54^3

Drive Sampler OD [illegible] ID ____ Hammer Wt 140 # Fall [illegible]

Undisturbed Sampler —

⌀	- Joint

NOTES

Soft	- can be scratched with fingernail
Mod Hard	- can be scratched with knife, not by fingernail
Hard	- difficult to scratch with knife
Very Hard	- cannot be scratch with knife

Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type	Blows	Inches	N Value	Recovered / Sampled	% Recovery	Water Level	% Moisture	Depth
									1
	1	12, 13, 13, 15	26	10/24	42	STIFF		5	
	2	16, 16, 16, 21	32	0/24	0				
	3	7, 12, 22, 23	34	15/24	62				
	4	9, 13, 18, 25	31	17/24	71			10	
	5	17, 21, 23, 28	44	16/24	67	HARD			
	6	9, 13, 19, 28	32	14/24	58	Sti[illegible]		15	
	7	7, 27, 17, 24	44	18/24	75	HARD			
	8	9, 19, 20, 25	39	12/24	50				
	9	8, 17, 23, 25	40	12/24	50			20	
	10	8, 15, 17, 28	34	10/24	42	St[illegible]			
	11	8, 17, 23, 33	40	12/24	50	[illegible]		25	
	12	9, 15, 20, 26	35	11/24	46	[illegible]			
	13	7, 14, 26, 30	40	14/24	58	HARD			
	14	15, 19, 25, 28	44	10/24	42			30	
	15	9, 15, 21, 33	36	14/24	58				
	16	12, 16, 19, 20	45	8/24	33			35	
	17	11, 16, 21, 22	37	11/24	46				
	18	7, 17, 23, 25	40	8/24	33				
	19	7, 9, 14, 16	23	10/24	42	STIFF		40	
	20	6, 11, 12, 16	23	8/24	33				
	21	15, 11, 29, 44	40	7/24	29	HARD	3.5	45	
	22	16, 24, 30, 36	54	24/24	100				
	23	18, 29, 40, 43	69	14/24	58		36.9		
	24	18, 29, 39, 47	61	?/24	?		—	50	
	25	10, 14, 17, 24	31	24/24	100	STIFF	20		
	26	14, 15, 50/	3½	16/15.5	100	HARD	—	55	
	BOTTOM	OF	HOLE						

Description	Remarks	Date
		5-18-7
~~Rocky~~ Slope Wash		
Clayey, Silty Sand plastic		
with yellow, brown, + red		
rx frag. mostly sub-angular		
+ weathered, 5mm minus		
% of rx. frag. varies from		
30 - 50 in interval 3'-43'		
grey rx frag.		
some rx frag crush to sand + silt		
41-43 sample color changes from		
red. bwn to lt. gray		
43-45 blue grey pebbly, Clayey		
Silty Sand		
45-49 [illegible] to med. bwn.		
49-54^3 gray, pebbly, Silty Sand		
weathered OTTER POINT		
Bottom of Hole @ 54^3		

Encl. 4

Oregon State Highway Division
SOILS & GEOLOGY EXPLORATION LOG

Hole No. FDH #2-77 (S.I. #16-77) Sheet 1 of 1
Project Shady Int. - Dillard Junction (Weber Slide)
Highway Pacific County Douglas
Location ~Sta 3061+27 60' Rt. (SB) Prefix 610-1921-910
Purpose of Hole Foundation Invest. & Slope Tube Install.
Driller Salem Bridge Crew Logged by P. Bowers
Drill B-50 Mobil Angle Vert.
Casing NX Core —
Drive Sampler OD 2" ID ___ Hammer Wt 140# Fall 30"
Undisturbed Sampler

LEGEND

GRAPHIC LOG

▮	Decomposed rock (hand crushable)
▯	Mixed decomposed and weathered rock
▯	Weathered rock (color, hardness, strength, etc., modified by weathering)
X	Zone of fragmental core
⁝	Mixed weathered and fresh rock
/	Bedding dip
ʃ	Slickensides
ø	- Joint

NOTES

Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fingernail
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type	Blows / 6 Inches	N Value	Recovered / Sampled	% Recovery	~~Water Level~~	% Moisture	Depth	Graphic Log	Description	Remarks	Date
								0		Road Rock & Rocky Slope Wash to 3º		5/19/77
	#1	4, 4, 7, 8	11	24/12	50	Soft	19.0			Clay, dk. gry-yel. brn., slty, sdy, moist, plast. est. 5-20% small vari. wea. rk. frags. mottled-speckled	* Problem Mtl. to 23º' (Currently)	
	#2	1, 5, 7, 10	12	24/15	63					increase in fn. sd.		
	#3	5, 9, 11, 13	20	24/15	63	Stiff	12.0					
	#4	5, 8, 10, 13	18	24/15	63			10				
	#5	4, 6, 7, 10	13	24/16	67	Soft	16.5			Lt. gry-yel. rd. brn., mottled to ~horiz. strks.; some gry-grn., sticky, poss. sensitive		
	#6	3, 5, 6, 8	11	24/10	42							
	#7	3, 10, 14, 21	24	24/20	83		15.5			Lt. gry. clayey sdy silt. w/ est. 20% included siltstone frags, matrix plastic.		
	#8	8, 10, 18, 24	28	20/14	58	Stiff						
	#9	8, 13, 17, 21	30	24/17	71		17.5	20				
	#10	9, 13, 18, 23	31	24/18	42					← Top Bedrock		
	#11	23, 36, 49, -	85	18/15	63	Hard	9.0	25		Shale, dk. gry-brn, fissil, molds to slt. & sd. szs, damp-moist, scatt. lt. gry clayey that is plastic, most non-plast.		
	#12	12, 21, 32, -	53	18/16	89		12.5					
	#13	32/6", 50/3½"		9½/7	74			30				
	#14	50/4½"		4½/4	89							
		Drilled w/ Tricone 31º-33º						33				
										Bottom of Hole 33º	19 May 77	
										* Slope Indicator tubing set on bottom w/ 2½ sacks of P-gravel		

isturbed Sampler

Soft - can be scratched with fingernail
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Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
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Elevation	Sample Type-Jar	Blows / 6 Inches	N Value	Recovered / Sampled	% Recovery	~~Water Level~~	% Moisture	Depth	Graphic Log	Description	Remarks	Date
								0		Road Rock & Rocky Slope Wash to 3º		5/19/77
	#1	4, 4, 7, 8	11	24/12	50	Soft	19.0			Clay, dk. gry-yel. brn, slty, sdy, ~~moist~~, plast. est. 5-20% small vari. wea. rk. frags. mottled-speckled	* Problem mtl. to 23º (Currently)	
	#2	1, 5, 7, 10	12	24/15	63							
	#3	5, 9, 11, 13	20	24/15	63	Stiff	12.0			increase in fn. sd.		
	#4	5, 8, 10, 13	18	24/15	63			10				
	#5	4, 6, 7, 10	13	24/16	67	Soft	16.5			Lt. gry-yel. rd. brn., mottled to ~horiz strks.; some gry-grn., sticky, poss. sensitive		
	#6	3, 5, 6, 8	11	24/10	42							
	#7	3, 10, 14, 21	24	24/20	83	Stiff	15.5			Lt. gry. clayey sdy silt w/est. 20% included siltstone frags, matrix plastic.		
	#8	8, 10, 18, 24	28	20/14	58							
	#9	8, 13, 17, 21	30	24/17	71		17.5	20				
	#10	9, 13, 18, 23	31	24/18	42					← Top Bedrock		
	#11	23, 36, 49, -	85	18/15	63	Hard	9.0	25		Shale, dk. gry-brn, fissil, molds to slt. & sd. szs, damp-moist, scatt. lt. gry clayey that is plastic, most non-plast.		
	#12	12, 21, 32, -	53	18/16	89		12.5					
	#13	32/6", 50/3½"		9½/7	74							
	#14	50/4½"		4½/4	89			30				
		Drilled w/ Tricone 31º-33º						33				
										Bottom of Hole 33º	19 May 77	
										* Slope Indicator tubing set on bottom w/ 2.5 sacks of P-gravel.		

[illegible]

Oregon State Highway Division
SOILS & GEOLOGY EXPLORATION LOG

Hole No. FDH#4-77 (S.I. #18 Sheet 1 of 1
Project Shady Int.-Dillard Junction (Weber Slide)
Highway Pacific (I-5) County Douglas
Location ~3058+33 45' Rt (SB R/L) Prefix 610-1921-910
Purpose of Hole Foundation Invest. & Slope Tube Install.
Driller Salem Bridge Crew Logged by P. Bowers
Drill B-50 Mobil Angle Vert.
Casing NX Core —
Drive Sampler OD 2" ID ___ Hammer Wt 140# Fall 30"
Undisturbed Sampler —

LEGEND

GRAPHIC LOG

Decomposed rock (hand crushable)
Mixed decomposed and weathered rock
Weathered rock (color, hardness, strength, etc., modified by weathering)
X Zone of fragmental core
Mixed weathered and fresh rock
Bedding dip
Slickensides
ø - Joint

NOTES

Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fingernail
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type-Jars	Blows / 6 Inches	N Value	Recovered / Sampled	% Recovery	~~Water Level~~	% Moisture	0 Depth	Graphic Log	Description	Remarks	Date
										Road Rock & Rocky Slope Wash to 2º'		5-31-77
	#1	4,6,7,8	13	24/12	50	Stiff				Clayey silty Sand, red-brown, moist,		
	#2	6,7,9,10	16	24/11	46					plastic, matrix w/est. 20% vari. Wea. rk. frags.		
	#3	6,8,7,10	15	24/14	58					Silty sandy Clay, brn. to yel. brn.,		
	#4	4,5,6,6	11	24/10	42		13.0	10		moist, plastic, scatt. rk. frags., 5-15%		← W.L. 9.5 6-1-77
	#5	4,3,4,6	7	24/8	33	Soft	15.6			clayey silty sd. matrix w/est.	*Shelby Tube #1, 10º-12º	
	#6	2,5,6,11	11	24/13	54		13.0			10-40% rk. frags.	*Shelby Tube #2, 12º-14º	6-1-77
	#7	6,5,5,5	10	24/9	38		13.6			Silty clayey sand & sandy clay, rd. brn,		
	#8	6,6,7,8	13	24/14	58					w/blk. spots, moist, plastic, rk. frags as above	* Problem mtl.	
	#9	5,6,9,9	15	24/15	63	Stiff	15.5	20			to 24º' (Currently)	
	#10	5,8,11,14	19	24/18	75		13.6			Increase in % rk. frags		
	#11	4,9,16,20	25	24/20	83							
	#12	10,16,23,34	38	24/17	71					Sdy clay seam, gry., yel-brn., moist, plastic		
	#13	15,25,37,48	62	24/19	79							← W.L. 27º 6-8-77
	#14	17,29,44,—	73	18/18	100		18.9	30				
		15,25,37,48	62	24/20	83		14.0	32		← color change		
		22,30,43,54	73	24/20	83		16.3	34		Clayey silty sand, yel. brn., moist,		
		25,50,—	Ref.	12/12	100	Hard	21.2	36		plastic w/est. 40% small rk. frags.		
		17,30,50/5"	Ref.	17/10	59		15.6	38		av. <1/2"		
		6,25,44,53	69	24/11.5	48		14.9	40				
		25,36,50/4"	Ref.	16/11	69		14.9	42				
		17,29,35,43	64	24/20	83		20.9	44				
	#15	13,22,28,53	50	24/19	79		15.5			red-brn, spotted		
											*d.w.r. blue @ 48º'	
	#16	11,26,29,35	55	24/12	50		19.7	50		Silty sand, fn.-med. grained, gry., blue-gry, moist, plastic w/ siltstone rk. frags., grading to dk. gry., fn. grained, plastic silty sand matrix.		
	#17	14,13,17,23	30	24/20	83	Stiff	21.9			← Gradational		
	#18	12,20,41,54	61	24/21	88	V. Compact	13.0					
	#19	29,41,40,50	81	24/16.5	69		13.0			Gravels, (grading from slty. gravelly		
	#20	31,47,38,50	85	24/12	50		15.5			sand (gry) to sandy gravel @ base.		
	#21	18,28,33,28	61	24/18	75		15.0	60			*Wtr. flwg. over csg. on break. of drill steel in gravel zone	
	#22	14,48,50/2"	98	15/						*multilith. gravels, slty., sdy., 90% fresh, hd. (Jar Samp. 61º+32º) ← Bedrock		
		*Bicone & Wireline Core								Otter Point gry. mod. hd. seamy Siltstone & Sandstone int/soft brn-blk. fissil shales. *Mixture of mtls.		
								70		Bottom of Hole 70º'	7 June 1977	

* Drive Samples 30º-44º & Shelby Tubes were taken from [illegible] hole ~2' away using

Mod Hard - can be scratched with knife, not by fingernail
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type	Blows 6 Inches	N Value	Recovered Sampled	% Recovery	~~Water Level~~	% Moisture	Depth	Graphic Log	Description	Remarks	Date
										Road Rock & Rocky Slope Wash to 2º'		5-31-77
	#1	4,6,7,8	13	24/12	50	Stiff				Clayey silty Sand, red-brown, moist,		
	#2	6,7,9,10	16	24/11	46					plastic, matrix w/est. 20% vari. wea.		
	#3	6,8,7,10	15	24/14	58					rk. frags.		
	#4	4,5,6,6	11	24/10	42	Soft	13.0	10		Silty sandy Clay, brn. to yel. brn., moist, plastic, scatt. rk. frags., 5-15%		
	#5	4,3,4,6	7	24/8	33		15.6			clayey silty sd. matrix w/est.	*Shelby Tube #1, 10º-12º	←W.L. 9.5 6-1-77
	#6	2,5,6,11	11	24/13	54		13.0			10-40% rk. frags.		6-1-77
	#7	6,5,5,5	10	24/9	38		13.6			Silty clayey sand & sandy clay, rd. brn.	*Shelby Tube #2, 12º-14º	
	#8	6,6,7,8	13	24/14	58					w/blk. spots, moist, plastic, rk. frags as above		
	#9	5,6,9,9	15	24/15	63	Stiff	15.5	20			*Problem mtl.	
	#10	5,8,11,19	19	24/18	75		13.6			Increase in % rk. frags.	to 24º' (Currently)	
	#11	4,9,16,20	25	24/20	83							
	#12	10,16,23,34	38	24/17	71					Sdy clay seam, gry., yel-brn., moist, plastic		
	#13	15,25,37,48	62	24/19	79							
	#14	17,29,44,-	73	18/18	100		18.9	30				←W.L. 27º 6-8-77
		15,25,37,48	62	24/20	83		14.0	32		↙color change		
		22,30,43,54	73	24/20	83		16.3	34		Clayey silty sand, yel. brn., moist,		
		25,50,-	Ref.	12/12	100		21.2	36		plastic w/est. 40% small rk. frags.		
		17,30,50/5"	Ref.	17/10	59	Hard	15.6	38		av. <½"		
		6,25,44,53	69	24/11.5	48		14.9	40				
		25,36,50/4"	Ref.	16/11	69		14.9	42				
		17,29,35,43	64	24/20	83		20.4	44				
	#15	13,22,28,53	50	24/19	79		15.5			red-brn, spotted		
											*d.w.r. blue@48º'	
	#16	11,26,29,35	55	24/12	50		19.7	50		Silty sand, fn.-med. grained, gry., blue-grys moist, plastic w/siltstone rk. frags.,		
	#17	14,13,17,23	30	24/20	83	Stiff	21.9			grading to dk. gry., fn. grained, plastic silty sand matrix.		
	#18	12,20,41,54	61	24/21	88	V. Compact	13.0			↙Gradational		
	#19	29,41,40,50	81	24/16.5	69		13.0			Gravels, (grading from slty. gravelly		
	#20	31,47,38,50	85	24/12	50		15.5			sand (gry) to sandy gravel @ base.		
	#21	18,28,33,28	61	24/18	75		15.0	60			*Wtr. flwg. over csg. on break.	
	#22	14,48,50/3"	98	15/						*multilith. gravels, slty., sdy., ~90% fresh, hd. (Jar Samp. 61º-63º)	of drill steel in gravel zone.	
										↙Bedrock		
		*Bicone & Wireline Core								Otter Point gry. mod. hd. seamy Siltstone & Sandstone intpsoft brn-blk. fissil shales.		
								70		*Mixture of mtls.		

Bottom of Hole 70º' 7 June 1977

* Drive Samples 30º-44º & Shelby Tubes were taken from new hole ~2º' away using this hole as a guide

*Slope Indicator tubing set at [illegible] w/11.5 sacks [illegible]-gravel.

Oregon State Highway Division
SOILS & GEOLOGY EXPLORATION LOG

Hole No. EDH. #3-77 (S.I. #17-77) Sheet 1 of 1
Project Shady Int. - Dillard Junction (Weber Slide)
Highway Pacific County Douglas
Location ~ 3059+92 60' Rt. (SB) Prefix 610-1231-910
Purpose of Hole Foundation Invest. & Slope Tube Install.
Driller Salem Bridge Crew Logged by P. Bowers
Drill B-50 Mobil Angle Vert.
Casing NX Core —
Drive Sampler OD 2" ID ___ Hammer Wt 140# Fall 30"
Undisturbed Sampler —

LEGEND
GRAPHIC LOG

Decomposed rock (hand crushable)
Mixed decomposed and weathered rock
Weathered rock (color, hardness, strength, etc., modified by weathering)
X Zone of fragmental core
Mixed weathered and fresh rock
Bedding dip
Slickensides
Joint

NOTES

Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fingernail
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type	Blows / 6 Inches	N Value	Recovered / Sampled	% Recovery	~~Water Level~~	% Moisture	Depth	Graphic Log
	#1	5, 11, 18, 21	29	24/16	67	Stiff	8.5		
	#2	7, 11, 12, 13	23	24/21	88				
	#3	3, 3, 5, 7	8	24/13	54	Soft	15.5		
	#4	3, 5, 9, 13	14	24/15	63	Stiff		10	
	#5	5, 8, 11, 12	19	24/10	42		17		
	#6	4, 5, 7, 9	12	24/15	63	Soft			
	#7	6, 6, 7, 12	13	24/10	42		14.5		
	#8	6, 6, 10, 13	16	24/16	67	Stiff			
	#9	4, 10, 14, 21	24	24/19	79		9.5	20	
	#10	6, 11, 19, 27	30	24/19	79				
	#11	9, 17, 21, 29	38	24/18	75	Hard	13		
	#12	14, 27, 33, 31	60	24/17	71				
	#13	6, 11, 18, 21	29	24/20	83	Stiff	19.5		
	#14	10, 15, 20, 23	35	24/24	100			30	
	#15	7, 10, 13, 15	23	24/15	63		25		
	#16	13, 16, 21, 37	37	24/16	67	Hard			
	#17	18, 29, 41, 50	70	24/18	75				
	#18	18, 30, 23, 24	53	24/16	67				
		Drilled w/ Tricone 39' - 49'						40	
								49	

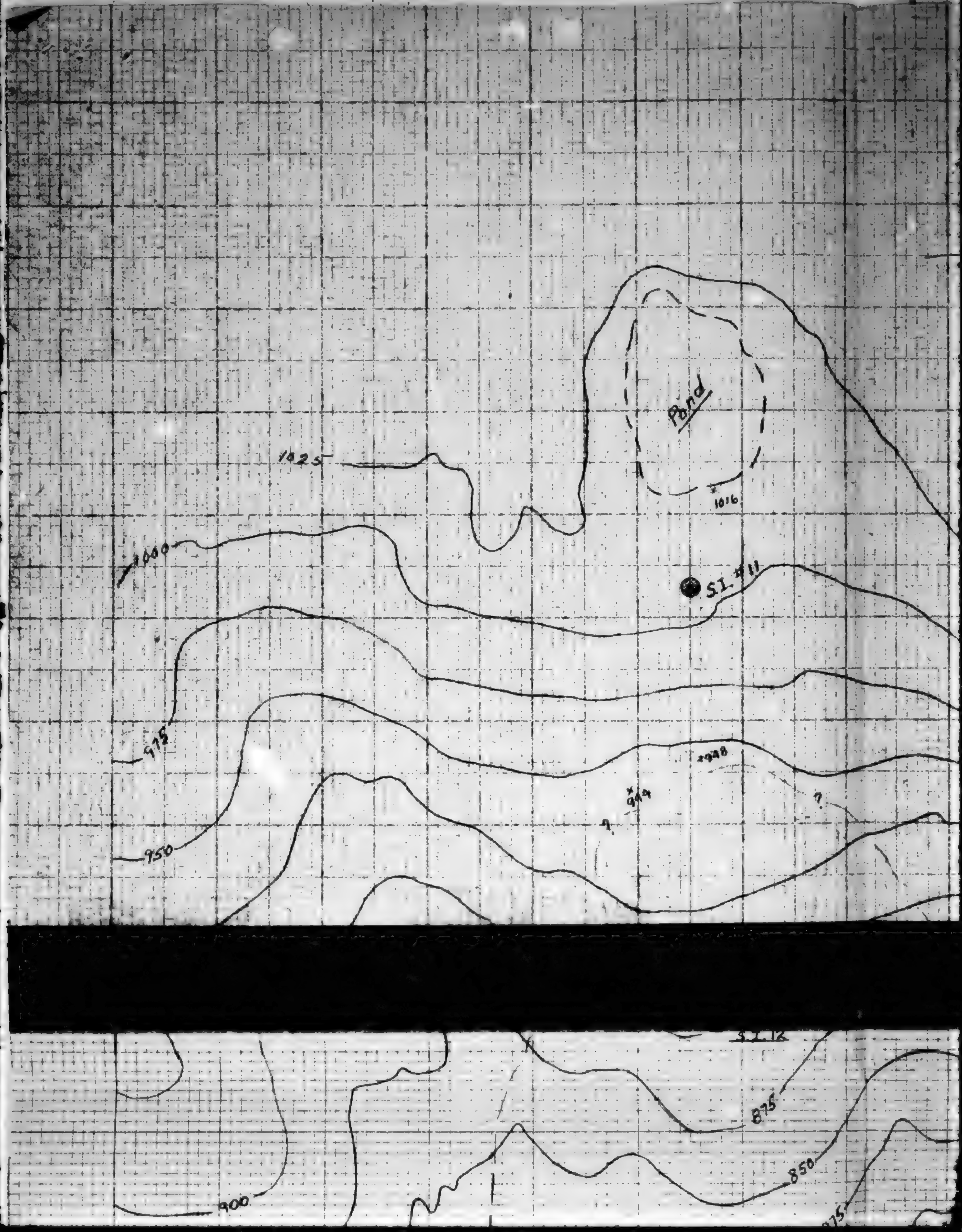
Description	Remarks	Date
Road Rock & Rocky Slope Wash to 3'		5-25-77
Clay, gry-yel. brn., slty., sdy., moist, Plastic, est. 40% vari. wea. rk. frags, small.	← W.L. 6' in A.M. 6-1-77	
decrease in rk. frags., inc. in moisture		
yel.-brn., gry. brn. silty clayey sand matrix, moist, plast. w/est. 50% ± vari. wea. rk. frags. - strks. slty. sdy. clay	* Problem Mtl. to 23' (Currently)	
yel. brn., gry. mottled sdy. slty. clay w/scatt. dk. gry. siltstone frags. to 1" ±		
increase to 50% ± vari. wea. rk. frags.		
Clay, gry-yel. brn., rd. brn., sandy, tough, mottled look		
gry., rd. brn., speckled, est. 50% ± rk. frags. in sdy. clay matrix, moist, plastic.		
Silt, red-brn., gray, mottled, sli. sandy, some apparent horiz. strks., moist, plastic ← Top Bedrock		
Siltstone, gry., gry.-grn., pebbly, sandy w/streaks of lt. gry plastic silt., - thin layers of silty pebbly sandstone		
* Wea. in upper portion gradually firming up w/deeper penetration		
Bottom of Hole 49'	26 May 77	
* Slope Indicator tubing installation w/ 4.5 sacks of P-gravel.		

Undisturbed Sampler ___

Soft - can be scratched with fingernail
Mod Hard - can be scratched with knife, not by fingernail
Hard - difficult to scratch with knife
Very Hard - cannot be scratch with knife
Soils symbols are those of Unified Soils Classification System.

Elevation	Sample Type	Blows / 6 Inches	N Value	Recovered / Sampled	% Recovery	~~Water Level~~	% Moisture	Depth	Graphic Log
	#1	5,11,18,21	29	24/16	67	Stiff	8.5		
	#2	7,11,12,13	23	24/21	88				
	#3	3,3,5,7	8	24/13	54	Soft	15.5		
	#4	3,5,9,13	14	24/15	63	Stiff		10	
	#5	5,8,11,12	19	24/10	42		17		
	#6	4,5,7,9	12	24/15	63	Soft			
	#7	6,6,7,12	13	24/10	42		14.5		
	#8	6,6,10,13	16	24/16	67	Stiff			
	#9	4,10,14,21	24	24/19	79		9.5	20	
	#10	6,11,19,27	30	24/19	79				
	#11	9,17,21,29	38	24/18	75	Hard	13		
	#12	14,27,23,31	60	24/17	71				
	#13	6,11,18,21	29	24/20	83	Stiff	19.5		
	#14	10,15,20,23	35	24/24	100			30	
	#15	7,10,13,15	23	24/15	63		25		
	#16	13,16,21,37	37	24/16	67	Hard			
	#17	18,29,41,50	70	24/18	75				
	#18	18,30,23,24	53	24/16	67				
		Drilled w/Tricone 39° - 49°						40	
								49	

Description	Remarks	Date
Read Rock & Rocky Slope Wash to 3°		5-25-77
Clay, gry-yel.brn., slty, sdy, moist,		
Plastic, est. 40% vari. wea rk frags, small.	← W.L. 6° in A.M. 6-1-77	
decrease in rk frags, inc. in moisture		
yel.-brn., gry. brn. silty clayey sand matrix, moist, plast. w/est. 50%± vari. wea rk. frags. - strks. slty. sdy. clay	* Problem Mtl. to 23° (Currently)	
yel. brn., gry. mottled sdy slty clay w/scatt. dk. gry. siltstone frags. to 1"±		
increase to 50%± vari. wea. rk. frags.		
Clay, gry-yel. brn, rd. brn, sandy, tough, mottled look		
gry, rd. brn, speckled, est. 50%± rk. frags. in sdy. clay matrix, moist, plastic.		
Silt, red-brn., gray, mottled, sli. sandy, some apparent horiz. strks., moist, plastic. ← Top Bedrock		
Siltstone, gry, gry-grn, pebbly, sandy w/streaks of lt. gry plastic silt., - thin layers of silty pebbly sandstone		
* Wea in upper portion gradually firming up w/deeper penetration		
Bottom of Hole 49°	26 May 77	
* Slope Indicator tubing installation w/4.5 sacks of P-gravel.		


1025
Pond
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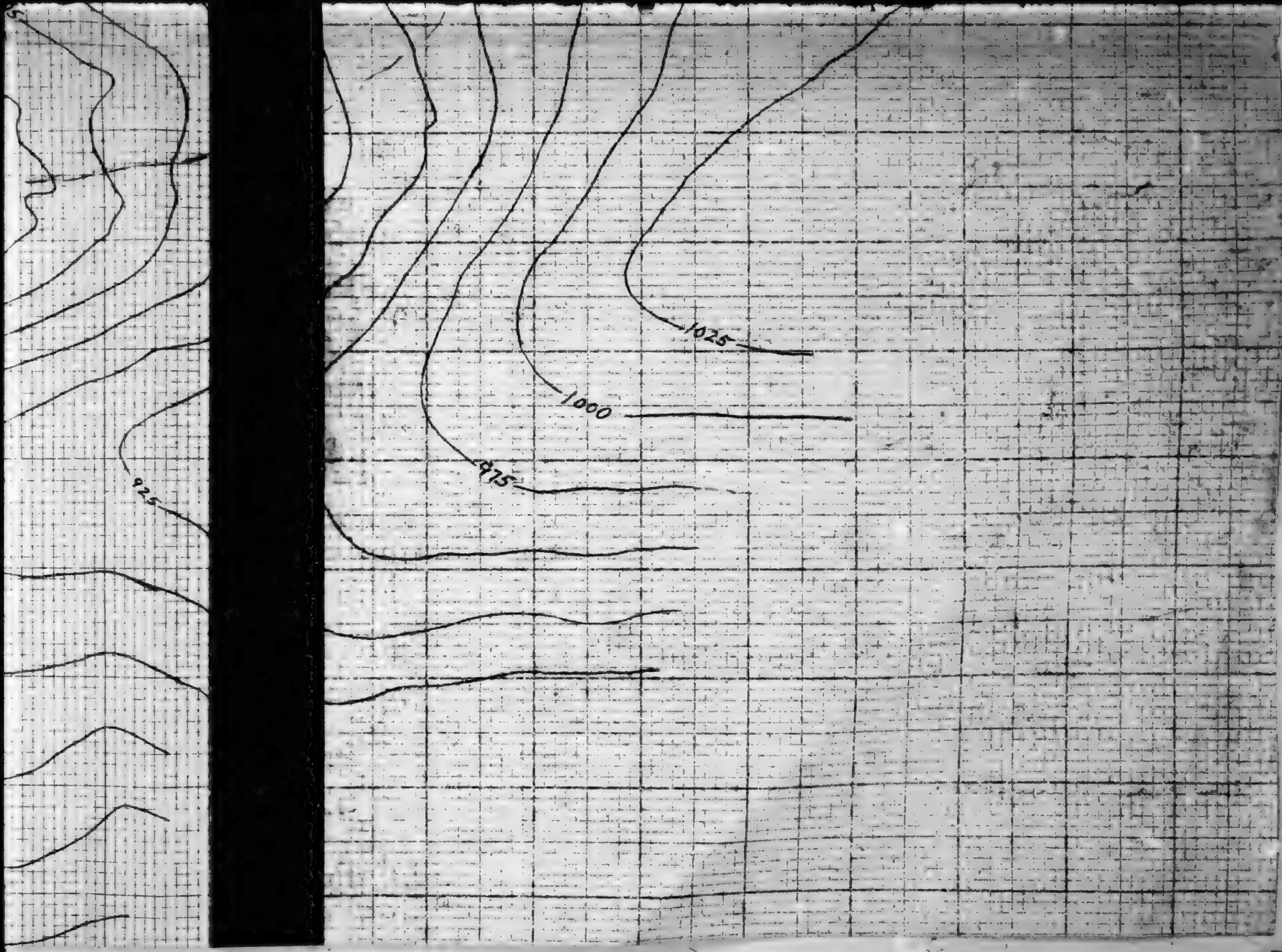
900
875

[redacted]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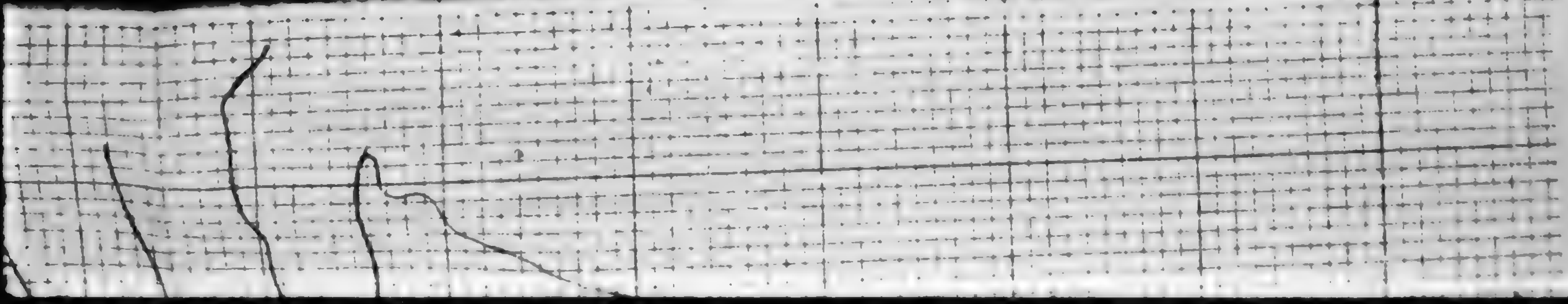

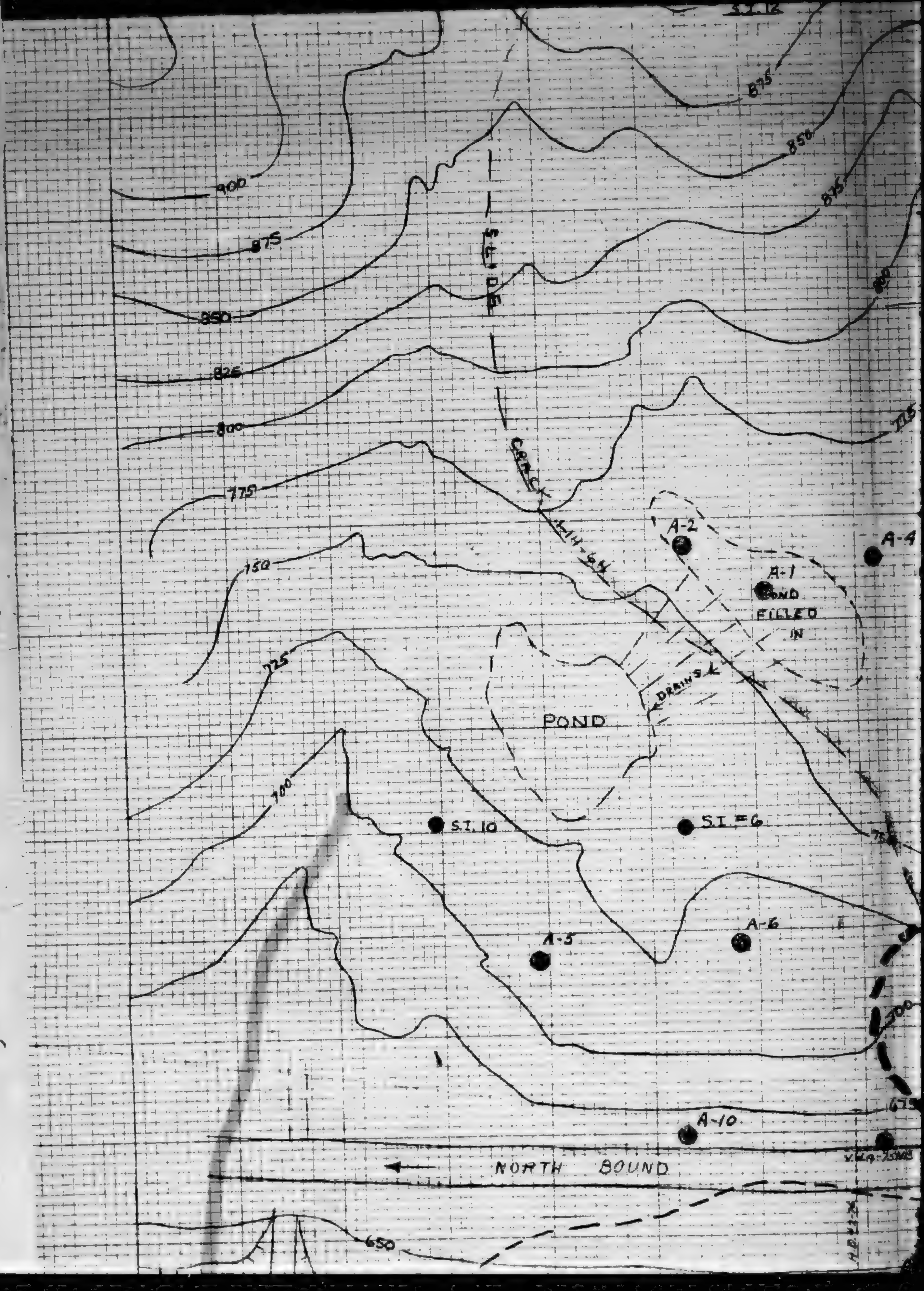
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825
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875
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825
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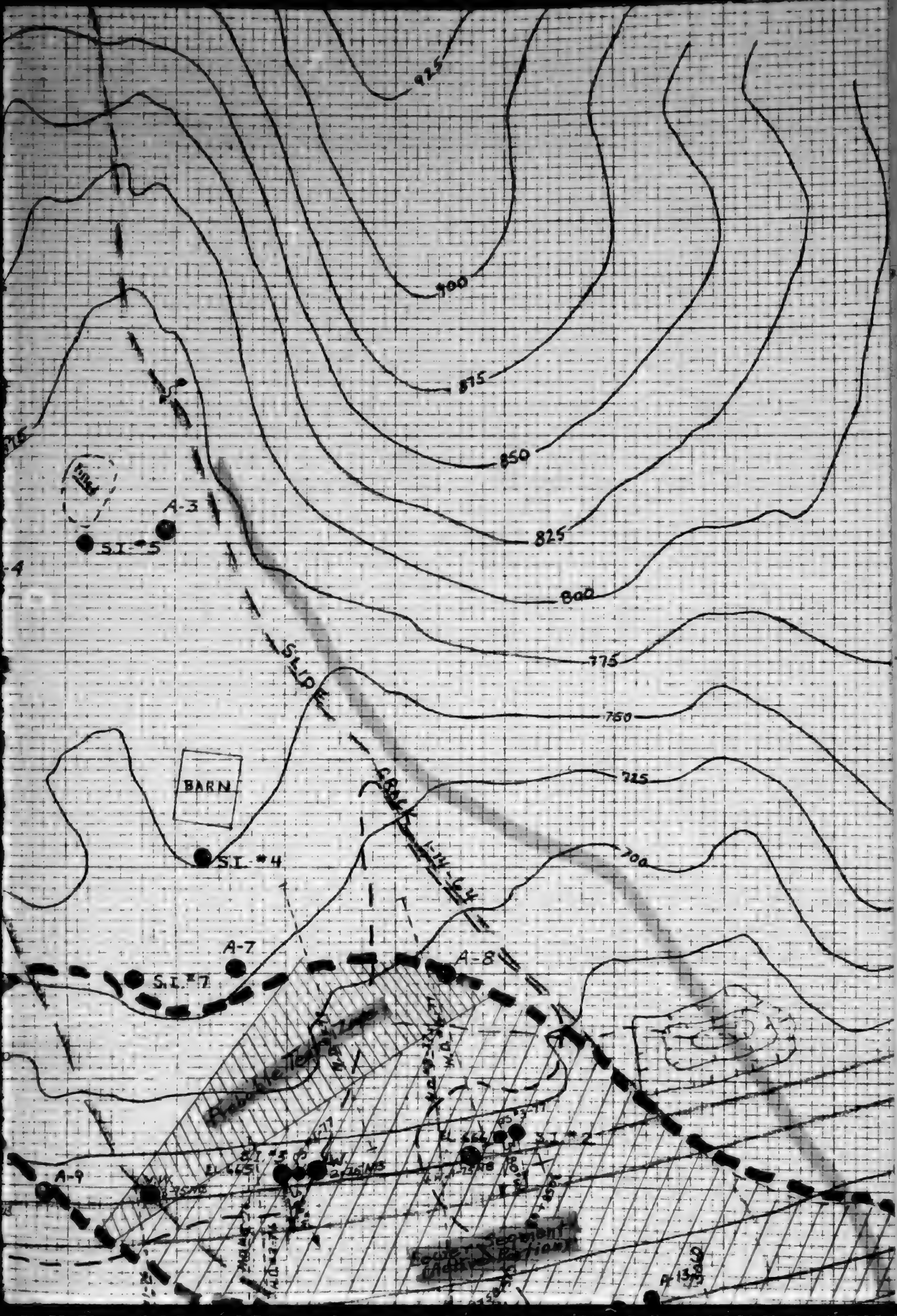
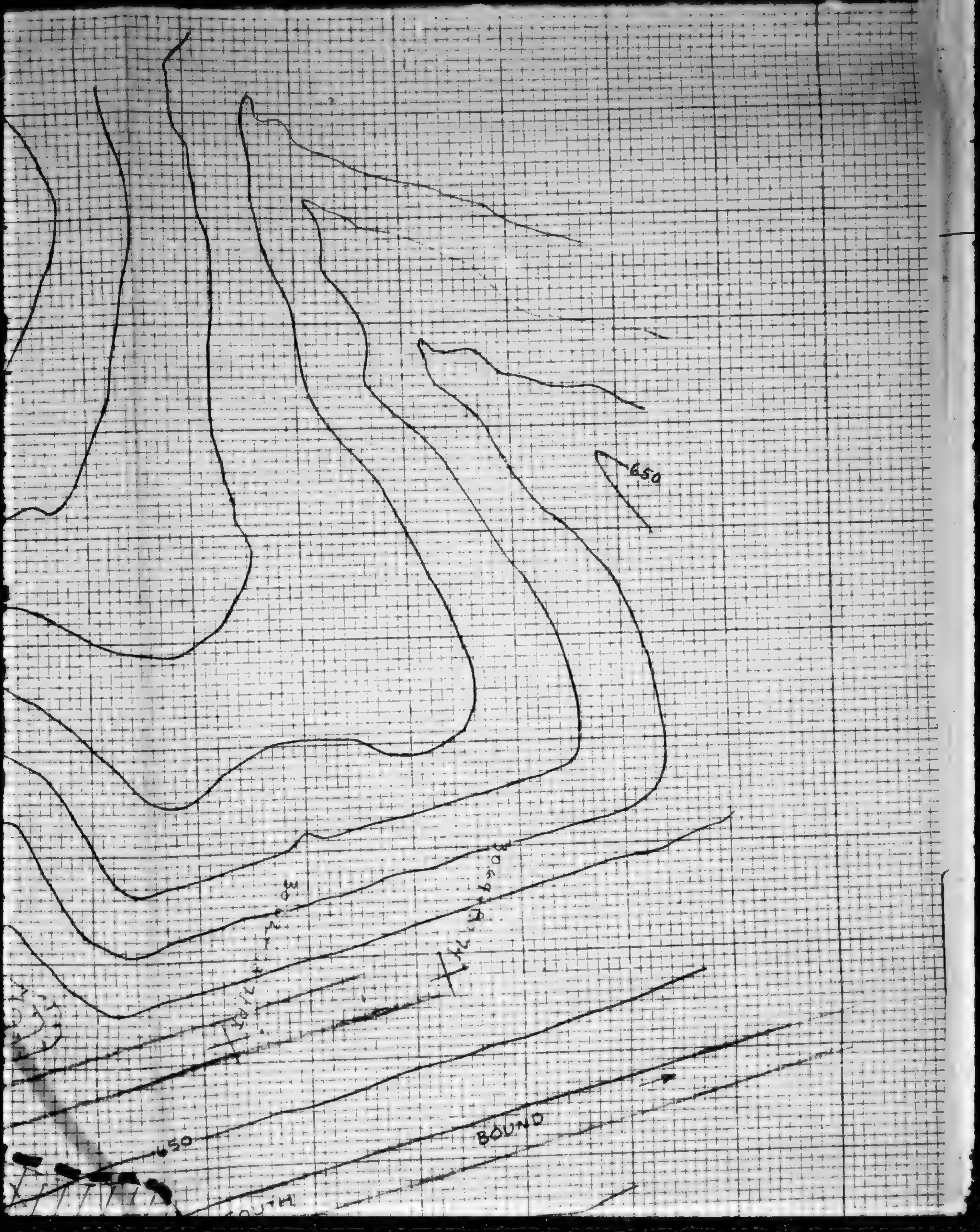
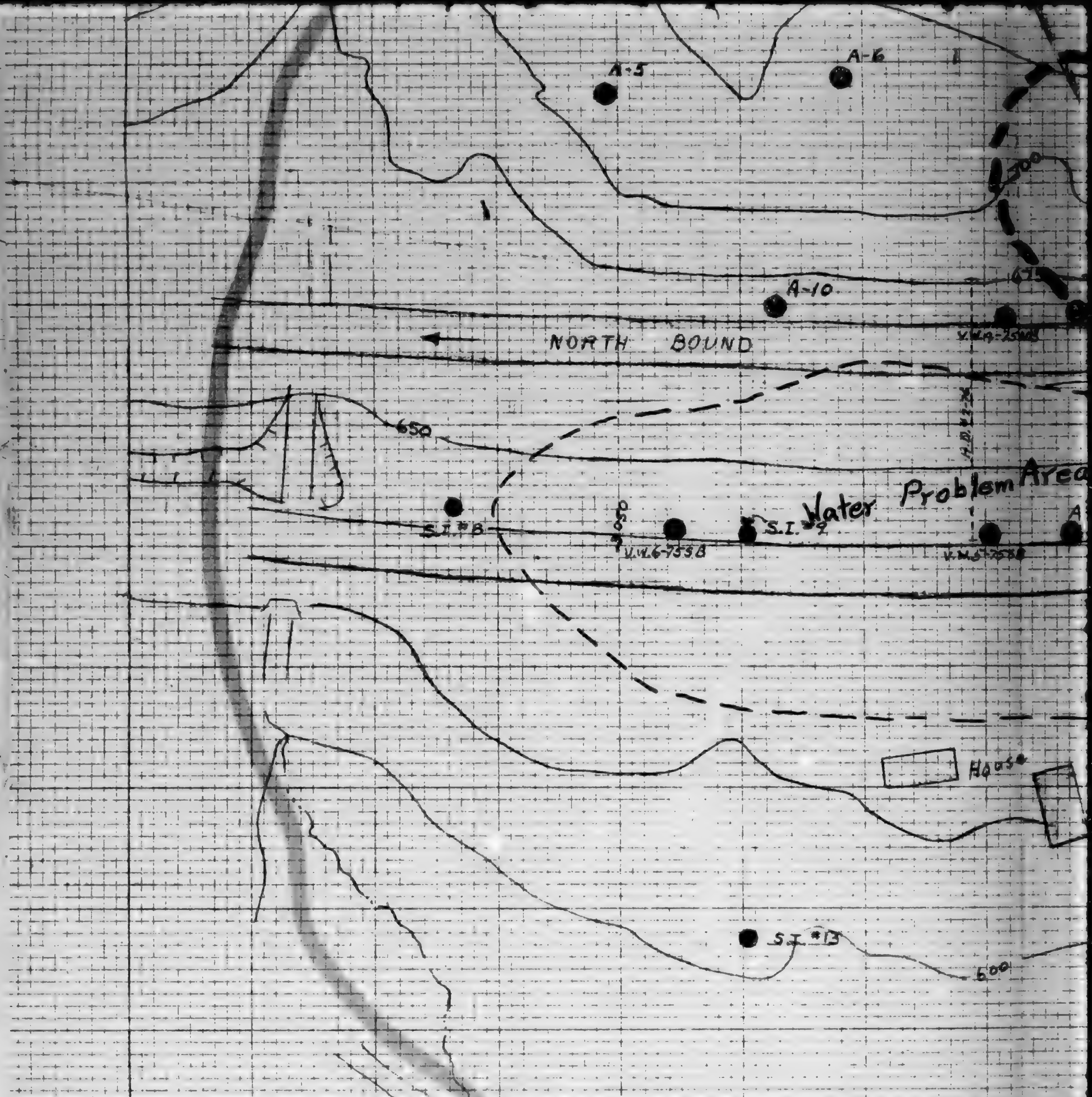
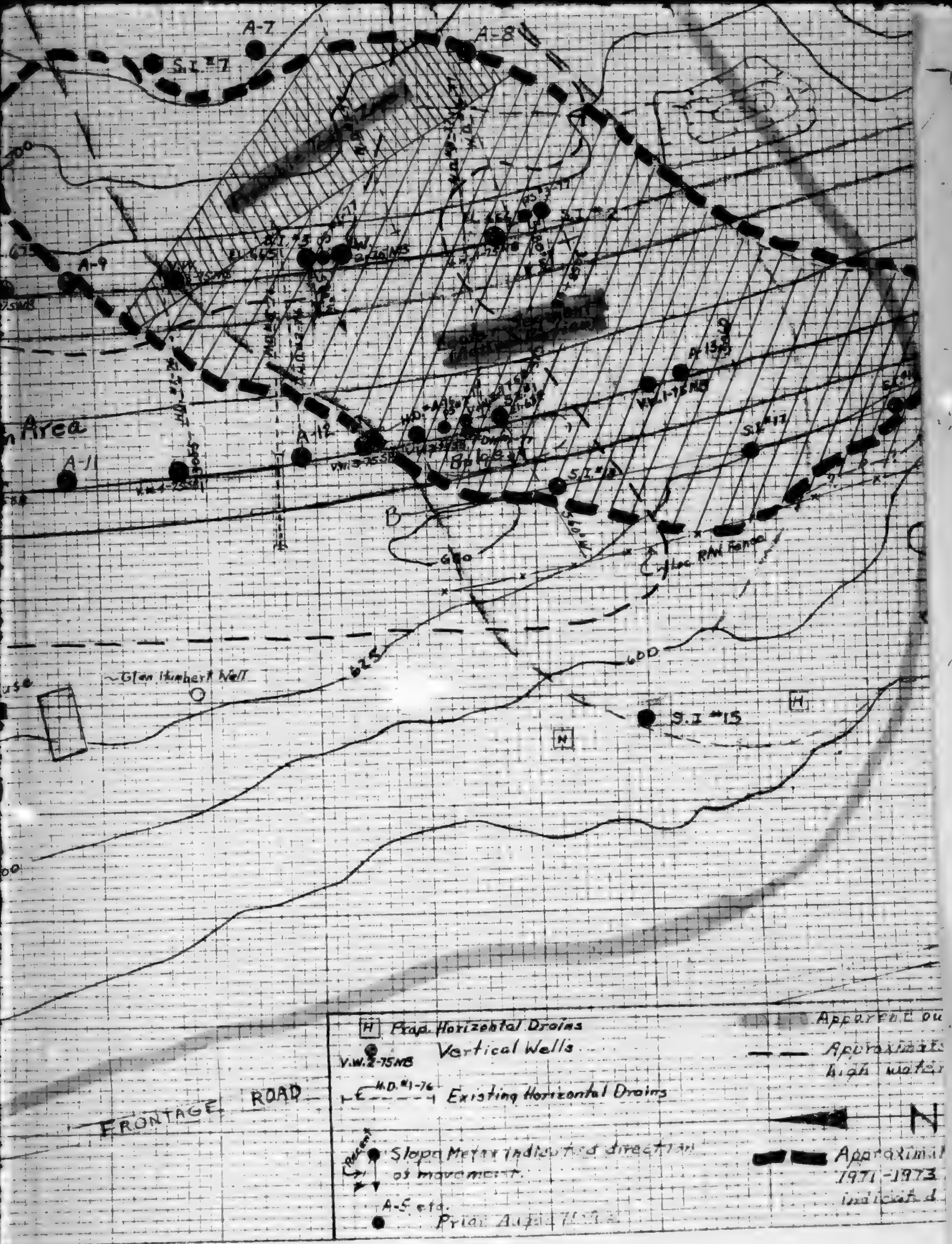
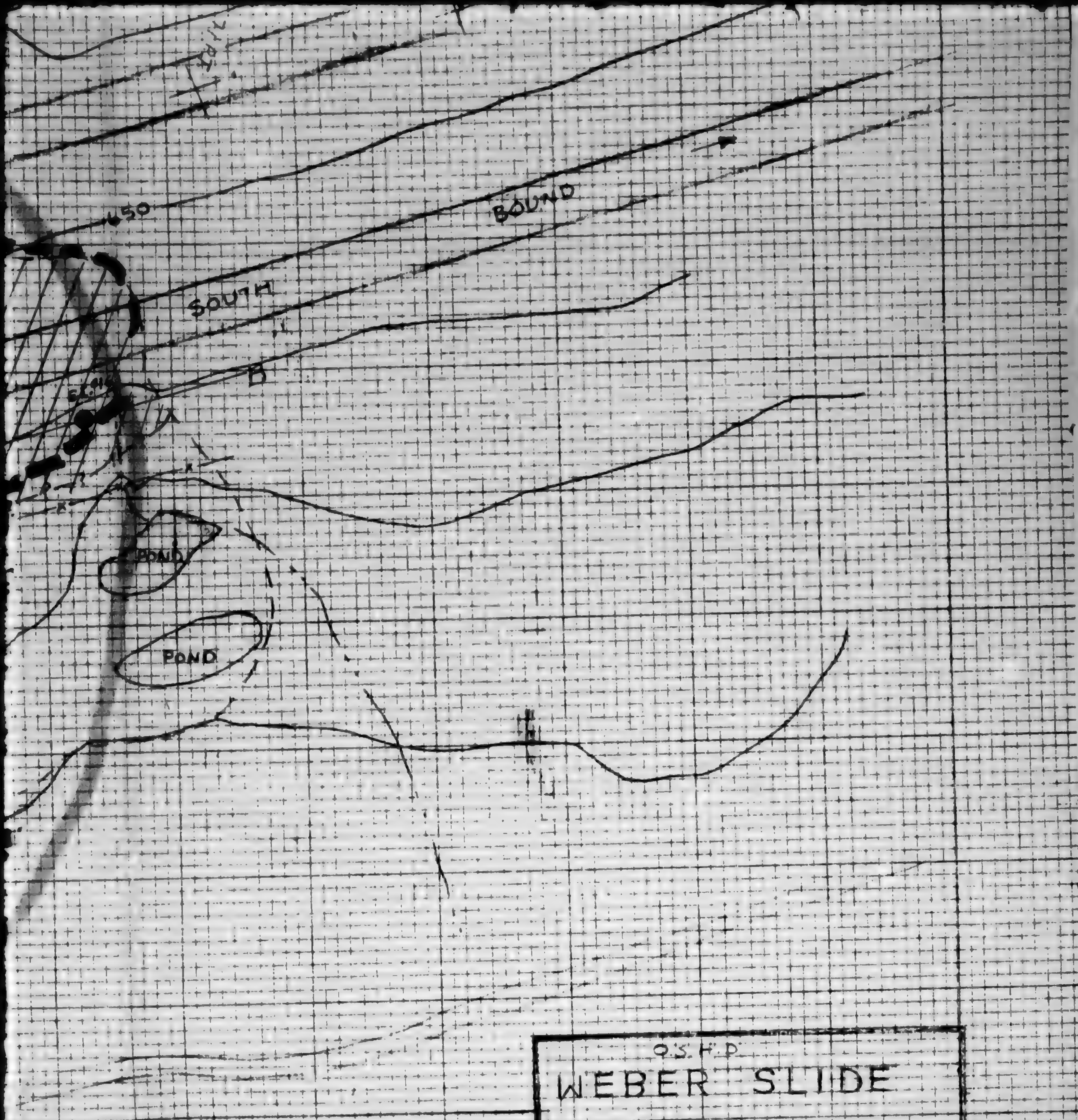
SLIDE
CRACK
4-14-64
750
725
700
A-2
A-4
A-1
POND
FILLED
IN
DRAINS
POND
S.I. 10
S.I. = 6
750
A-6
A-5
700
675
A-10
V.C.A-25103
NORTH BOUND
650
H.D. 12-3-74


925
900
875
850
825
800
775
750
725
700
Filled
A-3
S.I. #5
-4
SLIDE CRACK
1-14-64
BARN
S.I. #4
A-7
S.I. #7
A-8
Probable Toe
S.I. #2
EL. 664
S.I. #5
EL. 665
A-9
A-13
Segment Rotation
Outer Active


650
650
BOUND
SOUTH


A-5
A-6
700
675
A-10
V.W.4-25NB
NORTH BOUND
650
Water Problem Area
S.I.#8
V.W.6-75SB
S.I.#9
V.W.5-75SB
A
House
S.I.#13
600
575


A-7
S.I.#7
A-8
700
675
A-9
V.W.
S.I.#5
W.
A-13
V.W.1-75NB
n Area
A-11
A-12
S.I.#17
S.I.#13
B
650
Loc. R/W Fence
625
600
~Glen Humbert Well
use
S.I.#15
H
N
700
FRONTAGE ROAD
H Prop. Horizontal Drains
Vertical Wells
V.W.2-75NB
H.D.#1-76
Existing Horizontal Drains
Slope Meter indicated direction of movement.
A-5 etc.
Prior Augers
Apparent ou
Approximate high water
N
Approximat 1971-1973 indicated



pparent outline of old slide topography

pproximate area affected by excessive
igh water table as of 1 January 1975.

N

Approximate limits of area affected by
1971 -1973 movement & current area of
indicated instability.

PB-477

O.S.H.D.

WEBER SLIDE

HIGHWAY I-5

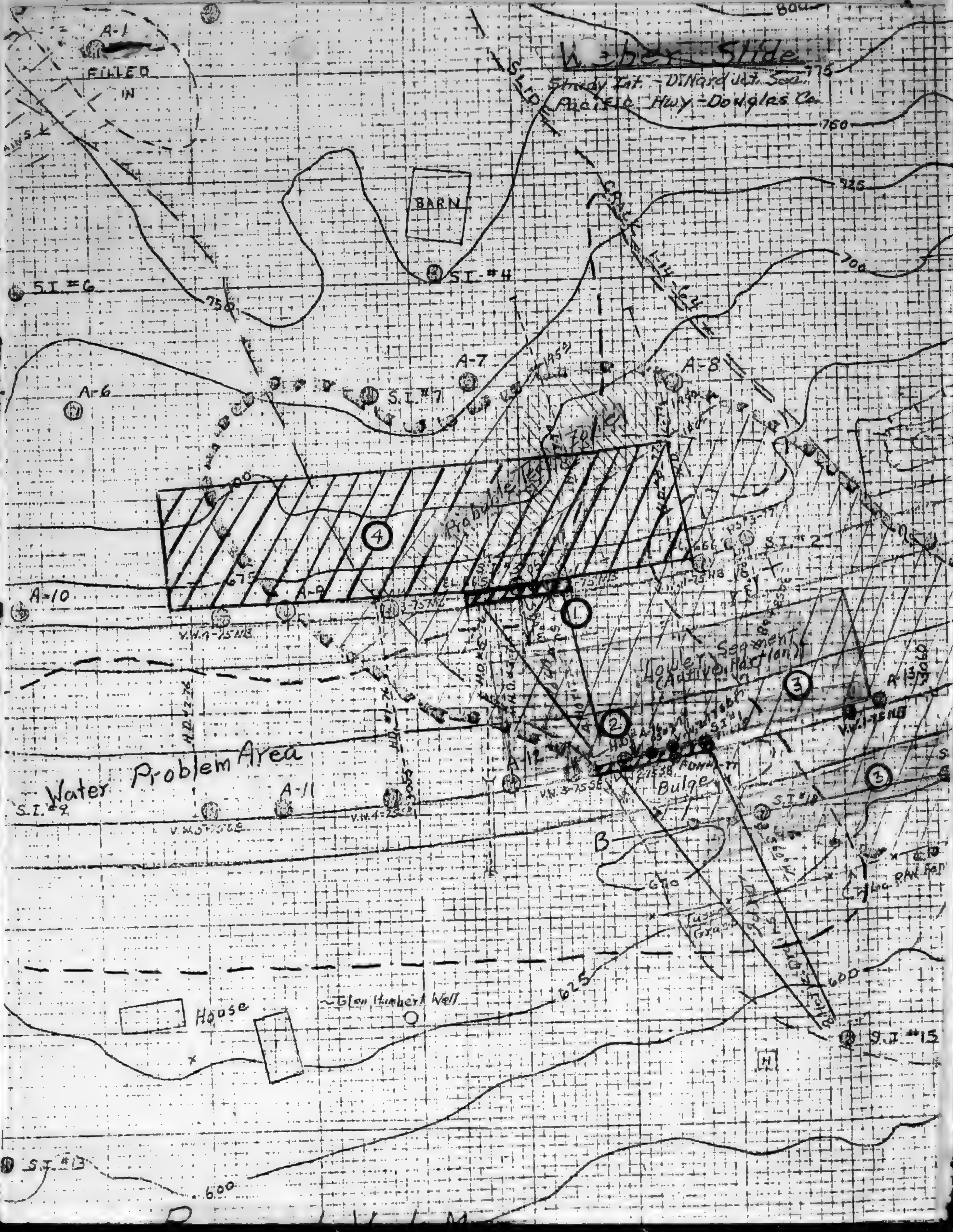
NEAR ROUND PRAIRIE

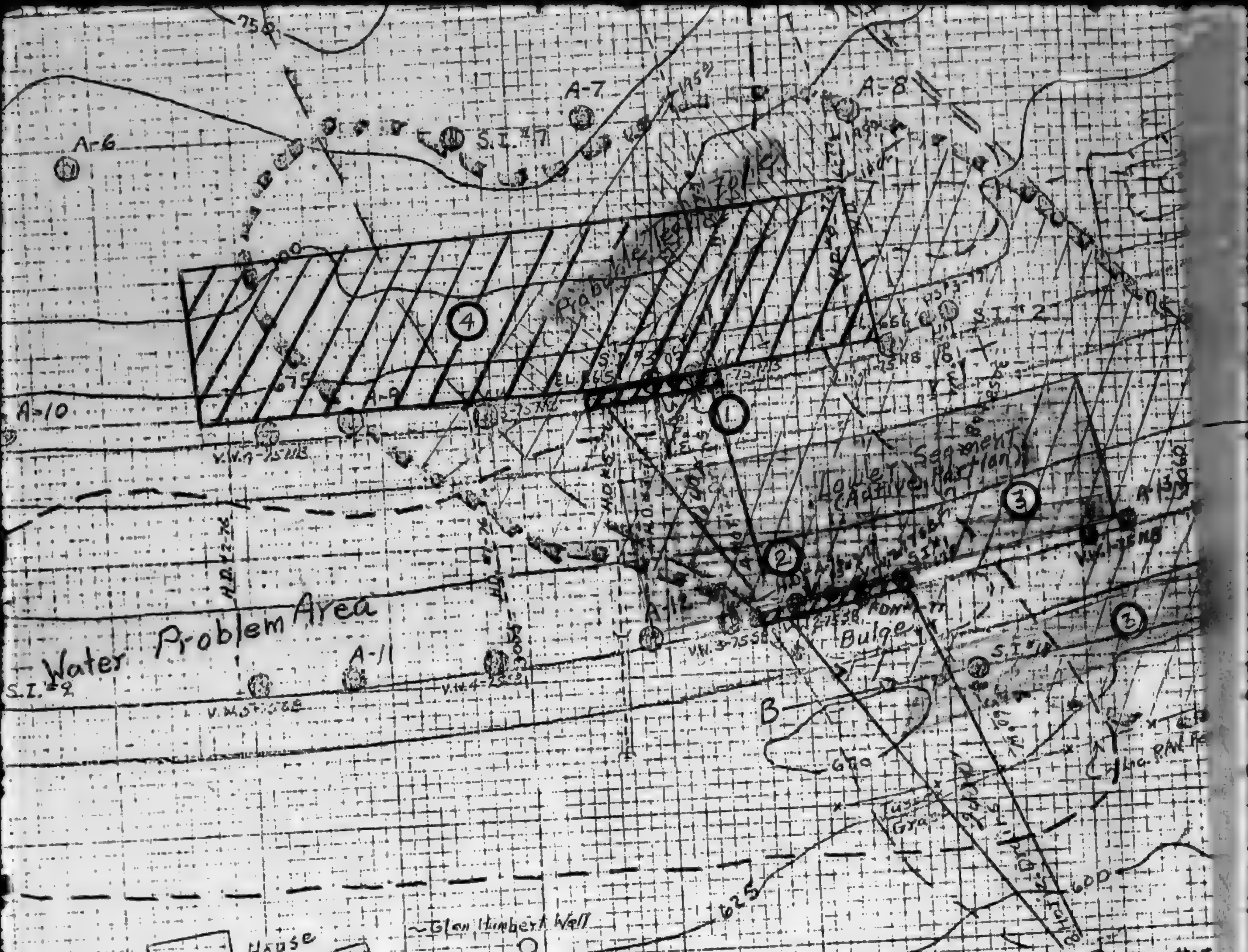
SCALE 1" = 100'   JAN. 1975

Contours at 25' int.

K·E 10 X 10 TO THE INCH
KEUFFEL & ESSER CO.
PRINTED IN U.S.A. 781001

Enc l. 5

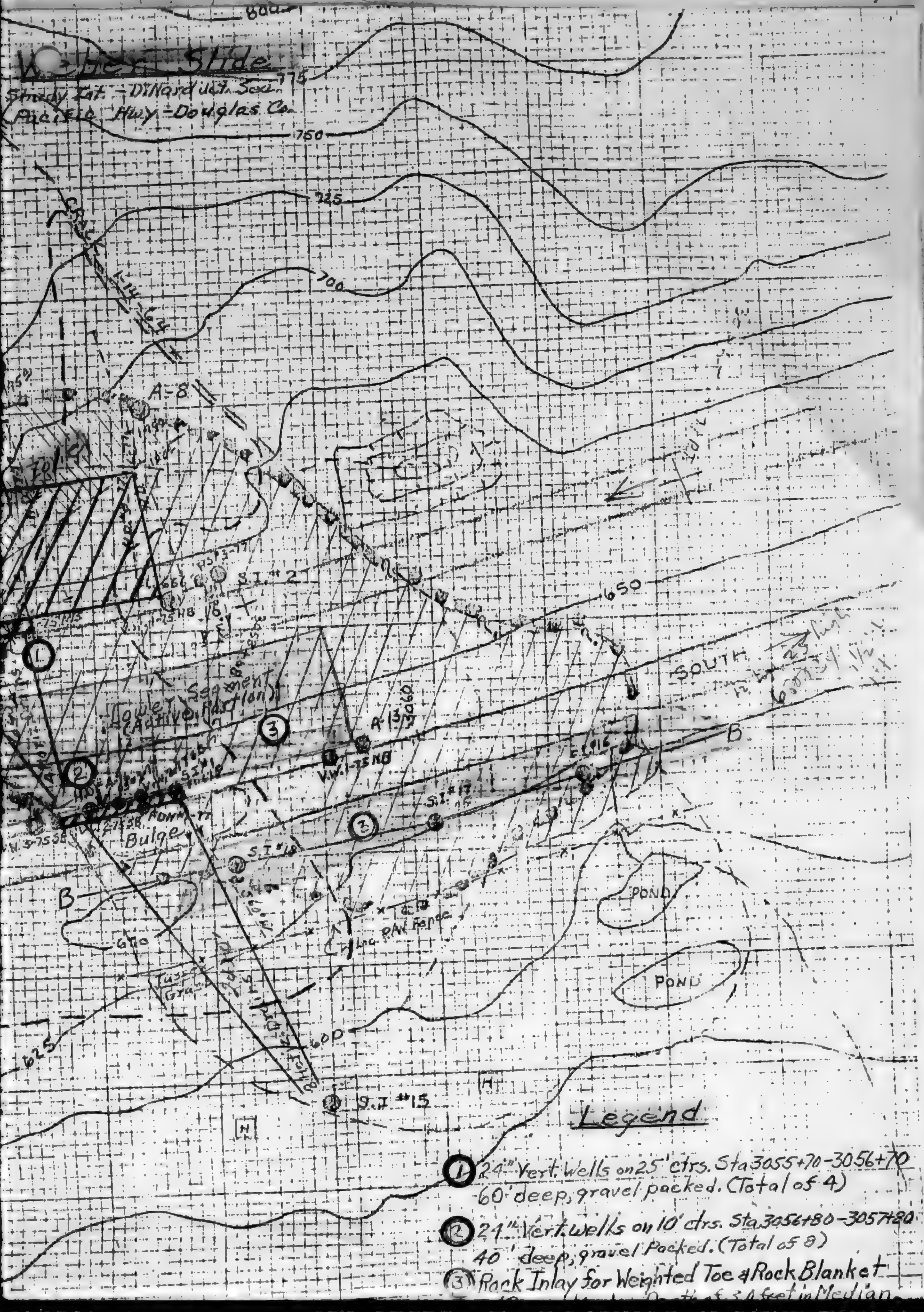
Weber Slide
Shady Int. - DiNard Jct. Sec.
Pacific Hwy - Douglas Co.
800
775
750
725
700
A-1
FILLED IN
BARN
S.I. #4
S.I. #6
CRACK
A-6
A-7
A-8
S.I. #7
A-10
A-9
4
Probable
S.I. #2
EL. 665
1
Lower Segment (Active Portion)
3
A-13
V.V. 1-75 NB
2
A-12
Bulge
V.N. 3-75 SE
Water Problem Area
A-11
S.I. #9
S.I. #10
B
650
625
600
House
Glen Humbert Well
S.I. #15
S.I. #13
600



Proposed Work Map

Scale 1" = 100'

A-6
A-7
A-8
S.I. #7
750
700
675
A-10
A-9
A-11
A-12
A-13
4
1
2
3
3
S.I. #2
S.I. #8
S.I. #13
S.I. #15
S.I. #9
Probable Slide
Lower Segment (Active Portion)
Bulge
Water Problem Area
V.W. 7-75 HB
V.W. 3-75 SB
V.W. 4-75 SB
V.W. 1-75 HB
H.D. #2-76
B
600
625
650
575
House
Glen Humbert Well
H
No. of Horizontal Drains to be drilled bet. Lines
Prop. Horizontal Drains
V.W. 2-75 HB
Vertical Wells
H.D. #1-76
Existing Horizontal Drains
FRONTAGE ROAD


800
775
750
725
700
650
625
600
CRACK
A-8
S.I. #2
Howley Segment (Active Portion)
SOUTH
B
B
A-13
V.W. 1-75 NB
S.I. #17
S.I. #18
Bulge
V.W. 3-75 SB
V.W. 2-75 SB
POND
POND
R/W Fence
S.I. #15
1
2
3
3

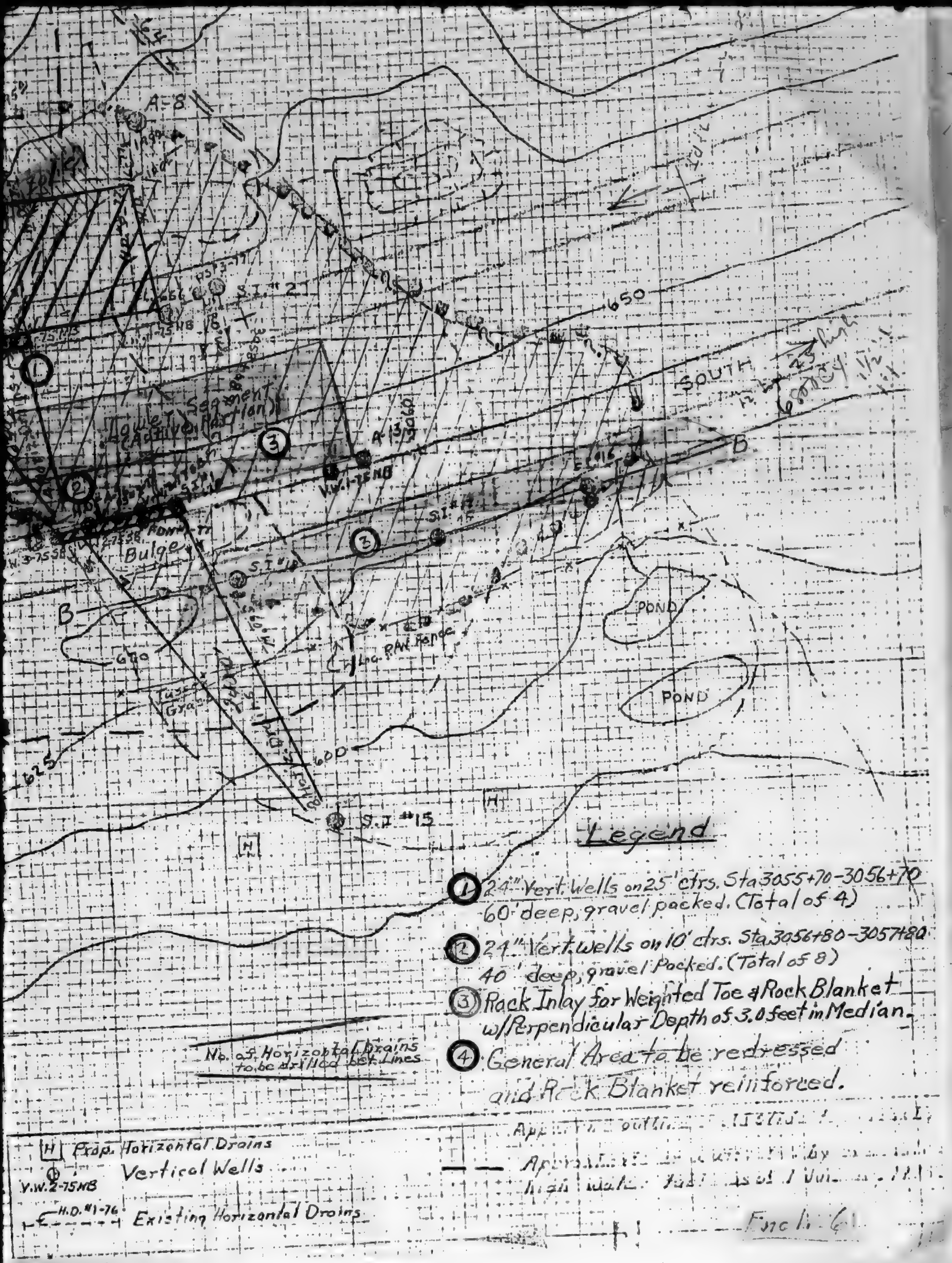
W... Slide
Study Int. - DiNard Jct. Sec.
Pacific Hwy - Douglas Co.

Legend

① 24" Vert. Wells on 25' ctrs. Sta 3055+70-3056+70 60' deep, gravel packed. (Total of 4)

② 24" Vert. wells on 10' ctrs. Sta 3056+80-3057+80 40' deep, gravel Packed. (Total of 8)

③ Rock Inlay for Weighted Toe & Rock Blanket


A-8
S.I.#2
650
SOUTH
Aguilar Segment
Bulge
B
B
V.W.1-75NB
A-13
E-16
S.I.#17
S.I.#18
POND
POND
600
625
600
S.I.#15
H
H
Legend
① 24" Vert. Wells on 25' ctrs. Sta 3055+70-3056+70
60' deep, gravel packed. (Total of 4)
② 24" Vert. wells on 10' ctrs. Sta 3056+80-3057+80
40' deep, gravel Packed. (Total of 8)
③ Rock Inlay for Weighted Toe & Rock Blanket
w/Perpendicular Depth of 3.0 feet in Median.
④ General Area to be redressed
and Rock Blanket reinforced.
No. of Horizontal Drains to be drilled bet. Lines
H Prop. Horizontal Drains
V.W.2-75NB Vertical Wells
H.D.#1-76 Existing Horizontal Drains

Encl. 6

9363 Form FHWA 121 (Rev. 5-73)

2.

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
Box 300
Salem, Oregon 97308

DATE: April 4, 1977

In reply refer to: 1041B.3

SUBJECT: Oregon I-5-2(69)109
Roberts Creek-S. Dillard Jct.
Humbert Well (Webber Slide)

FROM : G. L. Green, Division Administrator

NOTED
E. S. HUNTER

TO : Mr. H. S. Coulter, State Highway Engineer
Salem, Oregon

not in Gen Files
4.6.77

I concur in Mr. Terpin's March 28 request to provide a new well for Mr. Humbert under preliminary engineering (FAI funds). Estimated cost is $3,000.

I understand your legal counsel has reviewed this matter and feels the State is liable for damages caused to Mr. Humbert's existing well by exploratory and experimental drainage performed as preliminary engineering.

G.K. Hosmer
for G. L. Green

RECEIVED
STATE HWY ENGR
APR 6 '77
REFER TO
Terpin
FOR
Info | Inves | R/D | D.R | Sign | Act | File

9363

March 28, 1977

Mr. G. L. Green, Division Administrator
Federal Highway Administration
Box 300
Salem OR 97308

Dear Sir:

Re: Humbert Well (Webber Slide)
Roberts Creek-S. Dillard Jct.
Pacific Highway (I-5)
Douglas County

As you know, the Highway Division has for some time been conducting geologic studies on Webber slide in an effort to correct the instability problem that exists.

During the course of the study we have installed a variety of devices to measure ground water fluctuations and to dewater the slide mass. This activity has resulted in seriously affecting a domestic well within the area by reducing its productivity to the extent that it has become unreliable in meeting the minimum demands of the owner. The well in question belongs to Mr. Glen Humbert, a resident property owner in the immediate area.

Highway Division legal counsel indicates that the work already accomplished obligates the Highway Division to provide a new well for the owner since there is evidence that degradation of his present well has occurred during the Webber slide study. The slide correction activity is being conducted under preliminary engineering and there is additional work proposed; construction of a new well would be incidental work. We therefore request your concurrence in providing a new well for the Humberts under preliminary engineering (FAI funds). A probable site for the new well has been located which shows evidence of meeting the owner's domestic water needs; estimated cost for the well and appurtenances is not expected to exceed $3,000. Attached is correspondence from Region 3 relating to this well.

Your early consideration of this request will be appreciated.

Gen. Files 4/11

Very truly yours,

Frank E. Terpin
Location Engineer

bc L. W. Rulien
Jack Sollis
D. H. Moehring
F. W. Yarbrough
Alfred Shirley, Jr.

WHT:mc

Enc.

9363

1-5

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

INTER-OFFICE CORRESPONDENCE
Roseburg, Oregon
January 10, 1977

FILE: LOC 17-6

Alfred W. Bates

FROM: Alfred W. Bates,
Resident Engineer

SUBJECT: Safety Project
Roberts Mountain Section
Pacific Highway

TO: J.X. Wilson,
Regional Construction Engineer

This set of photos attempts to demonstrate that there is a safety problem for southbound traffic on the south side of Roberts Mountain between MP 115 and MP 117.

Both curves have an unusual record of single car accidents involving contact with the median or shoulder rail. Because the problem is apparently similar for both, only the first curve south of the summit (MP 116.10) was studied.

The abruptness of superelevation development seems to be the major problem. It appears that a softly suspended vehicle experiences excess body roll before the full "super" is reached. When full super is reached it is already too late for the vehicle body to respond and the suspension extends further, unweighting the wheels or perhaps lifting them and causing loss of control.

See my letter of December 15, 1976 for an analysis of the roadway.

1 Versteeg
2 [illegible]
3 [illegible]

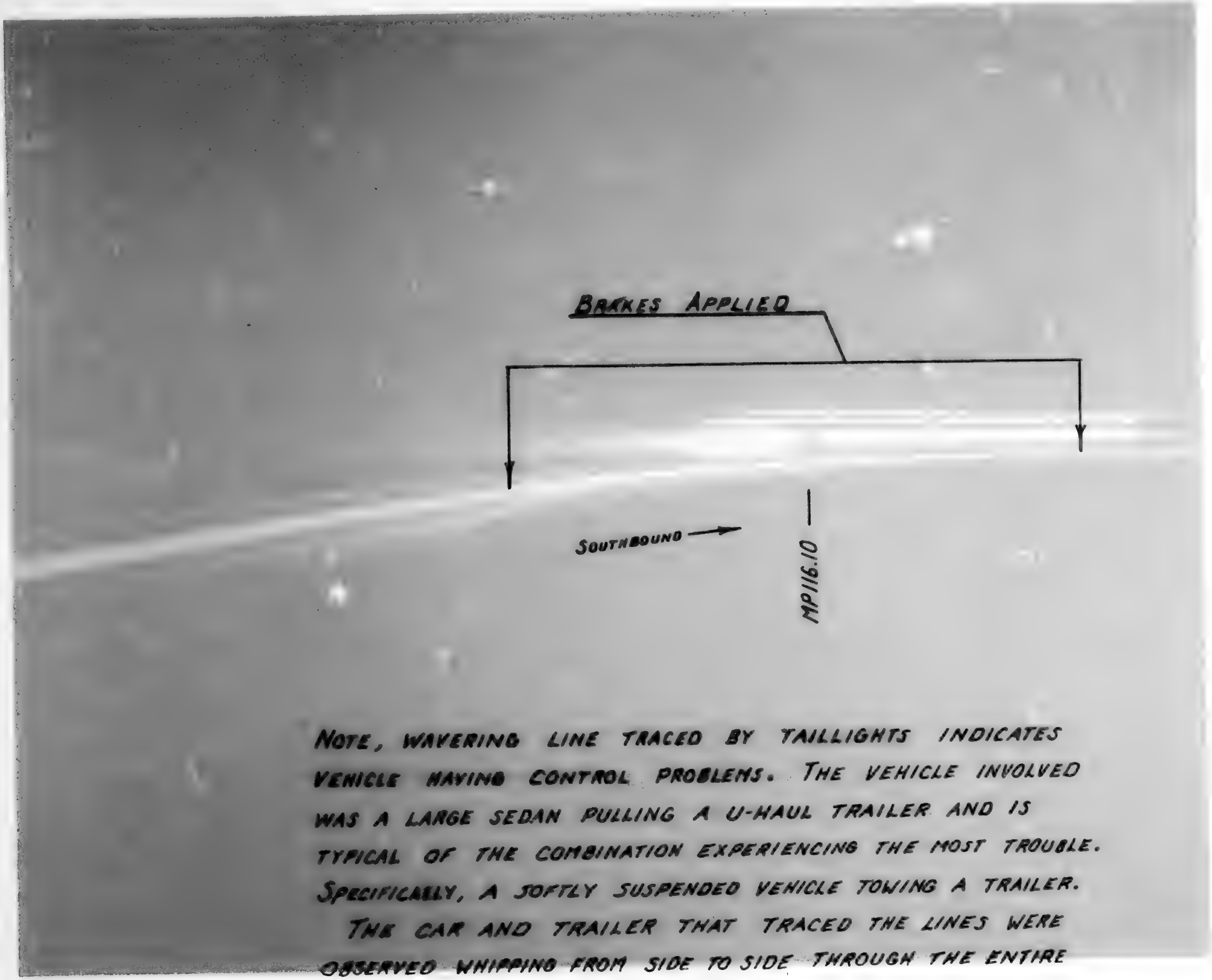
RECEIVED
JAN 1 [illegible] 77
SECTION

Requires Reply ☐
Requires Approval
[illegible] Keep
[illegible] not File
[illegible] To______
[illegible] Up___/___/__
Other______

ROSEBURG REGION
RECEIVED
JAN 11 1977

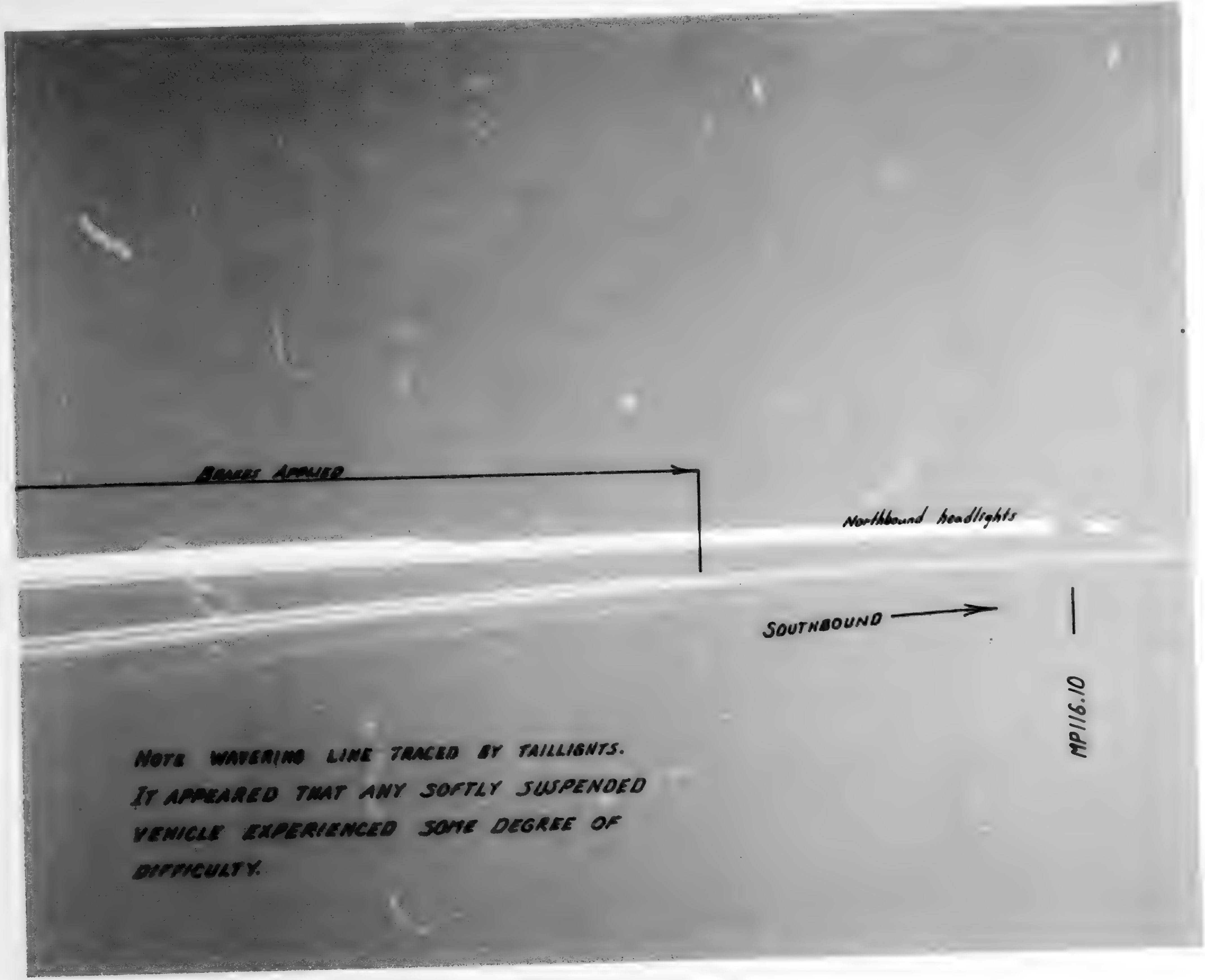
[✓ RE]	[✓ RME]	[✓ PCE]	[illegible]	[illegible]
RUE	DES	RSR	FILE	
ENV	FAE	RBI		

1-11-77
CC: J.H. Versteeg w/encl. - Can you think of anything more we can supply to make a case? J.X.W.

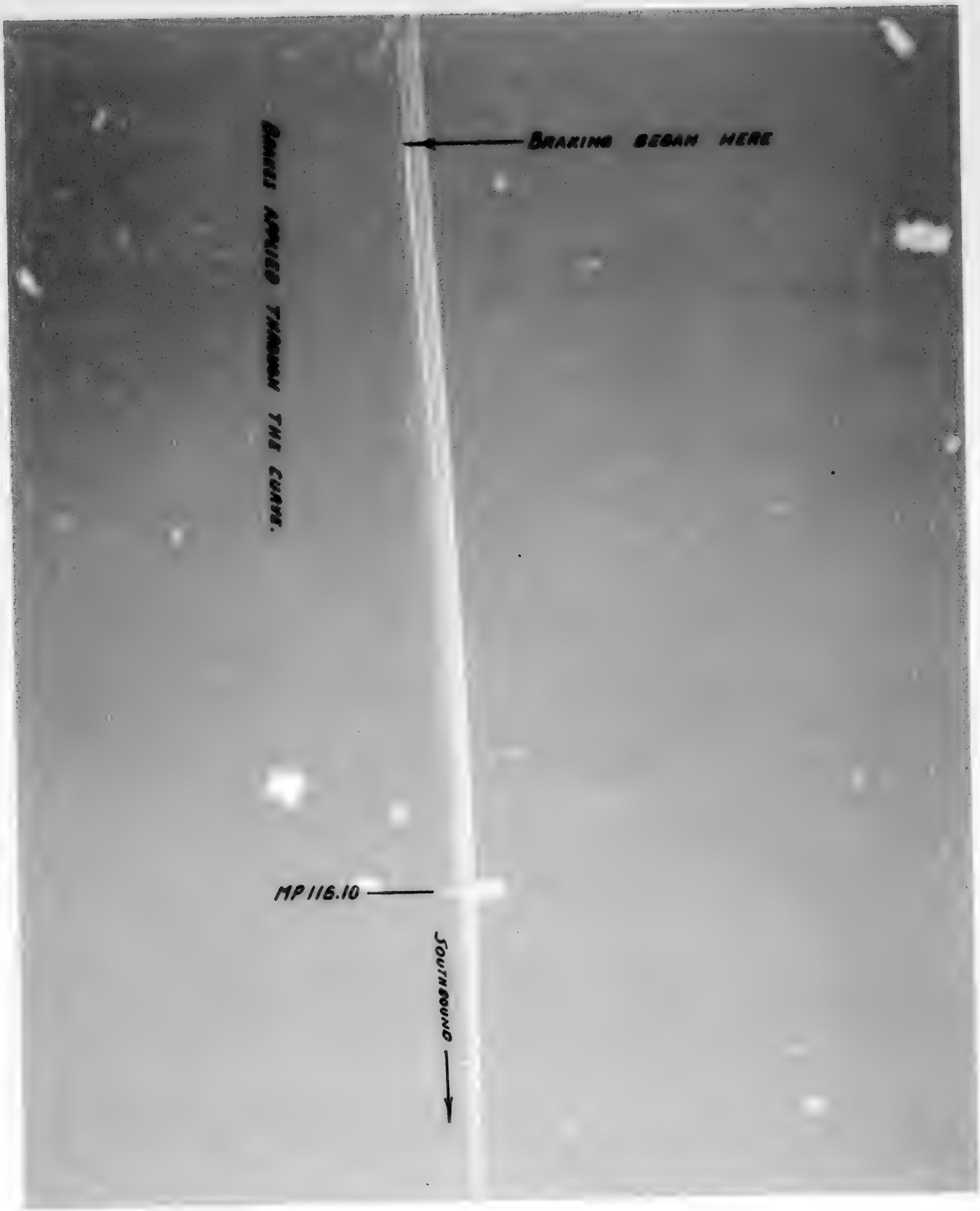


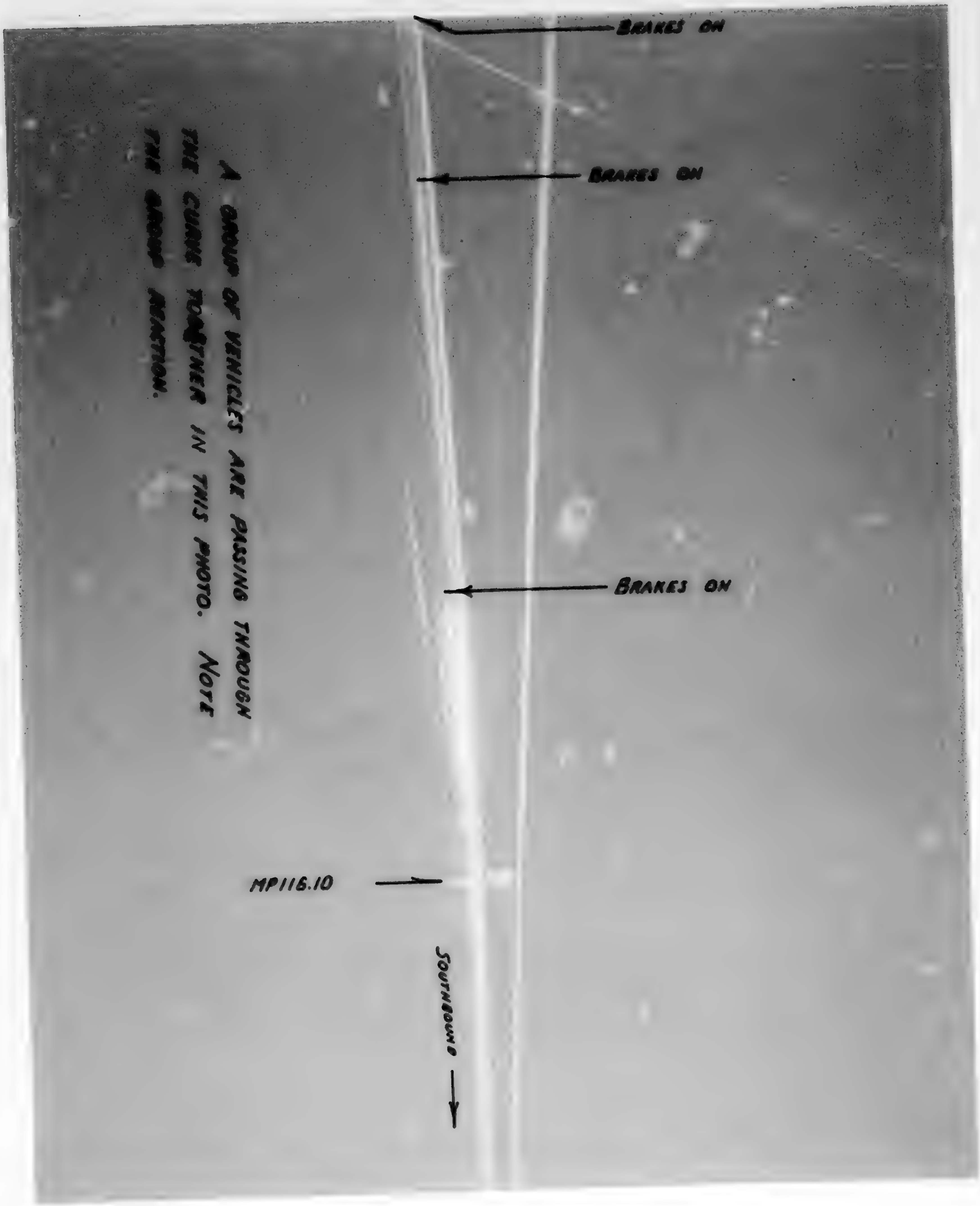
NOTE, WAVERING LINE TRACED BY TAILLIGHTS INDICATES VEHICLE HAVING CONTROL PROBLEMS. THE VEHICLE INVOLVED WAS A LARGE SEDAN PULLING A U-HAUL TRAILER AND IS TYPICAL OF THE COMBINATION EXPERIENCING THE MOST TROUBLE. SPECIFICALLY, A SOFTLY SUSPENDED VEHICLE TOWING A TRAILER.

THE CAR AND TRAILER THAT TRACED THE LINES WERE OBSERVED WHIPPING FROM SIDE TO SIDE THROUGH THE ENTIRE CURVE.


BRAKES APPLIED
Northbound headlights
SOUTHBOUND
MP116.10

NOTE WAVERING LINE TRACED BY TAILLIGHTS.
IT APPEARED THAT ANY SOFTLY SUSPENDED
VEHICLE EXPERIENCED SOME DEGREE OF
DIFFICULTY.


BRAKES APPLIED THROUGH THE CURVE.
BRAKING BEGAN HERE
MP 116.10
SOUTHBOUND



A GROUP OF VEHICLES ARE PASSING THROUGH THE CURVE TOGETHER IN THIS PHOTO. NOTE THE GROUP REACTION.

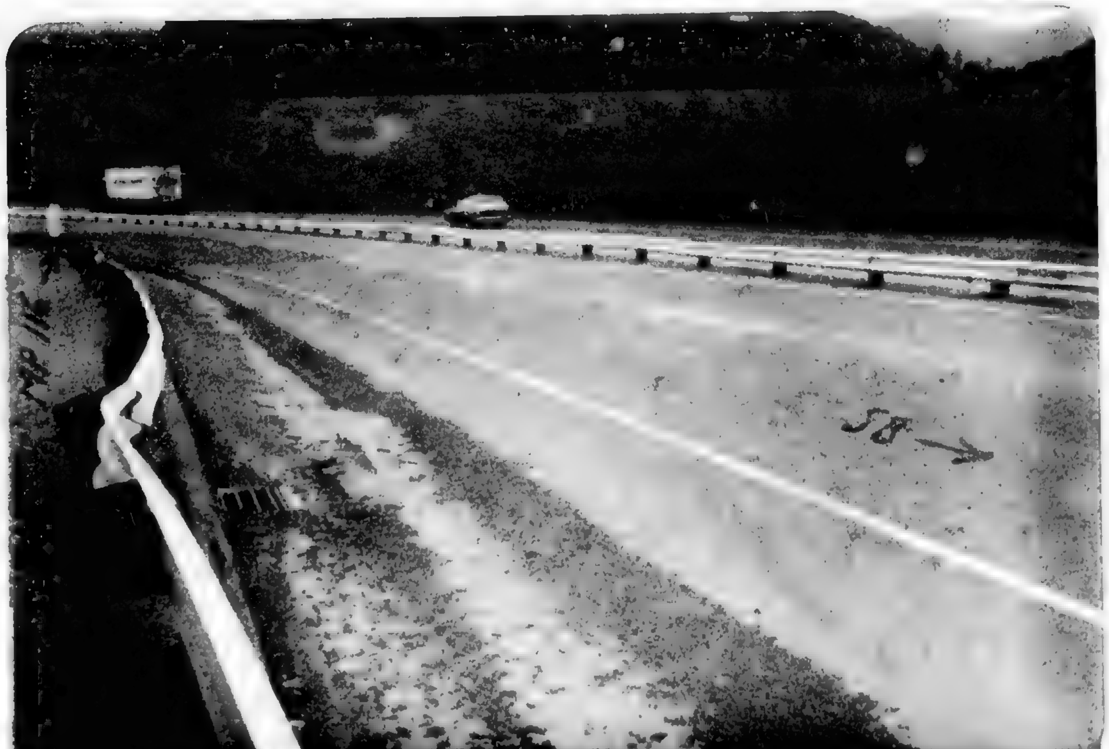
BRAKES ON
BRAKES ON
BRAKES ON
MP116.10
SOUTHBOUND

ROBERTS MTN.

PACIFIC HWY.   DOUGLAS CO.

Note large sedan applying brakes in curve.

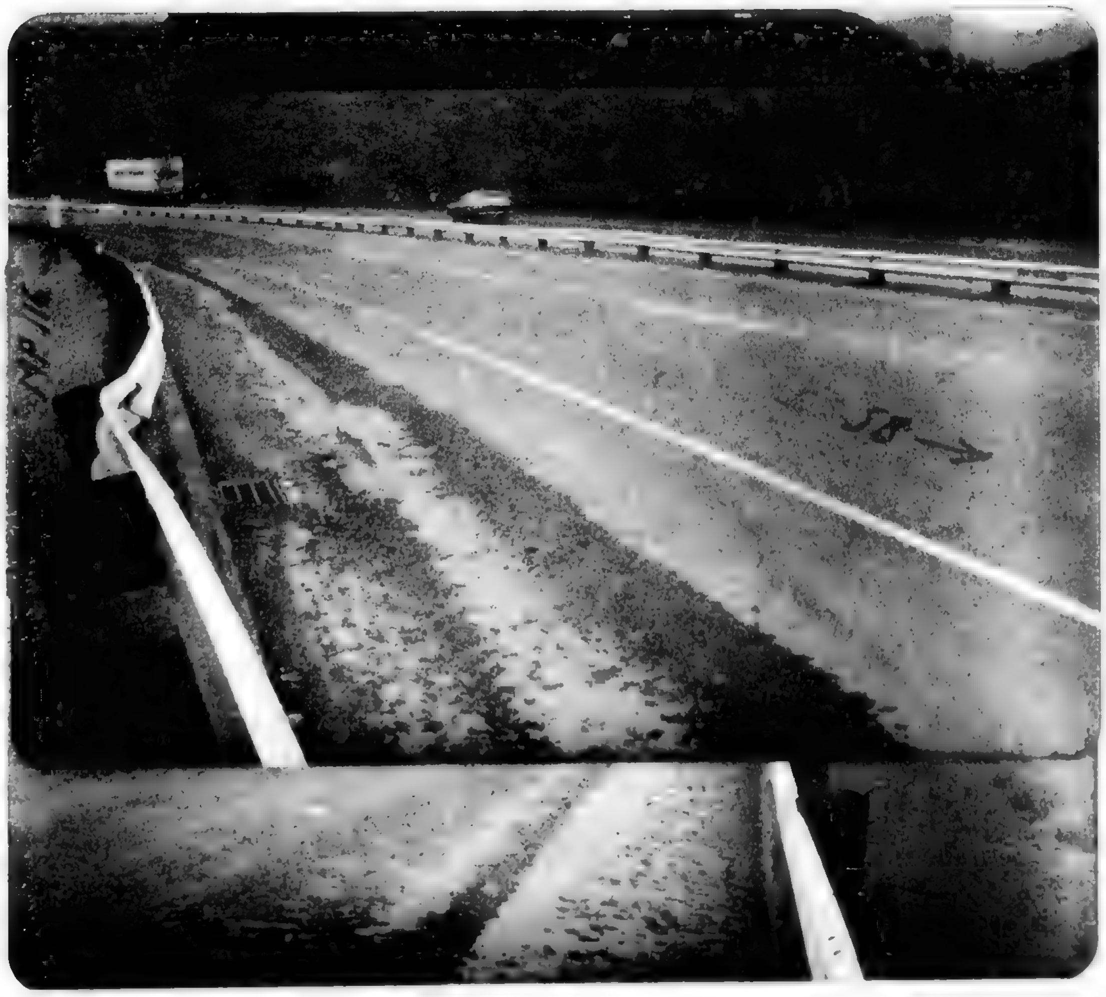
Note skid marks and guard rail damage from out of control vehicle.



RO
PACIFIC HWY

Note large sedan applying brakes in curve.

Note skid marks and guard rail damage from out of control vehicle.



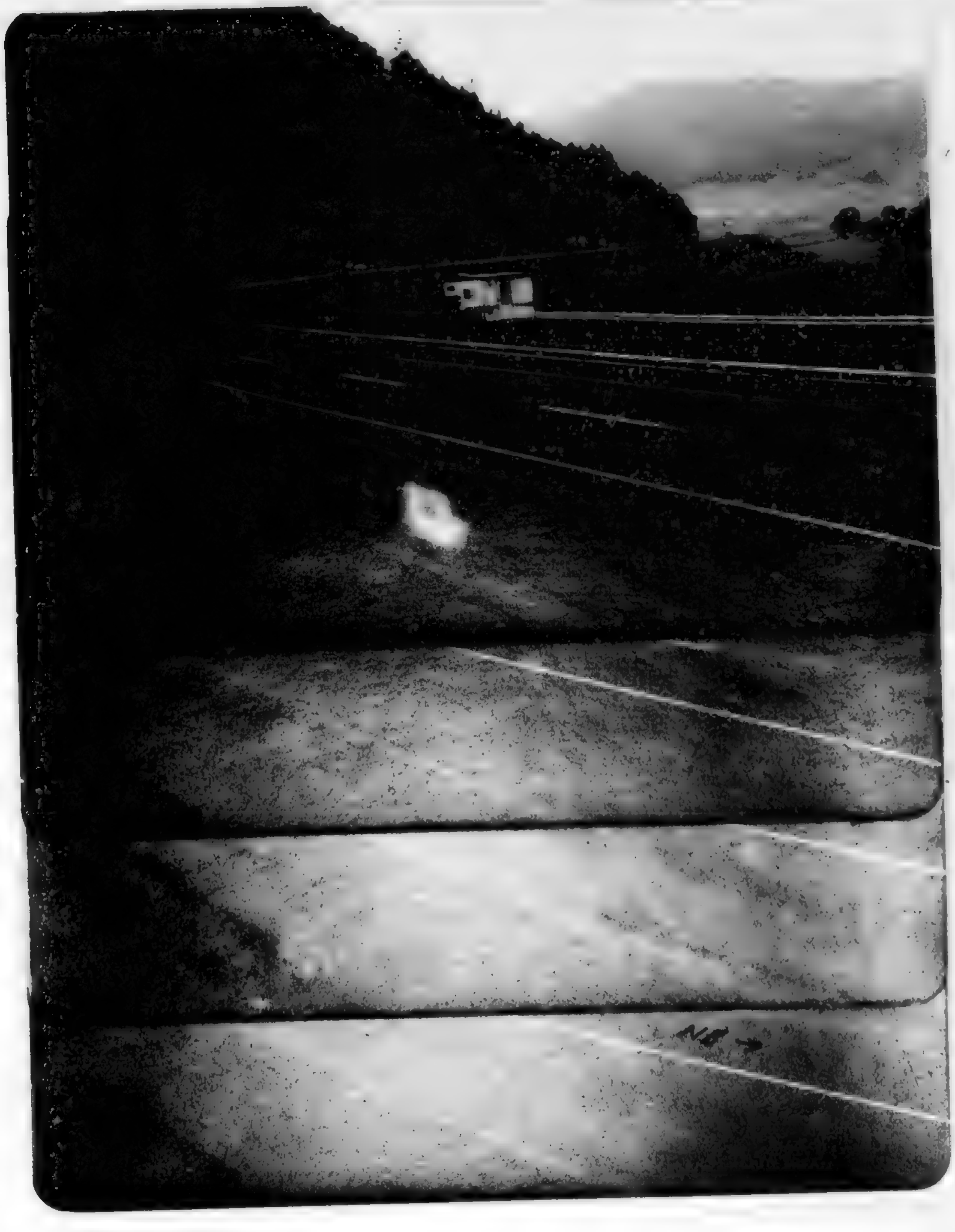
RO
PACIFIC Hwy

Note large sedan applying brakes in curve.

Note skid marks and guard rail damage from out of control vehicle.

ROBERTS MTN.
PACIFIC HWY. DOUGLAS Co.

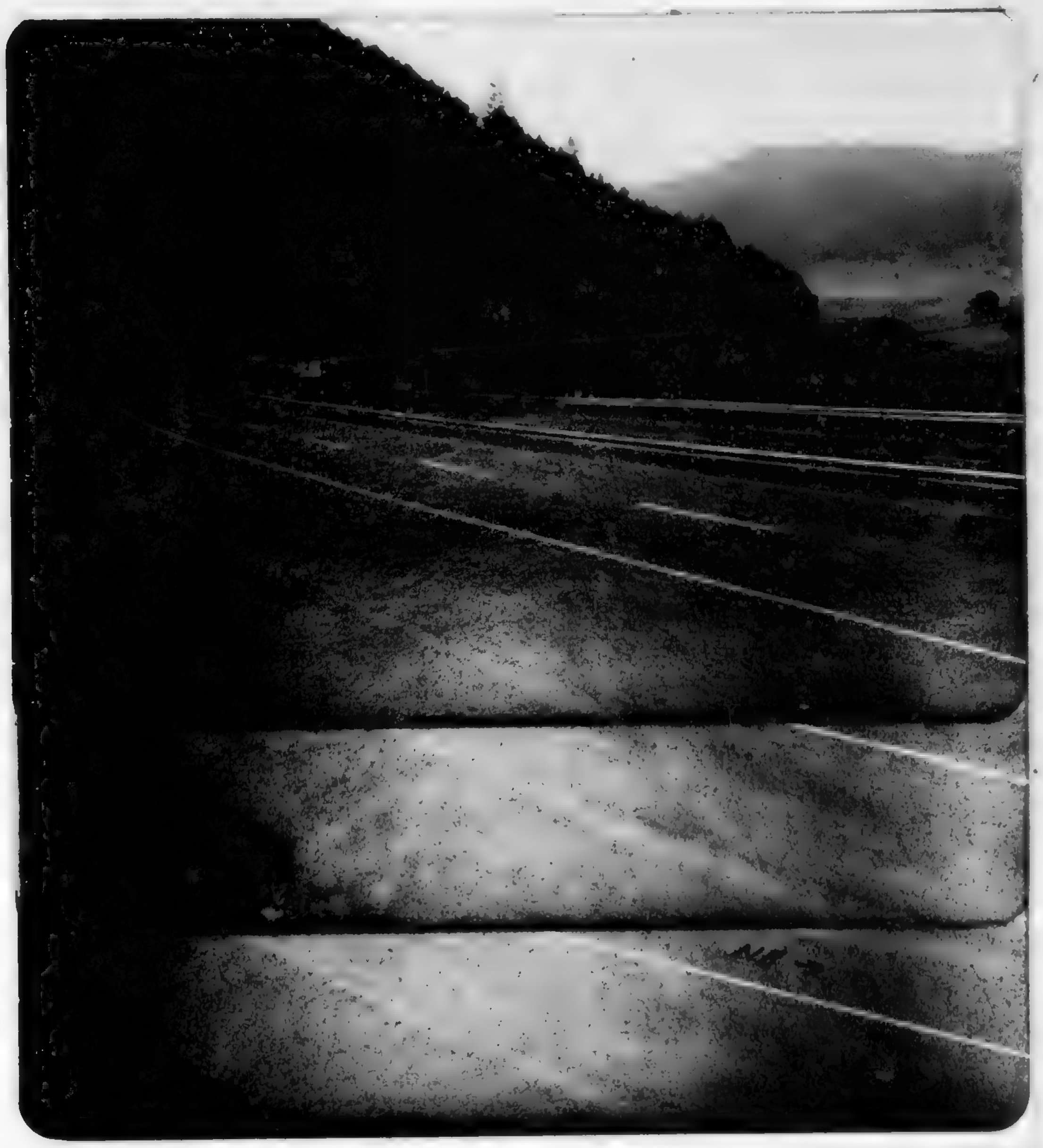
Note the pickup
camper in pix.
1&2 braking
through the turn.



RO

PACIFIC H

Note the pickup
camper in pix.
1&2 braking
through the turn.



RO

PACIFIC H

Note the pickup camper in pix. 1&2 braking through the turn.

RO

PACIFIC H

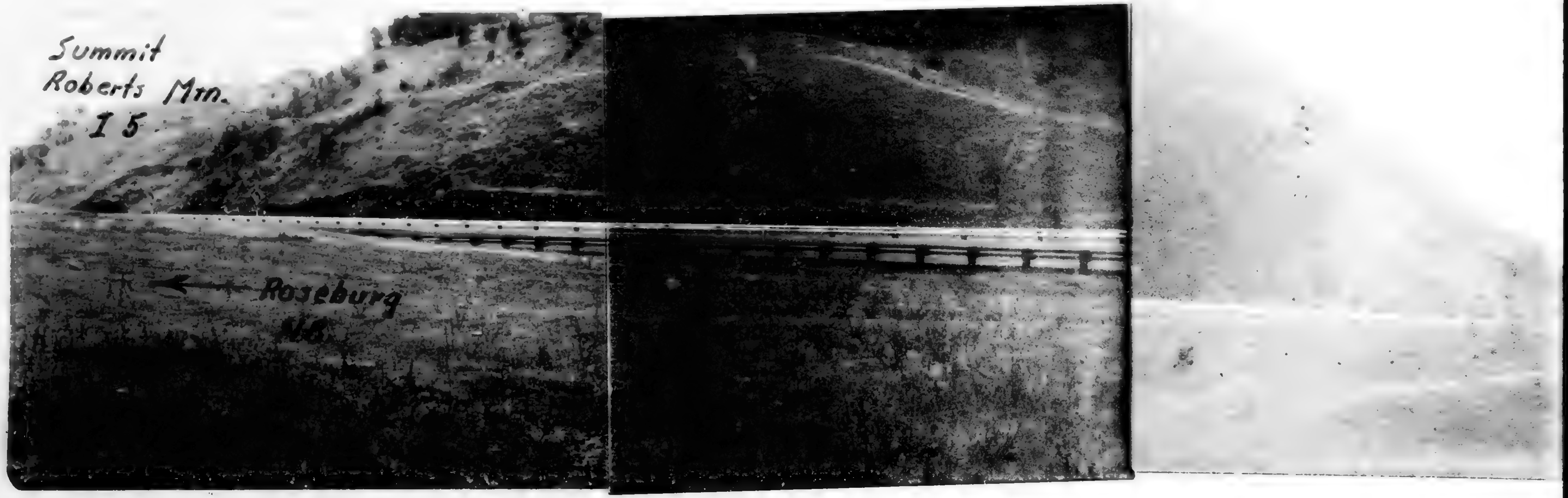
Note the pickup
camper in pix.
1&2 braking
through the turn.

Summ
Rober

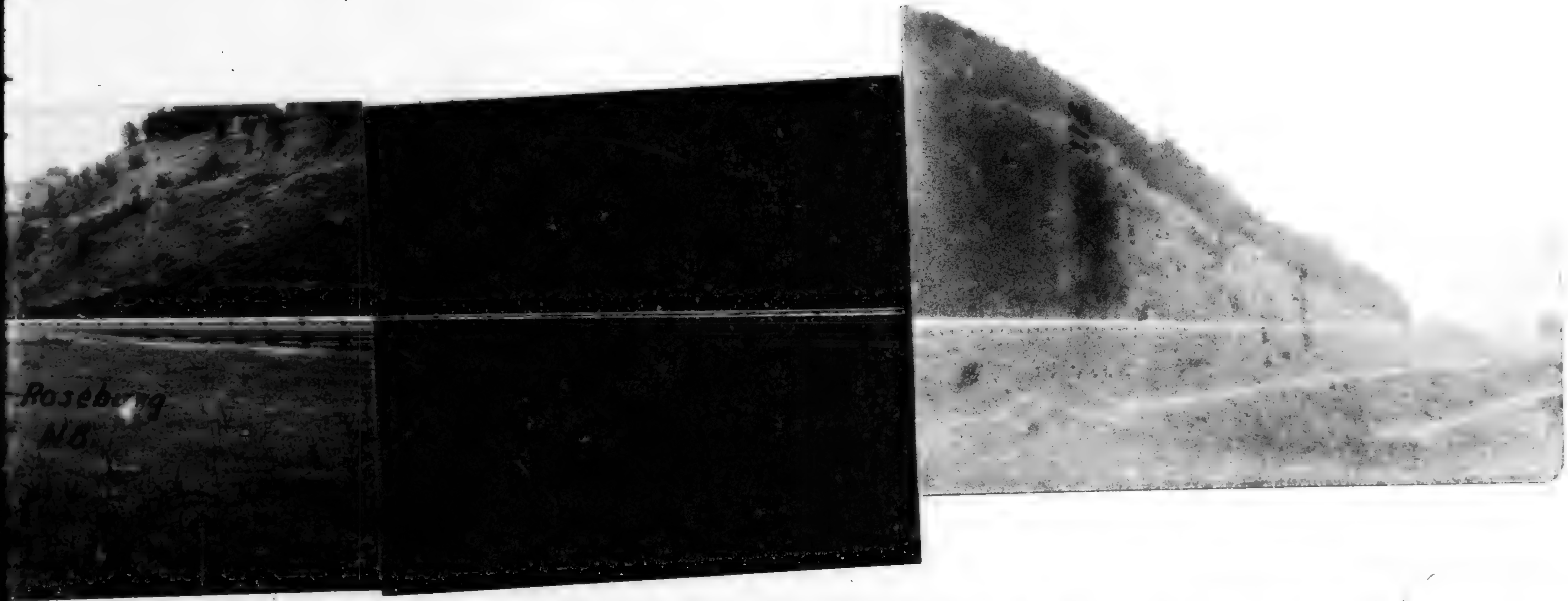
ROBERTS MOUNTAIN
I-5

PANORAMIC PHOTOS MP 116 ±

55
NB


Summit
Roberts Mtn.
I 5
Roseburg
NB

55

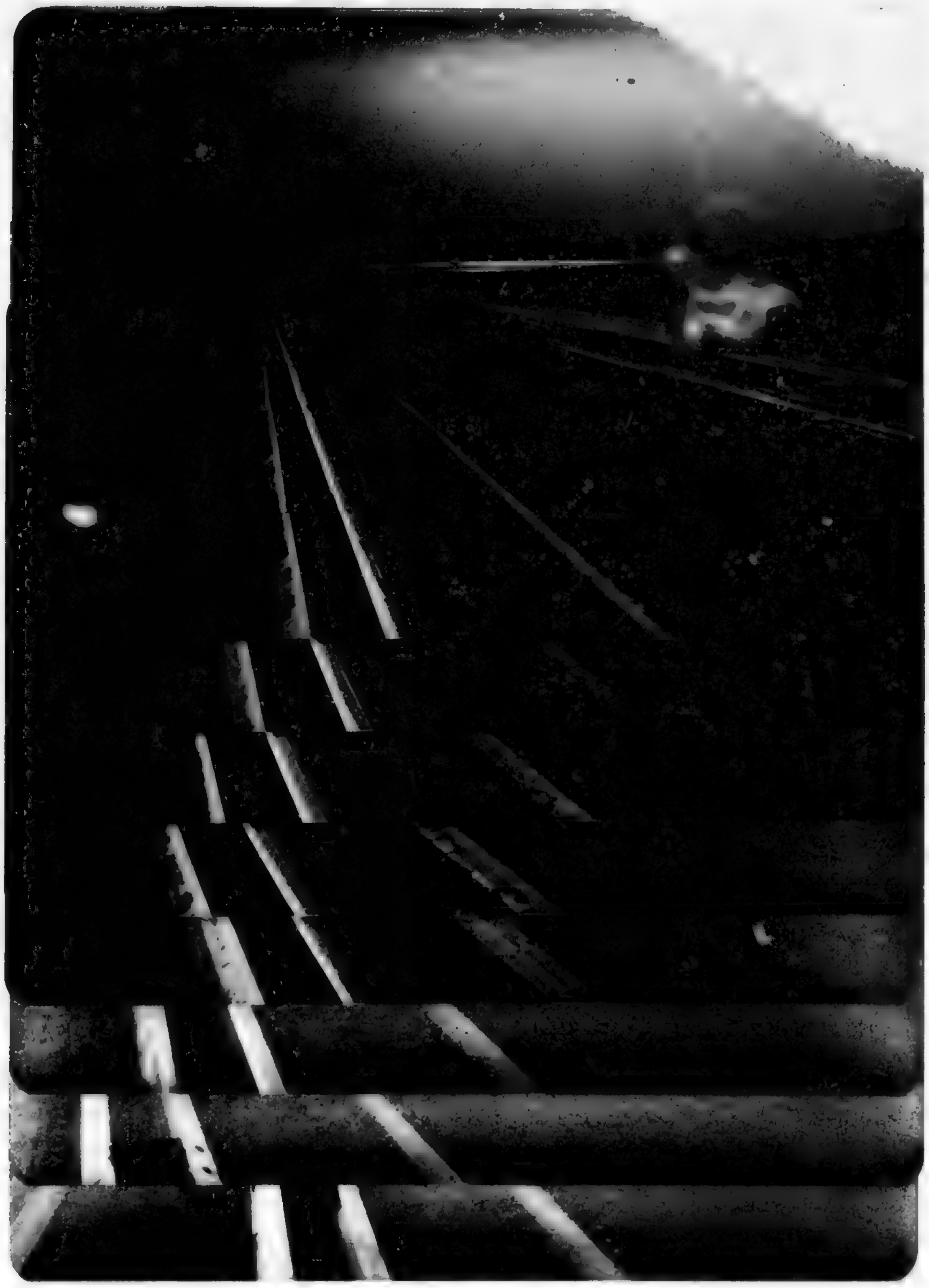

Roseburg
NB

ROBERTS MOUNTAIN

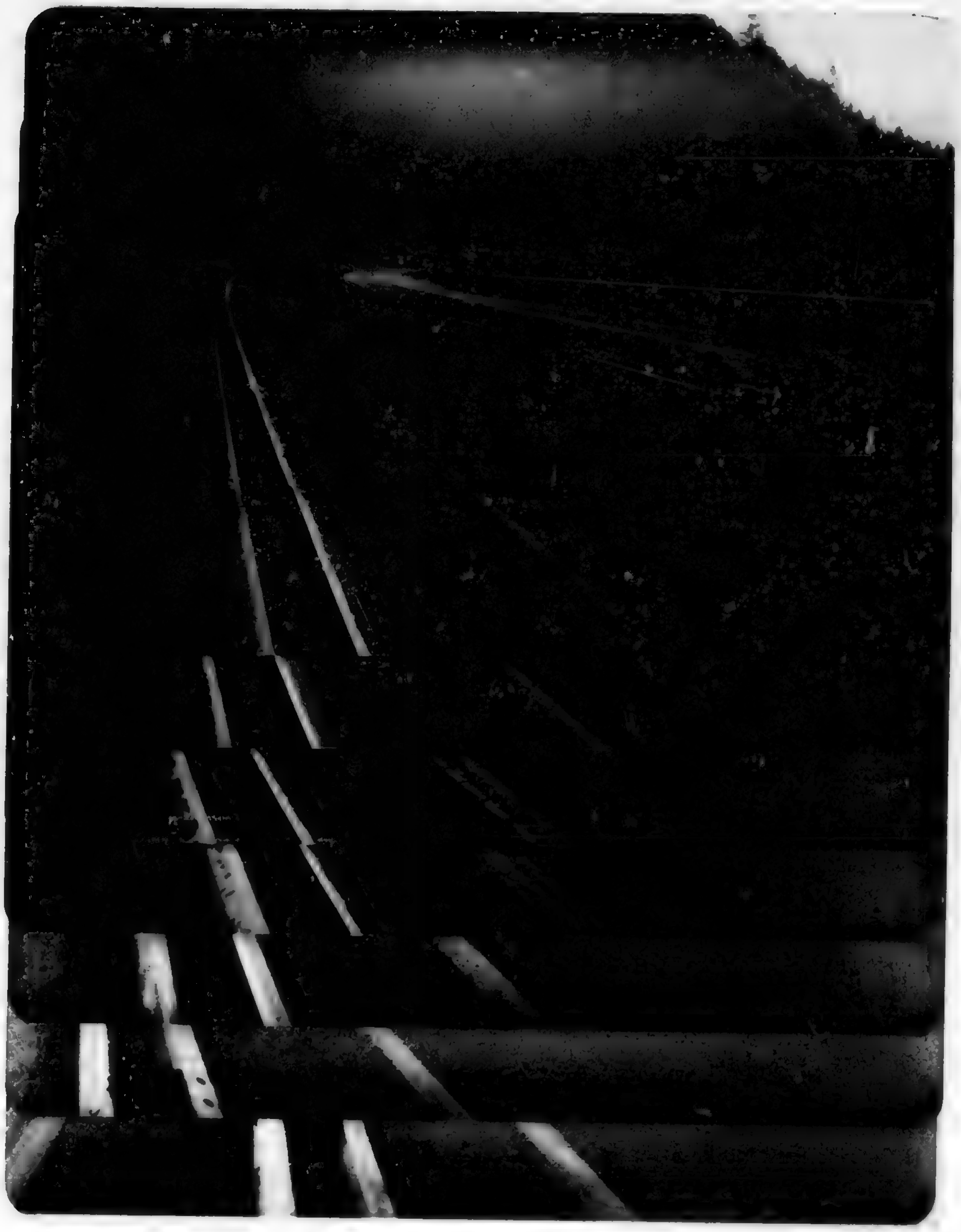
PACIFIC HWY. DOUGLAS CO.

PHOTO SERIES SB FROM MP116.4
pg 1 of 2

Note new and damaged median and shoulder rail throughout series.



Rc
PAC
P.



Note new and damaged median and shoulder rail throughout series.

RC
PAC
P

Note new and damaged median and shoulder rail throughout series.

RC
PAC
F

Note new and
damaged median
and shoulder
rail throughout
series.

RC

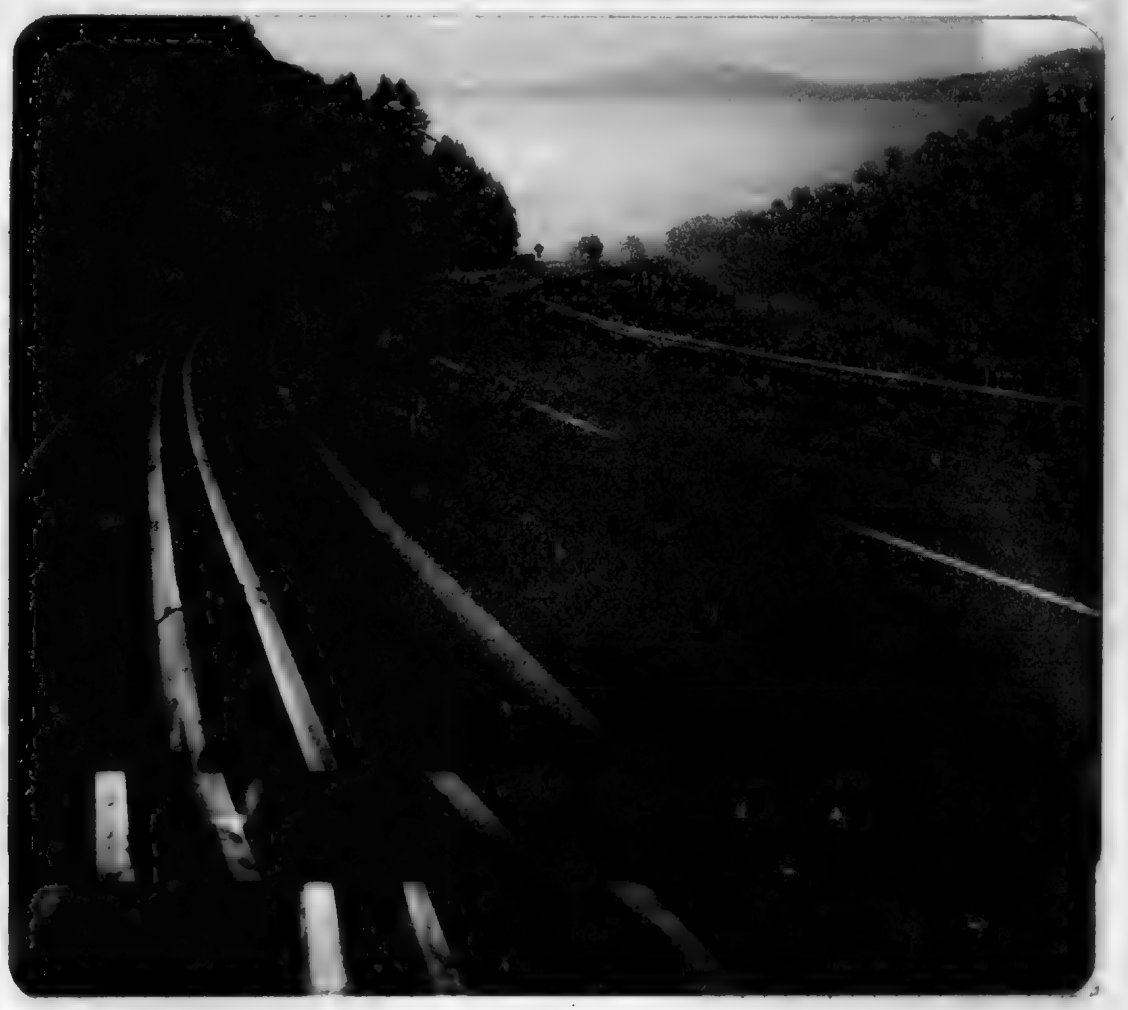
PAC

F

Note new and damaged median and shoulder rail throughout series.

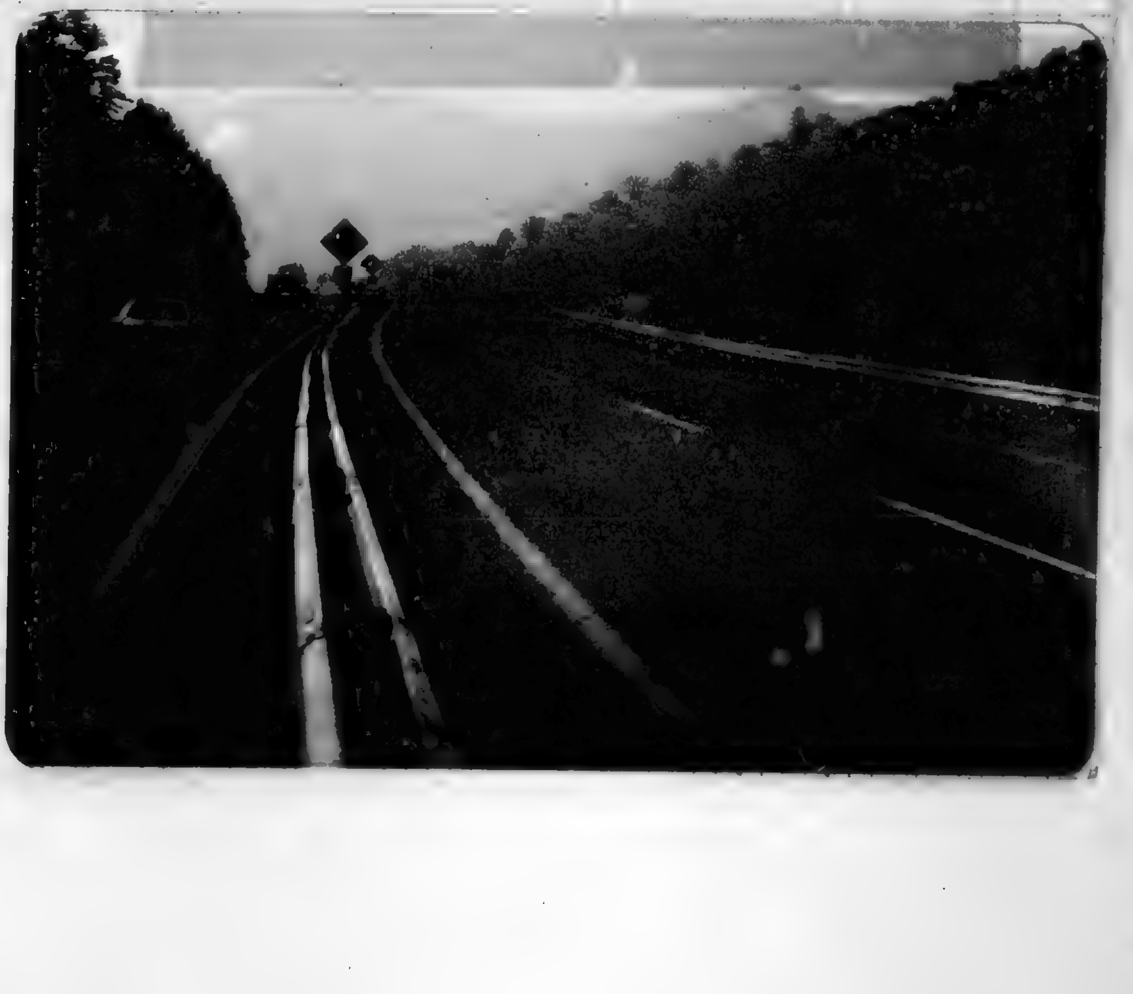
RC
PAC
F

Note new and
damaged median
and shoulder
rail throughout
series.



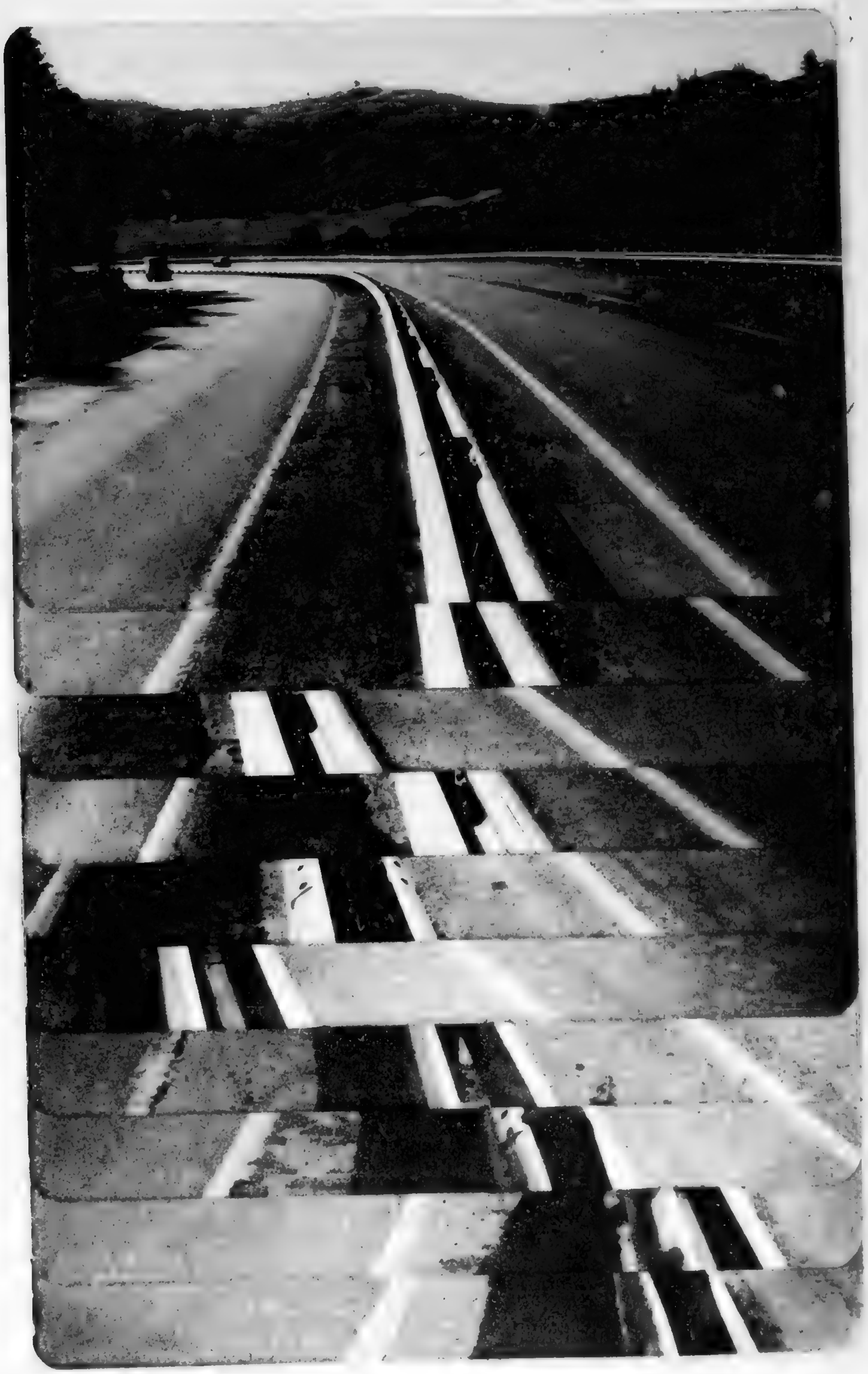
Note new and damaged median and shoulder rail throughout series.

Note new and
damaged median
and shoulder
rail throughout
series.

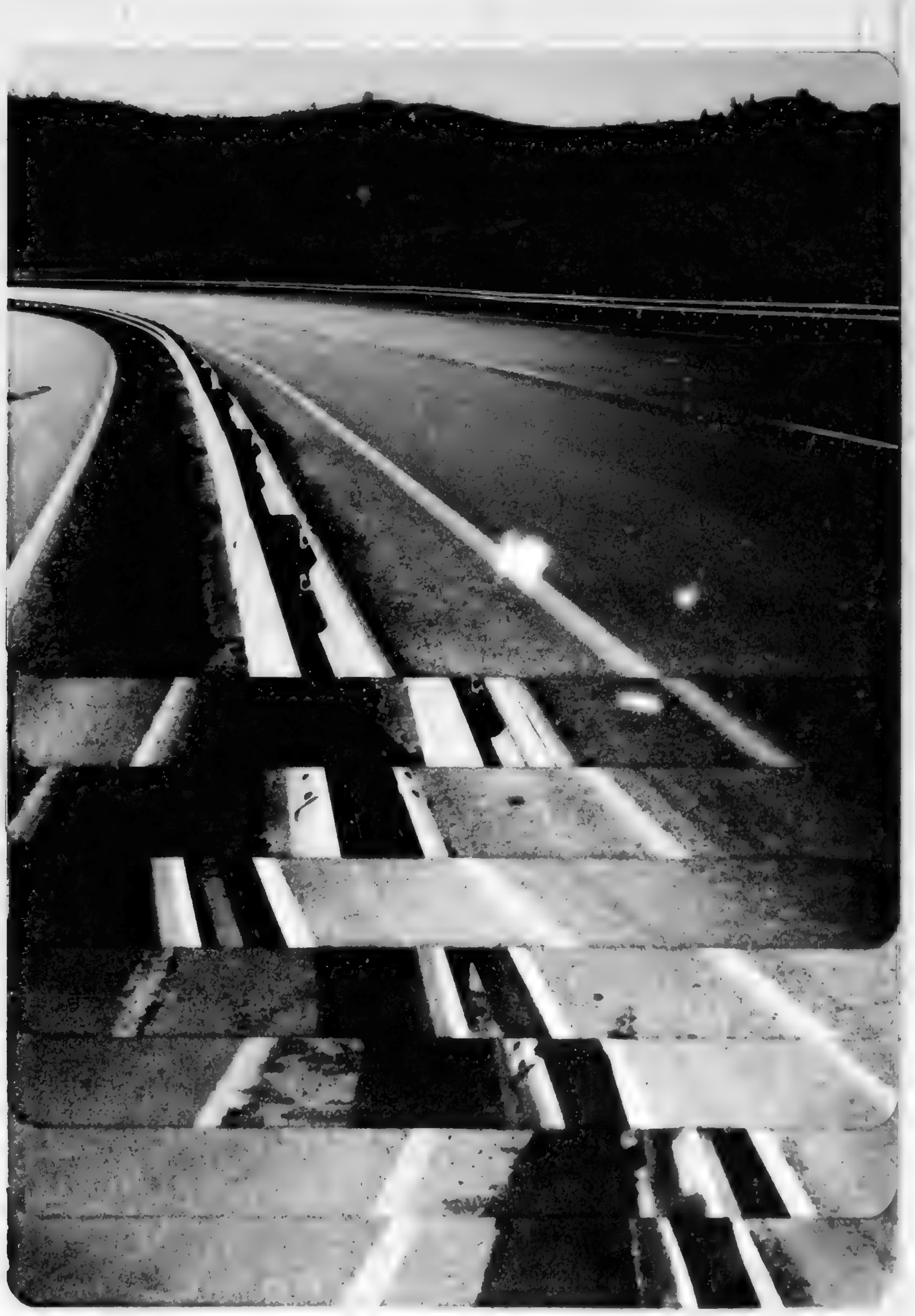


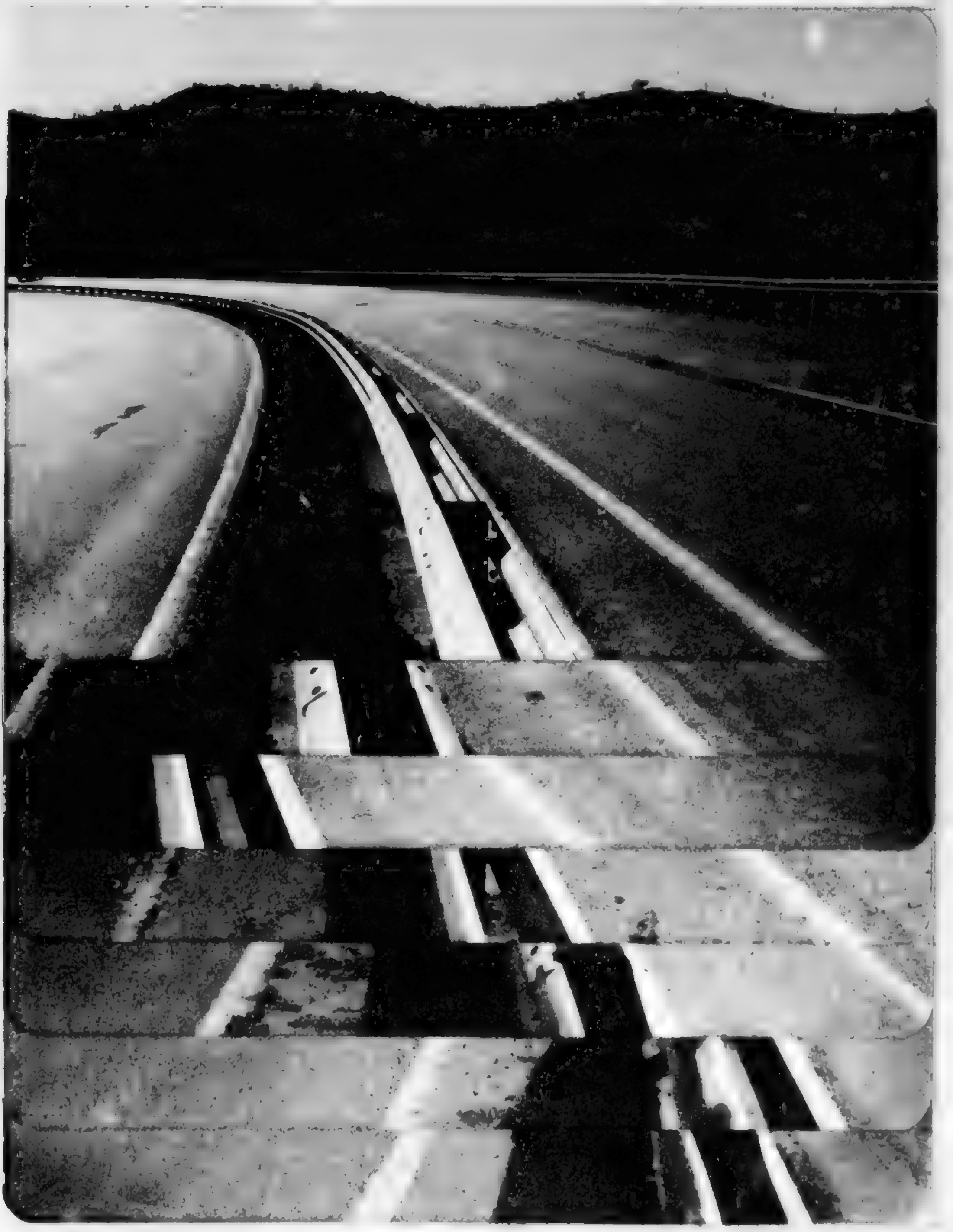
ROBERTS MOUNTAIN PHOTO SERIES pg 2 of 2

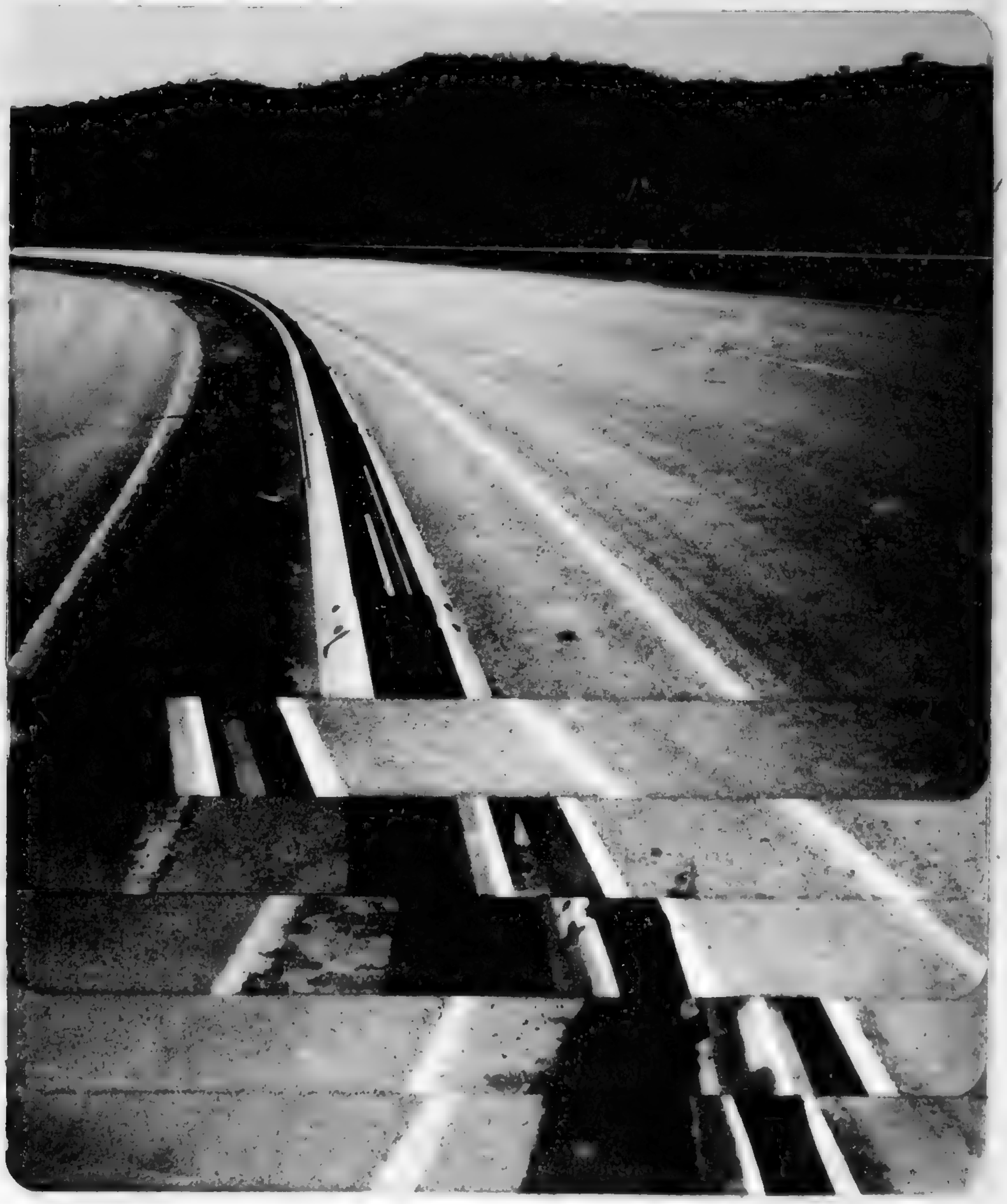
ROBERT



ROBER







ROBER

ROBER

ROBER

ROBER

9363

1-5

Form 81-734-3030

OREGON STATE HIGHWAY DIVISION

FILE: LOC 17

INTER-OFFICE CORRESPONDENCE
Roseburg, Oregon
January 5, 1977

J.X. Wilson

FROM: J. X. WILSON
Regional Construction Engineer

SUBJECT: Roberts Mtn. Section
Pacific Highway (I-5)
Douglas County

TO: J. H. Versteeg
Road Design Engineer

Further in support of a reconstruction concept on the subject section rather than simply overlay, attached is a letter from Al Bates and past correspondence relative to accident experience. Al has pictures and these are forthcoming.

jxw/cw
Attach.

cc A. W. Bates

1 [illegible]
2 Doc
RECEIVED
JAN 10 1977
ROAD DESIGN SECTION
Requires Approval ☐
Receiver Keep ☐
Do not File ☐
Return To
Bring Up
Other

REFERRED TO
Beard
Reed
Cole
Sample
✓ Eriksen F.E.
Watson
Hager
Wolfe
[✓ Return] Discuss Do File Copy Due
BY FINAL DESIGN ENGINEER

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

INTER-OFFICE CORRESPONDENCE
Roseburg, Oregon
December 15, 1976

FILE: LOC 17-6

Signed A.W. Bates

FROM: Alfred W. Bates,
Resident Engineer

TO: J.X. Wilson,
Regional Construction Engineer

SUBJECT: Safety Project
Roberts Mountain Section
Pacific Highway

The safety project on the south side of Roberts Mountain was initiated at the request of Mr. Klaboe. Mr. Klaboe's request was initiated due to a letter from an irate citizen concerning a fatal accident. I do not have Mr. Klaboe's letter in my file.

I am enclosing correspondence from 1973 concerning another fatal accident. This correspondence includes a letter from Mr. Gearon to the Governor, two reports by Glen Clark, Regional Traffic Engineer, and two accident diagram sheets.

The accident diagram sheets for 1973 were only prepared for the south slope as this was considered the problem area. The accident reports prepared in 1976 verify this as they show 17 accidents on the north slope and 40 on the south slope. There were no fatal accidents on the north slope for the reporting period and there were four fatal accidents on the south slope. The fatal accidents other than the head-on were within an area of less than one-half mile.

The reporting area has 1.07 miles on the north slope with 17 accidents and 0.96 of a mile on the south slope with 40 accidents, twenty-nine of the 40 accidents are within a one-half mile area.

The three fatal accidents that were not head-on occurred within the same half mile as the twenty-nine accidents.

This is three fatal accidents in four years within a one-half mile stretch. If we had the same number of fatal accidents on the balance of I-5, there would be 153 fatal accidents per year between the California line and the Lane-Linn County line.

The original investigation on this section consisted of contacting the maintenance section foreman and having him show me where the accidents had occurred. There were two areas and both areas coincided with the outlet spirals on the two curves descending the south slope.

An investigation was made, to determine the reason why the accidents would occur in these particular locations. The results of this investigation were that the profile grade was carried on the edge of the traveled way ascending the mountain.

ROSEBURG REGION
RECEIVED
DEC 17 1976
FILE
FAE
RBI

This resulted in an almost 2% increase in grade at the super runoff for these curves.

I am enclosing copies of the 1973 correspondence concerning this section and a copy of my report of Septemeber, 1975.

Pictures will be forwarded at a later date.

LOC 17-6

Roseburg, Oregon
September 2, 1975

Alfred W. Bates

Alfred W. Bates,
Resident Engineer

Safety Project
Roberts Mountain Section
Pacific Highway

Alfred Shirley, Jr.,
Regional Engineer

A complete study of this section of highway was required due to the high accident rate.

The first investigation revealed that practically all of the accidents were loss of control accidents on two sharp downgrade curves of 6°.

The profile grade on this section is -6.32% and is carried on the outside of the northbound lanes which creates a maximum grade of -8% of the super runoff of the southbound lanes. This is the area of all of the reported accidents and all but one were out of control accidents.

It was apparent that it would be necessary to correct the alignment and grade to eliminate these accidents.

The first alignment thinking was to hold to approximately the existing roadbed on the fill section and cut at station 2990 to station 3006. This was not possible, as investigation revealed the proposed cut would create a major slide.

The final alignment was held as tight as possible into the cut without starting a slide. This alignment made it necessary to widen the fill from station 2978 to station 2996 which required extensive borrow material.

The two cut slides on the summit of the mountain have have been moving for several years and therefore unloading these slides to use for fill for the alignment change seems logical.

There is a 48" culvert pipe at station 2981 which has open joints which empty water into the fill, sections which are crushed and the grade of the pipe is not uniform.

This fill could fail at any time due to the erosion around this pipe.

A new pipe could be installed by tunneling and plugging the existing pipe. The existing culvert is 410 feet long. It would need to be extended and riprapped on the outlet.

It is proposed to random fill the inlet of this culvert and open trench a new culvert across the highway. The material for the random fill would be from the slide on the summit on the easterly side of the freeway.

The slide on the easterly side of the highway has been a traffic hazard for a number of years as the material slides onto the paved surface.

The slide on the westerly side of the summit has reached the point at which it will be a constant safety hazard as material encroached on the pavement for the first time this spring.

There is a fill slide between station 2952+50 and station 2954. Corrective work for this slide was not submitted as a geology report dated June 11, 1974 on this slide stated that it was stablized. I have difficulty reconciling this as a tube at station 2953+35 has been sheared and one at station 2953+35 has been crushed.

The dirt fill under the existing shoulder is standing nearly vertical with no lateral support.

A corrective plan will be submitted.

Conclusion: All proposed work on this section from station 2948 to station 3011 is safety related and will reduce the number and severity of accidents and may prevent the emergency closing of I-5 due to slides.

Al Bates

FORM 2-30 (REV. 10-60)

OREGON STATE HIGHWAY DIVISION

INTER-DEPARTMENT CORRESPONDENCE

Roseburg, Oregon
April 13, 1973

SUBJECT: Traffic Conditions
Pacific Hwy.-South of Roseburg
South Slope of Roberts Mt.
I-5 - Hwy. No. 1 - MP 115
HSC 35

To: H. S. Coulter
Asst. State Hwy. Engr.
SALEM

Attached is a suggested draft for the Governor's consideration regarding the subject assignment.

Attached is a report which was prepared by the writer outlining conditions and accident experience at the subject location and one further south on I-5.

The field data has not been completed at this writing, but from the accident experience, some remedial treatment is in order.

ORIGINAL SIGNED BY GLEN L. CLARK
REGION TRAFFIC ENGINEER

GLEN L. CLARK
Region Traffic Engineer

GLC/cw
Attach.

cc L. E. George
A. W. Bates
Jack McCormick

SUGGESTED DRAFT

John L. Gearon
Dunes Motel
610 West Madrone
Roseburg, OR 97470

Dear Mr. Gearon:

This will acknowledge your recent letter bringing to our attention traffic conditions on Interstate 5 on the south slope of Roberts Mountain south of Roseburg.

Information received from the Highway Division indicates that the immediate vicinity you refer to has been under investigation for sometime and field work is now underway preparing date for inclusion in a forthcoming Federally funded safety project.

The field work has not been completed and, therefore, the exact nature of any possible improvement is not known. I assure you that every affort is being made to locate such problem areas and provide suitable corrective treatments as soon as funds are available.

We understand your concern and hope you will continue your interest in traffic safety.

Very truly yours,

6 1973

⑤

Dear Governor McCall,

Highway I-5, southbound, at Roberts Mtn, Milepost 115 vic Roseburg, is a death trap. Witness the death last Sunday of a 20 yr old Ree college student. My son is here in the hospital with multiple fractures.

There is one 55 MPH sign at the top of the descent which ends about a mile south with a left curve. No other instruction or warning of any kind. No "Warning", "Danger", "Slow", "Curve", or even additional speed limit sign.

Mr Doyle, the local auto graveyard owner: "We take wrecked cars off that piece of road all the time".

It is imperative that you ~~assistant~~ direct your State highway department to take immediate corrective action.

Your people at the local State police Office have been most cooperative and helpful. The doctors, circuit Court judge and personnel, bankers and hospital personnel have been concerned, compassionate and most helpful. You can be proud of the people you serve.

Please take action

RECEIVE
MAR 27 1973
OFFICE OF
ADMINISTRATOR OF HIGHW

Sincerely,

John J. Gearen

P.S. President of the Village of Oak Park, Ill. pop 6
I am aware of the demands on government and its leadership. I would not write this letter but to point out a situation which demands correction.

FORM [illegible] (REV [illegible])

OREGON STATE HIGHWAY DIVISION
INTER-DEPARTMENT CORRESPONDENCE

Roseburg, Oregon
April 9, 1973

SUBJECT: Isolated Freeway Alignment Sections Having Safe Speeds Below 70 MPH

To: ALFRED SHIRLEY, JR.
Region Engineer
OFFICE

Attention: John W. Sheldrake

As you recall, a recent fatal accident occurred on the south slope of Smith Hill; and, as a result it was decided further investigation might reveal a correctable defect. At the same time, an accident occurred on the south slope of Roberts Mountain.

Attached are Collision Diagrams showing a considerable accident experience at both locations. Because of this, it is thought advisable to investigate further.

You may recall that originally the entire freeway system was posted with standard (black on white) regulatory speed signs based on the safe speed of the horizontal alignment. Later, due to the accident experience, the entire section from Canyonville to the California line was posted 70 MPH with standard speed signs and individual curves were treated with 60" warning signs and speed riders.

This is the condition now existing in the section stated. The balance of the Region, including Roberts Mountain, is posted with standard regulatory signs only.

Mr. Bates is collecting some data on the Roberts Mountain curve in connection with a forthcoming safety project.

The accident experience indicates the need for treatment. First, the most desirable solution would be to reconstruct to a safe speed of 70 MPH. This is impractical from an economic standpoint. Some locations would be impractical from a construction standpoint. Additional warning signs could be installed. It is doubtful that such treatment would be any more effective than the present signing.

Any paving that is accomplished could be laid to increase the superelevation. When most of these problem locations are in mountainous terrain, this treatment is also impractical.

It may be worthwhile considering GM type rail treatment. The cost would be less than the present guard rail repair costs. The question is; would such treatment retain the out of control vehicles safely and enable the driver to regain control. We have not experienced enough data from GM rail in Region III to determine this factor.

The problem is, that a percentage of the motoring public is overdriving these isolated sections; due to the fact, that this is a freeway and freeways are 70 - 75 MPH facilities, not 50 - 55 MPH.

It is suggested that serious consideration be given the suggested treatment.

Glen L. Clark

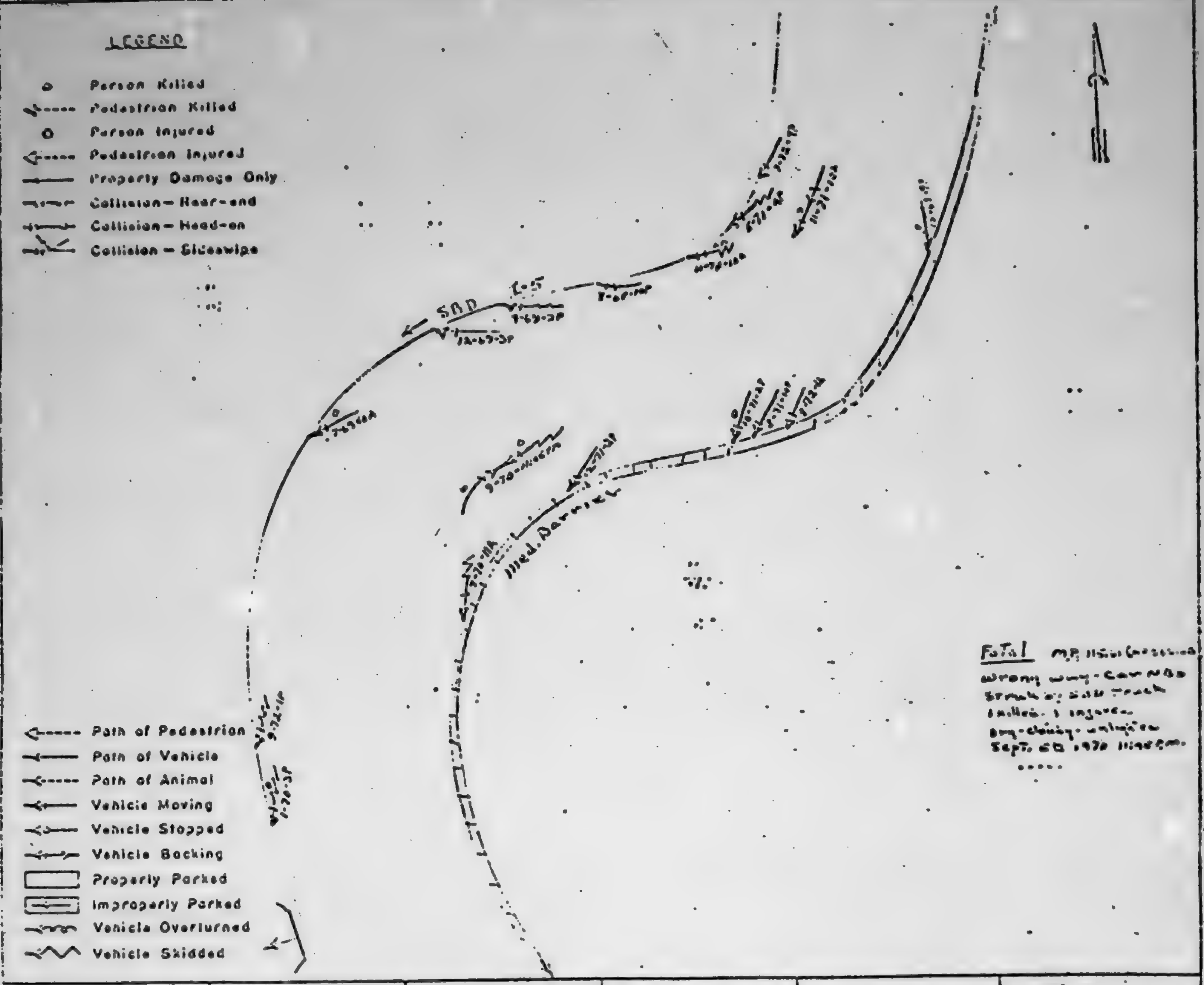
GLEN L. CLARK
Region Traffic Engineer

GLC/jw
attach.
cc L. E. George
D. H. Moehring
Jack McCormick
George Thornton

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION
ACCIDENT ANALYSIS

COLLISION DIAGRAM

City of ____________ County [illegible]
Intersection of [illegible] and [illegible]
Highway Number 1 (I-5) [illegible]
Period Covered [illegible] [illegible]
Compiled by [illegible] Drawn by ____________ Date [illegible]


LEGEND
Person Killed
Pedestrian Killed
Person Injured
Pedestrian Injured
Property Damage Only
Collision – Rear-end
Collision – Head-on
Collision – Sideswipe
SBD
I-5
9-69-3P
12-69-3P
Med. Barrier
Path of Pedestrian
Path of Vehicle
Path of Animal
Vehicle Moving
Vehicle Stopped
Vehicle Backing
Properly Parked
Improperly Parked
Vehicle Overturned
Vehicle Skidded

Fatal M.P. [illegible]
Wrong way - car NBD
struck by SBD truck
1 killed - 1 injured
[illegible]
Sept. [illegible] 1970 [illegible]

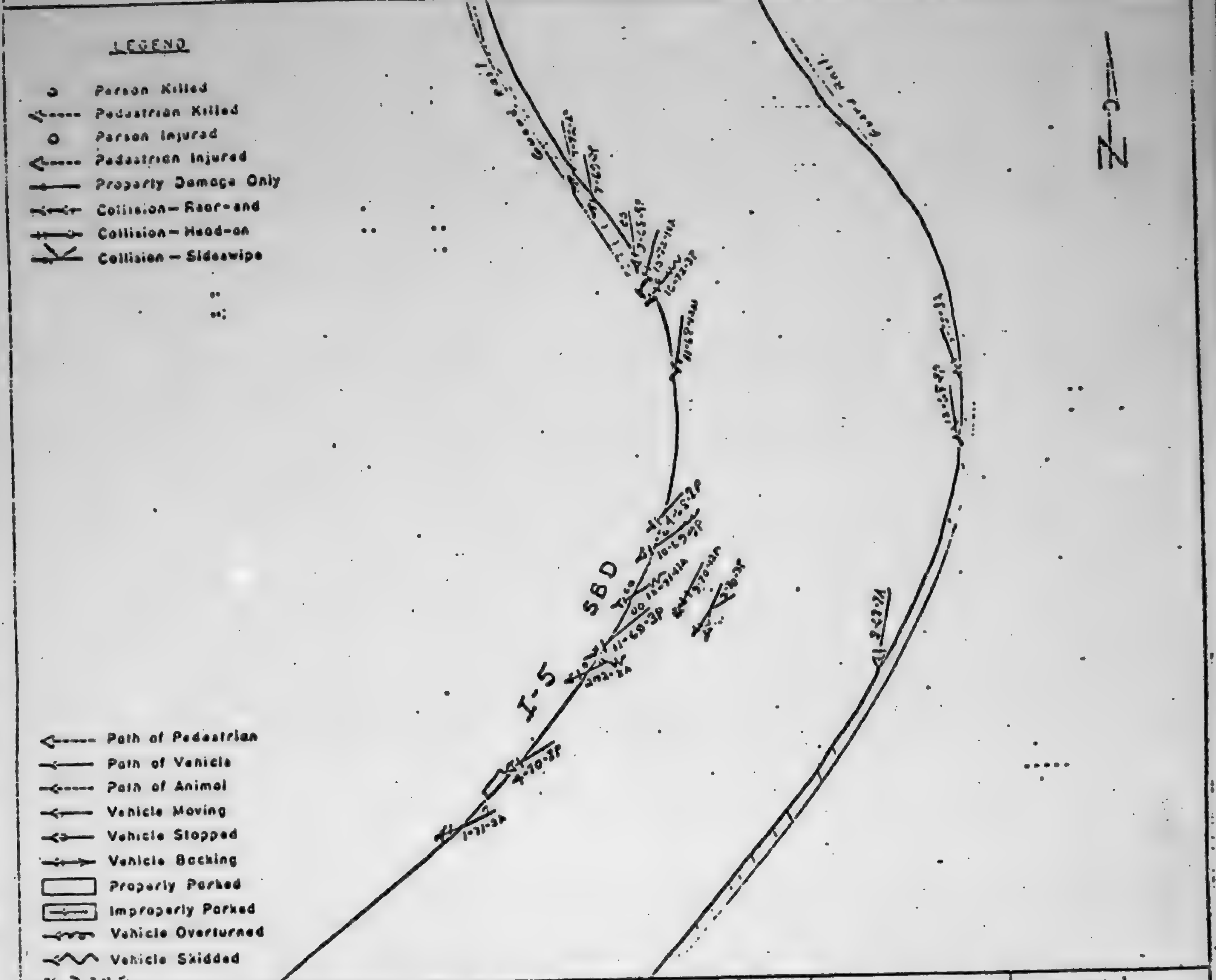
Collision Type	1969				1970				1971				1972				[illegible]			
	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total
Angle																				
Head-on					1			1									1			
Rear-end										1		1								
Sideswipe																				
Turning Movement																				
Parking																				
Non-collision																				
Fixed Object		2	3	5		1	1	2		2	3	5			3	3		5	10	15
Pedestrian																				
Backing																				
Misc																				
TOTAL		2	3	5	1	1	1	3		3	3	6			3	3	1	6	10	17

Form E-261-[illegible]

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION
ACCIDENT ANALYSIS

COLLISION DIAGRAM

City of [illegible] County [illegible]
Intersection of [illegible] and [illegible]
Highway Number [illegible]
Period Covered [illegible] [illegible]
Compiled by [illegible] Drawn by ______ Date [illegible]


LEGEND
Person Killed
Pedestrian Killed
Person Injured
Pedestrian Injured
Property Damage Only
Collision—Rear-end
Collision—Head-on
Collision—Sideswipe
N
I-5
SBD
Path of Pedestrian
Path of Vehicle
Path of Animal
Vehicle Moving
Vehicle Stopped
Vehicle Backing
Properly Parked
Improperly Parked
Vehicle Overturned
Vehicle Skidded

Collision Type	[illegible] 1969				1970				1971				1972				Total			
	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total
Angle																				
Head-on																			1	1
Rear-end							1	1											1	1
Sideswipe							1	1												
Turning Movement																				
Parking																				
Non-collision		2	2	4						2		2		1	1	2	-	5	3	8
Fixed Object		1	3	4										1	2	3		2	5	7
Pedestrian																				
Backing																			1	1
Misc.							1	1												
TOTAL		3	5	[illegible]			3	3		2		2		2	3	5		7	11	18

Form E-201-C-70

9363 C

1-5

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

INTER-OFFICE CORRESPONDENCE

FILE:

Roseburg, Oregon

October 29, 1976

Jack C. McCormick

FROM: Jack C. McCormick, District Engineer

SUBJECT: Safety Project
Roberts Mountain

TO: J. X. Wilson
Region 3 Construction Engineer

Attached find a list of accidents on Roberts Mountain from the Section Foreman's records. Numerous other accidents occurred of which we have no record. If the responsible party could not be found, repairs were made without making out Extra Gang reports.

The summit slide and the failing 48" culvert at Sta, 2981 should also be considered as safety problems. The potential slide could easily bury a vehicle or vehicles at the worst. Debris and rock deposited in the travel lanes could cause serious accidents at the least. If or when we have complete failure of the culvert, water will be running down the travel lanes or we could get a complete fill failure. In either case, damage to both the highway and property below the highway would be severe.

JCM:bes

Attachment

RECEIVED
LOCATION SECTION

1 Versteeg
2 Olson
3 [illegible]
[illegible]
[illegible]venson
[illegible]

RECEIVED
DEC 02 1976
ROAD DESIGN SECTION

Requires Reply ☐
Requires Approval ☐
Receiver Keep ☐
Do not File
Return To
Bring Up ✓ ✓
Other

ROSEBURG REGION
RECEIVED
NOV 04 1976
RE RY RCE ROE TE
FILE
RUE RBI
ENV FAE

copy Versteeg
12-1

11-29-76
CC: Frank Turpin - Info.

TO: Jack C. McCormick

FROM: Leon O. Neis

DATE: October 13,1976

SUBJECT: Safety Project Roberts Mountain

May 9, 1974

M.P.# 115.80

100' Guardrail
8 Posts

June 30, 1976

M.P.# 115.4

312 ' Guardrail
25 Posts

Fatal

October 25, 1975

M.P.# 115.4

135' Guardrail
12 Posts

Fatal

May 8, 1974

M.P. #115.85

Truck Wreck
Non-Fatal

April 4, 1974

M.P.# 116

10 Panels Guardrail
4 Posts

There were numerous times the guardrial was hit and we have had no record of it because of no report of the accidents.

Leon O. Neis

Leon O. Neis
HMF-1

9363

I-5

Salem, Oregon
September 28, 1976

ORIGINAL SIGNED BY
J. H. VERSTEEG
J. H. Versteeg
Road Design Engineer

Safety Project
Roberts Mountain

J. X. Wilson
Region 3 Construction Engineer

Mr. Al Bates, Resident Engineer, made a very strong case to correct the alignment and profile grades on the south side of Roberts Mountain. He spoke of the numerous serious accidents, etc., which would justify the reconstruction of this section of I-5.

Unfortunately there isn't enough recorded accident data to make a strong case for the reconstruction of this section. I am trying to put together a report which would support reconstruction. I would like to have the following reports if possible and anything else that you might think appropriate for the intended use.

1. A resident engineer's report addressing the safety problems on this section plus colored photos of the highway at reasonable intervals. Damaged guardrail photos would also be helpful.
2. If available, a report by one of the State Police officers who patrol this area commenting on the dangers, accident records, etc.
3. Maintenance foreman's guardrail repair records, accidents, clean-up reports and, if possible, his written comments on the need for safety correction.
4. Maintenance engineer's report, comments and recommendations.
5. A traffic engineer's report, comments and recommendations.
6. Regional comments and recommendations on the need for a safety project.

This may seem overdone but we really don't have sufficient justification for a project at this time. If we can generate a combined report that weighs enough, maybe we can get a project approved.

JHV:jh
cc: A. W. Bates
Jack McCormick
Kipp Osborn

____ Versteeg ____
I Olson ____
____ Christensen ____
____ Scott ____
____ Swenson ____
____ Savage ____
____ Trout ____

RECEIVED
SEP 28 1976
ROAD
DESIGN
SECTION

Requires Reply ☐
Requires Approval ☐
Receiver Keep ☐
Do not File ☐
Return To____
Bring Up____/____/____
Other____

9343

OREGON STATE HIGHWAY DIVISION

TOM McCALL
GOVERNOR

F. B. KLABOE
Administrator of Highways

June 16, 1976

Mr. Glen Green
Division Administrator
Federal Highway Administration
Post Office Box 300
Salem OR 97308

Dear Mr. Green:

Re: Roberts Mountain Section, I-5
East Side Cut Slide
Your Ref: 1041 DB.A

Enclosed is a report by F.W. Yarbrough, Soils & Geology Engineer, for your use in determining the eligibility of FAI funds for remedial construction of the East Side Cut Slide on the Roberts Mountain Section of Interstate 5. Pertinent data with estimated costs for the four alternatives considered are documented in the report.

The alternatives involving reinforced earth were not considered because of high cost and the uncertainty of the ability of reinforced earth to withstand sliding forces. (The Reinforced Earth Company has not given any positive assurances that it can.) A rock inlay buttress ($241,000) provides the best way to contain the slide; however, there is a possibility that excavating the slide mass and providing a 40-foot fallout will also stop the slide at a lower cost ($68,000).

We would like to proceed with the lowest cost alternative and request your approval of FAI funds to excavate the slide mass and to provide a 40-foot fallout at this location. This decision is contingent upon receiving your commitment to continue with sharing the financial responsibility should further remedial construction become necessary. If such a commitment cannot be made, we request approval to proceed with the rock inlay buttress using FAI funds.

Your early consideration of this request will be appreciated.

Very truly yours,

Frank E. Terpin
Location Engineer

NOTED
E. S. HUNTER

Enclos (3)
WHT:jp
cc E.S. Hunter
J. H. Versteeg
Alfred Shirley

Notes

RECEIVED
STATE HWY ENGR
JUN 16 '76
REFER TO
FOR
Info Inves R/D D/R Sign Act File

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FORM E-30

OREGON STATE HIGHWAY DIVISION
INTER-DEPARTMENT CORRESPONDENCE

Salem, Oregon
June 3, 1976

SUBJECT: Geotechnical Analysis of
the Eastside Slide
Roberts Mountain Section
Pacific Highway I-5
Douglas Co.

To: Frank Terpin
Location Engineer

The Eastside cut slide appears to be in part landslide and in part fluid flow of detritus down the slope. There is a considerable surface area above the slide (not present on the west side) contributing drainage to the slide area. The condition of formation of the detritus appears peculiar to this location. Why or how it forms is not understood. Geology of the slide formation is described hereunder.

Proposed alternate schemes of controlling this slide are:

1.	Excavate the slide mass with 40' fallout	$ 68,000
2.	Reinforced Earth Wall and Rock Dam	386,000
3.	Reinforced Earth Wall only	333,000
4.	Rock Inlay Buttress S.F. 1.3	241,000

As on the West Side, the rock inlay buttress is fairly certain to end the problem.

The schemes involving a reinforced earth wall cannot be adopted until the Reinforced Earth Company has said the walls can be reinforced to withstand the sliding force.

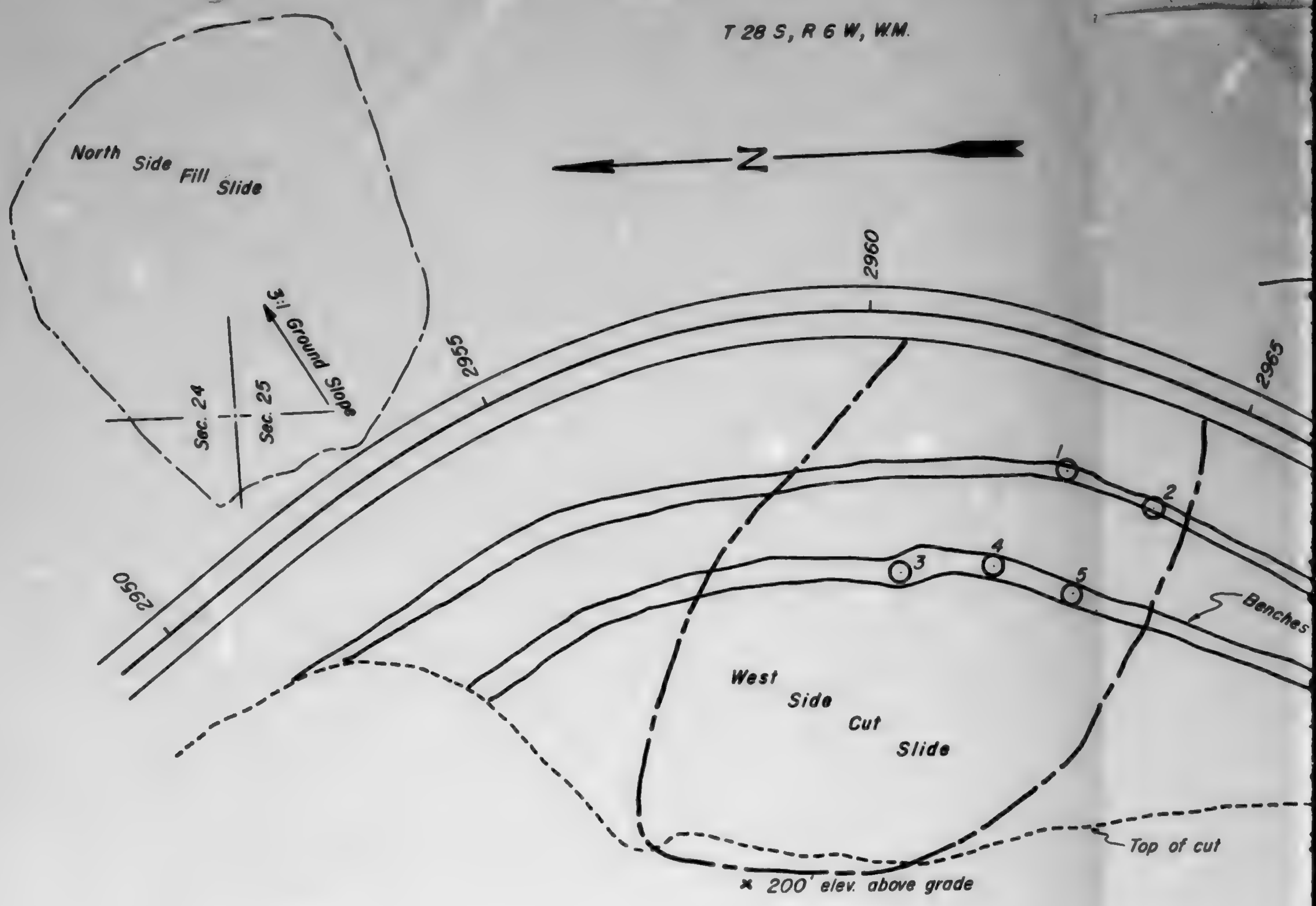
Internal drainage schemes are not proposed for this slide because of its fluid characteristic with potential for rapid movement which could destroy such a system if an initial installation was inadequate. Also, the mass remains quite impervious because no cracks develop, or remain if they do, and, for this reason, internal drainage possibly could not be made to work.

The plan to excavate the detritus and slide mass has considerable merit along with the risk. There must be a vertical limit to the troublesome formation as there is obviously a lateral limit, and excavation approaches to it. If the present sliding mass is excavated, another may or may not develop. This scheme offers large cost saving if it does not.

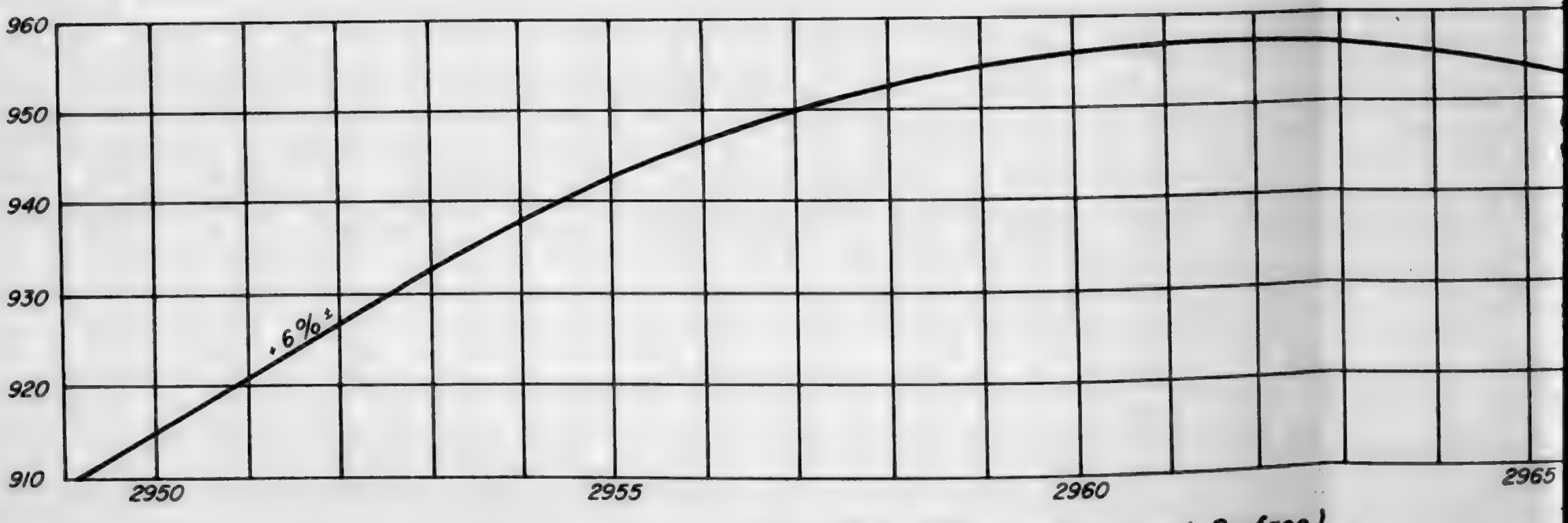
The cost of a surface interceptor drain around the top of the slide to channel the surface water to the side and extensive seeding and mulching to stop the detritus flow down the slope is not included in any of the cost estimates above. This work probably should be done with any proposed scheme.

F. W. Yarbrough
Soils & Geology Engineer

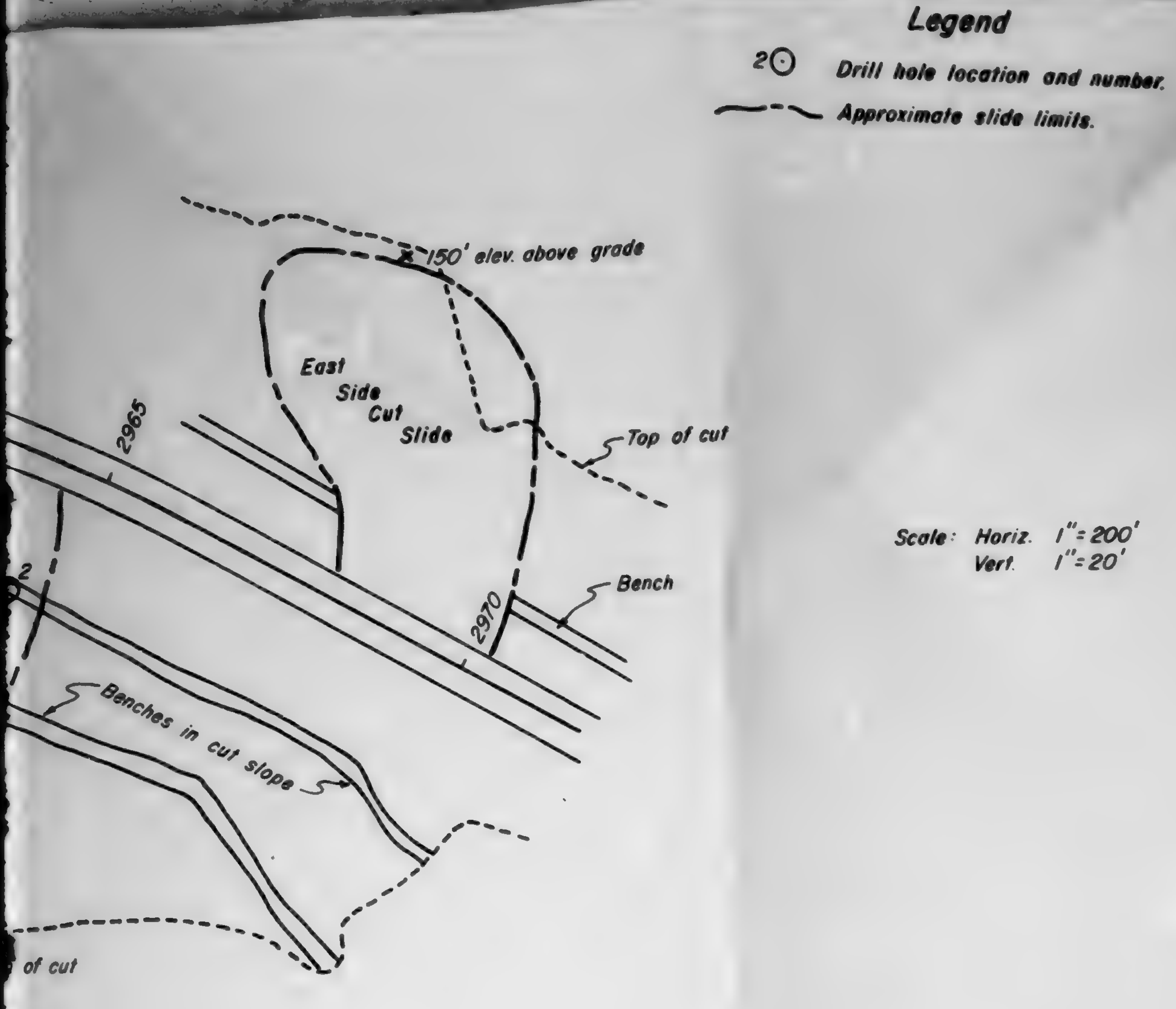
FWY:af

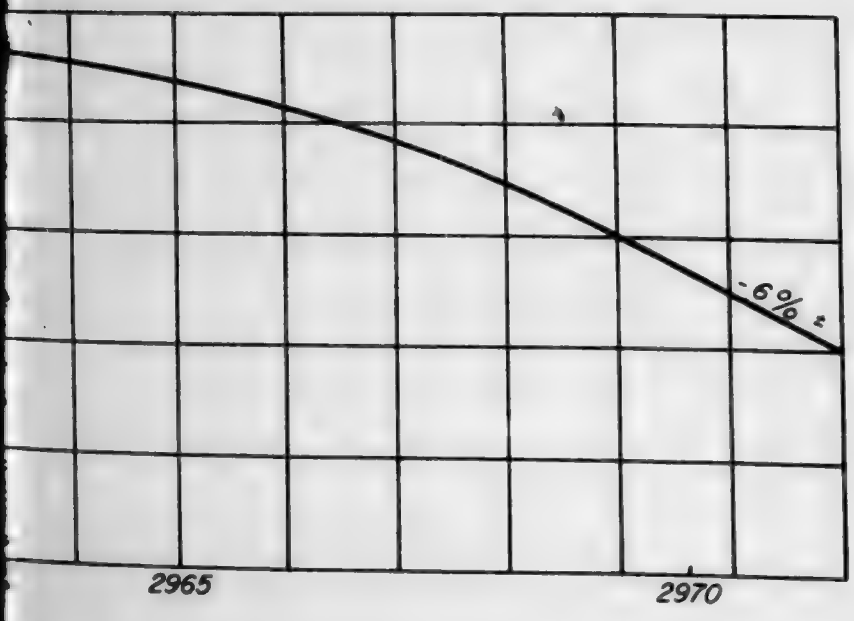

T 28 S, R 6 W, W.M.
N
North Side Fill Slide
3:1 Ground Slope
Sec. 24
Sec. 25
2950
2955
2960
2965
1
2
3
4
5
Benches
West Side Cut Slide
Top of cut
× 200' elev. above grade

PLAN



PROFILE (Existing Pavement Surface)

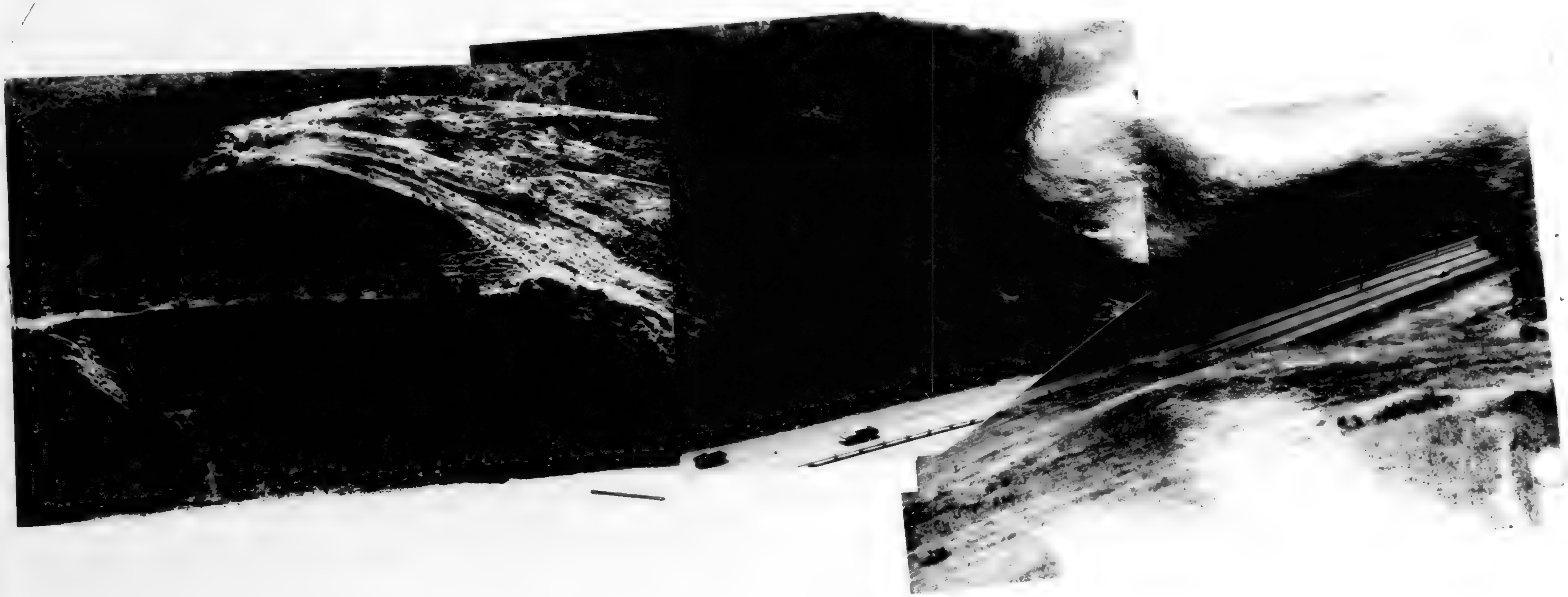

Legend
2 ⊙ Drill hole location and number.
Approximate slide limits.
150' elev. above grade
East Side Cut Slide
2965
Top of cut
2
2970
Bench
Benches in cut slope
of cut
Scale: Horiz. 1" = 200'
Vert. 1" = 20'



SKETCH MAP
OF
ROBERTS MTN. SLIDES

OREGON STATE HIGHWAY DIVISION

PACIFIC HIGHWAY (I-5)
DOUGLAS COUNTY



Looking southeasterly across the Eastside Cut Slide

July 1975

HISTORY OF ROBERTS MOUNTAIN SECTION

Initial grading on this alignment started 1954 for 4-lanes over the summit. Another contract for grading of flatter slopes was necessary before paving was finished in the fall of 1957. Mostly on the west side.

The fill slide (north) was counterbalanced in the 1957 grading contract.

Grading for the interstate highway was done in 1964 by widening on the west side. Slopes were made flatter with wide benches. On the eastside cut slope, removal of loose material was done by extra work order in the amount of $30,000.

In 1969, the grade was moved away from the fill slide on the north as much as 12-feet. Only 400 cy of excavation was required.

Some removal of debris has been done by maintenance from the eastside cut slide to clear the ditch and shoulder.

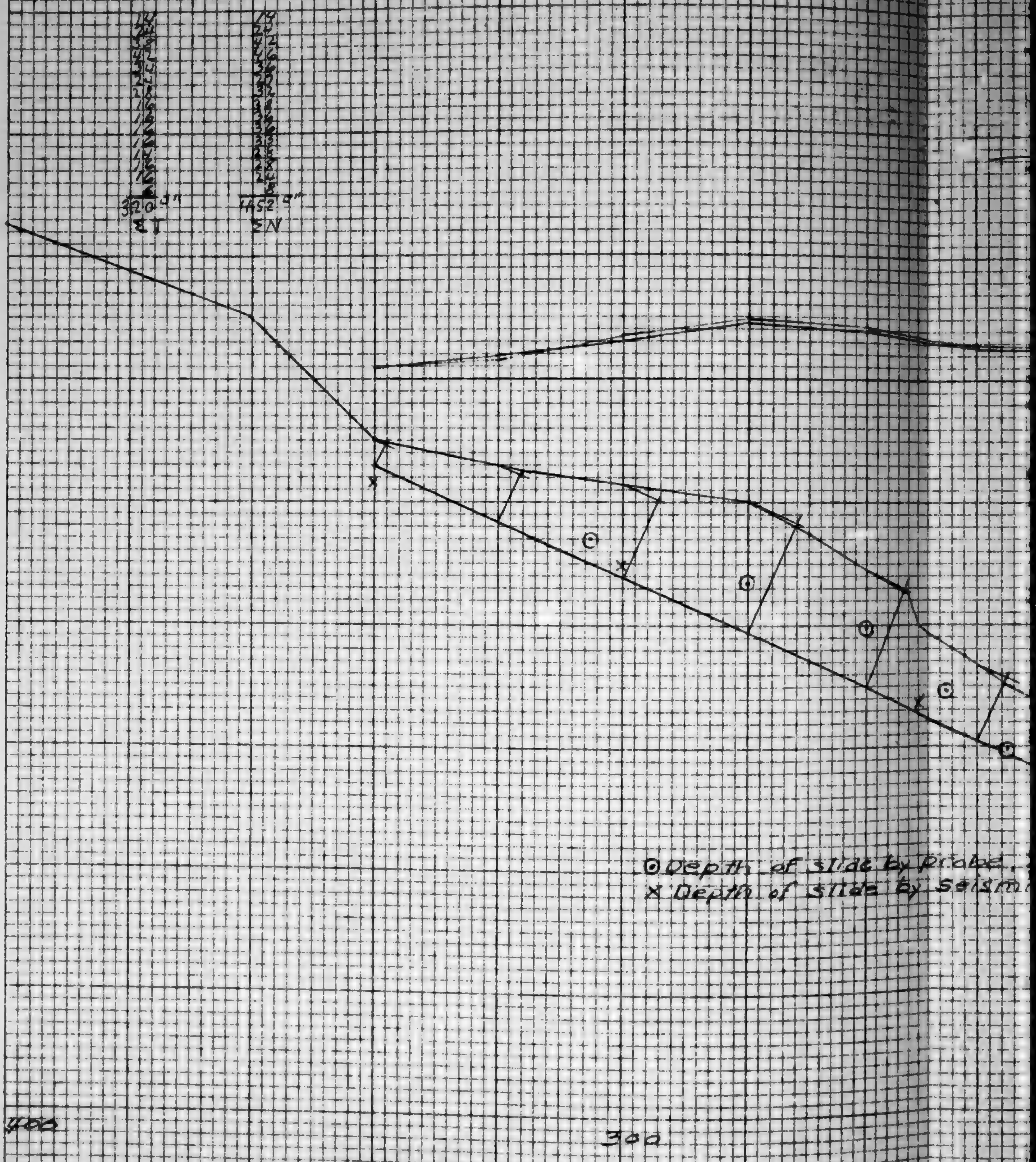
GEOLOGY

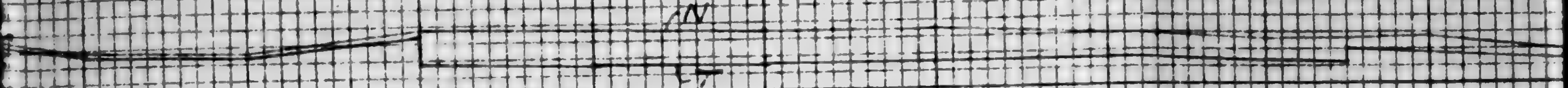
Rock-like graywacke (dark colored sandstone) is the rock type in the Roberts Mountain cut. It is part of a relatively old formation, three to five times or more older than the Columbia River basalt, as a comparison. It is highly fractured and somewhat sheared or crushed. Numerous slickensided surfaces are seen in the drill cores.

Given the history of development of new sliding with each new cut excavation, the slide triggering mechanism is rebound of former loading strain due to the unloading effect of excavation. Because the soil is rock-like (brittle), the rebound force is relieved by "breaking" of the mass on a plane surface (slide surface) rather than a yielding adjustment through several feet or more as would take place in plastic soil. Cracks and joints open up, fill with water when it is available, contributing hydraulic forces. Development of the sliding surface is aided by the presence of a number of slickensides which are residual from fault thrusting.

Probably the best prediction of what will happen if nothing is done to control the slides is that "what has been is what will be." If nothing is done, the creeping of the slides as has been experienced will continue and probably at about the same rate. If new cut slope excavations are made, new "breaking" can be expected. Stabilization of the existing slide masses is somewhat uncertain because adjacent yet unbroken masses may be developing sliding surfaces.

K+E 10 X 10 TO THE INCH
KEUFFEL & ESSER CO.
PRINTED IN U.S.A.
78100





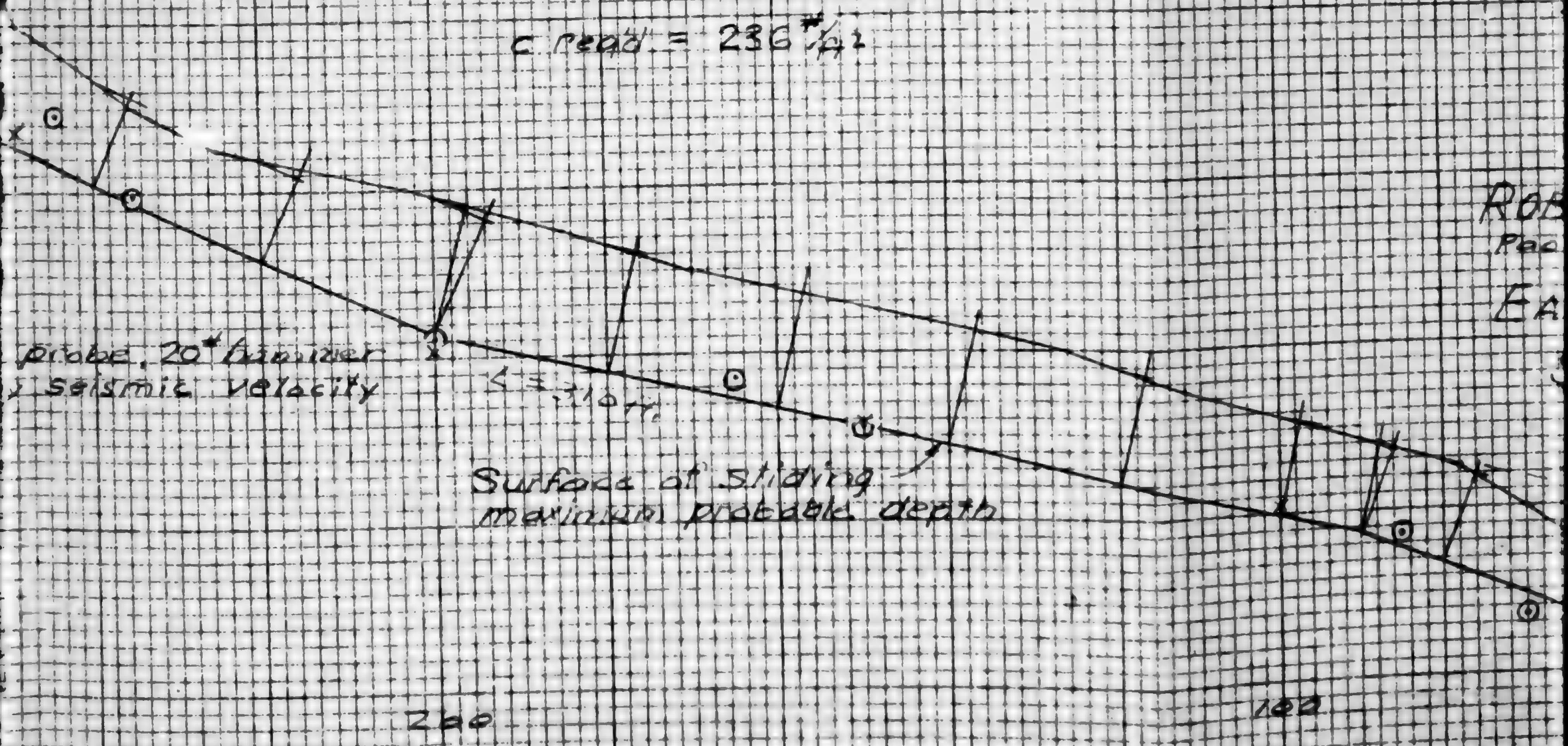
Let: tan φ = 0.4, and cL + ΣN tan φ = ΣT (existing sliding

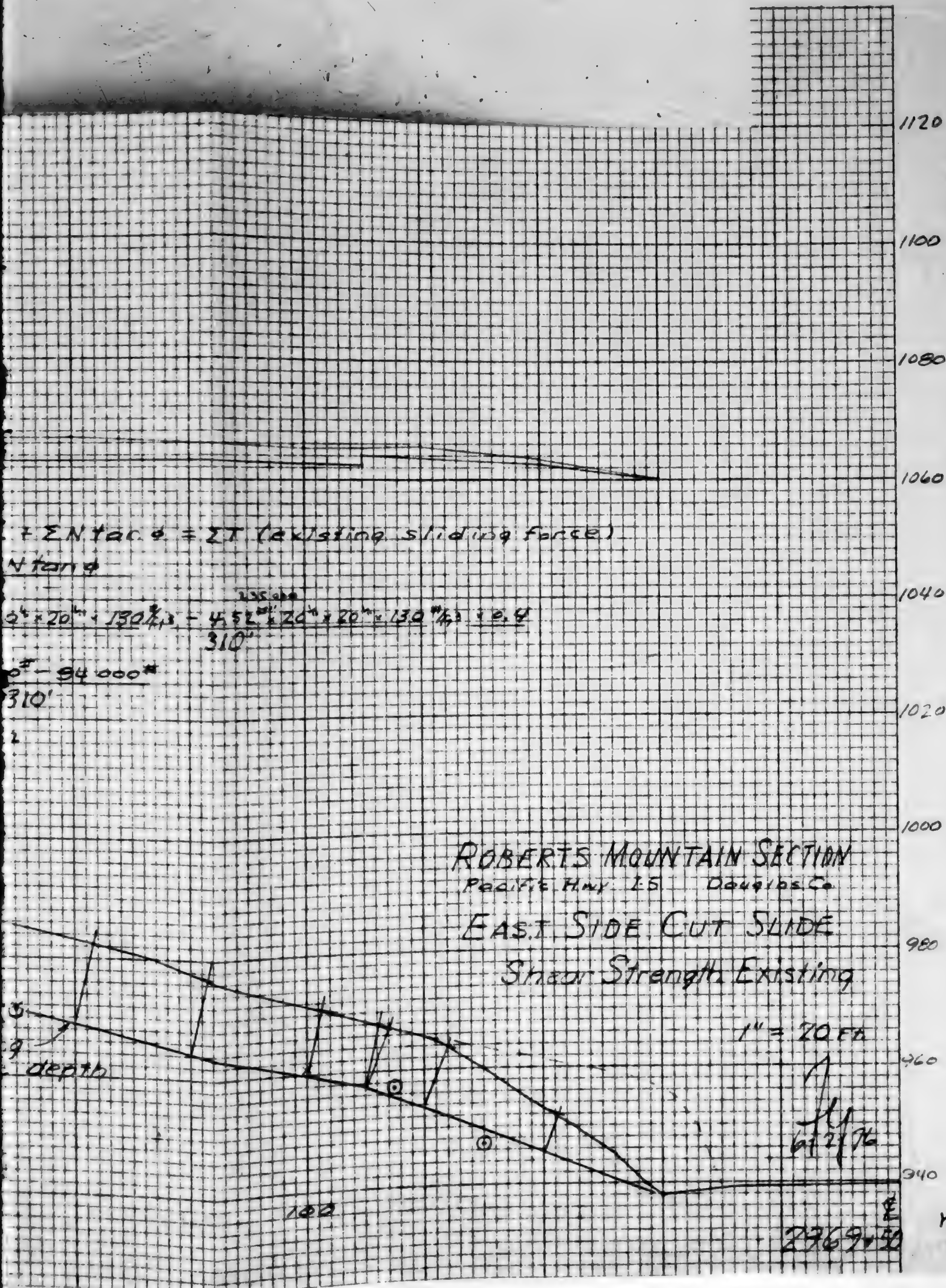
Then: $c_{reqd} = \frac{\Sigma T - \Sigma N \tan\phi}{L}$

$$= \frac{3.20^{k} \times 20' \times 20' \times 130^{\#}/_{ft^3} - \overset{235,000}{4.52^{k}} \times 20' \times 20' \times 130^{\#}/_{ft^3} \times 0.}{310'}$$

$$= \frac{167,000^{\#} - 94,000^{\#}}{310'}$$

$c_{reqd} = 236^{\#}/_{ft^2}$


probe. 20# hammer
& seismic velocity
L = 310 ft
Surface of sliding
maximum probable depth
200
100
ROB
Pac
EA


1120
1100
1080
1060
1040
1020
1000
980
960
940
5
9
depth
100
℄
2269+50

+ ΣN tan φ = ΣT (existing sliding force)

N tan φ

5' × 20' × 130#/ft³ − 235,000 4.52' × 20' × 20' × 13.0#/ft³ + 0.4

310'

0# − 94 000#

310'

2

ROBERTS MOUNTAIN SECTION

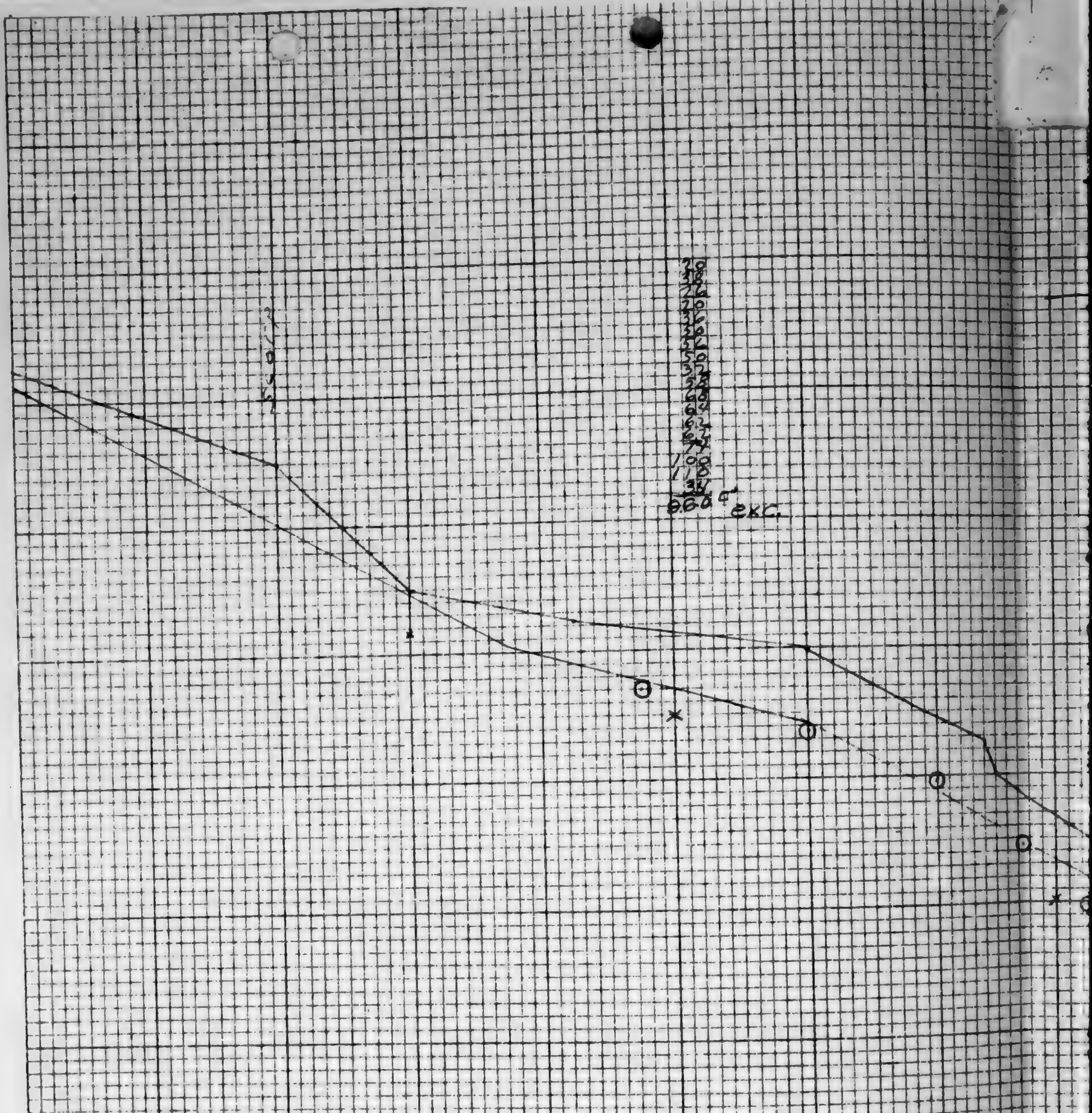
Pacific Hwy 25 Douglas Co

EAST SIDE CUT SLIDE

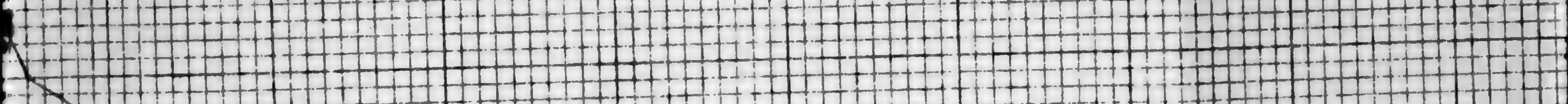
Shear Strength Existing

1" = 20 Ft

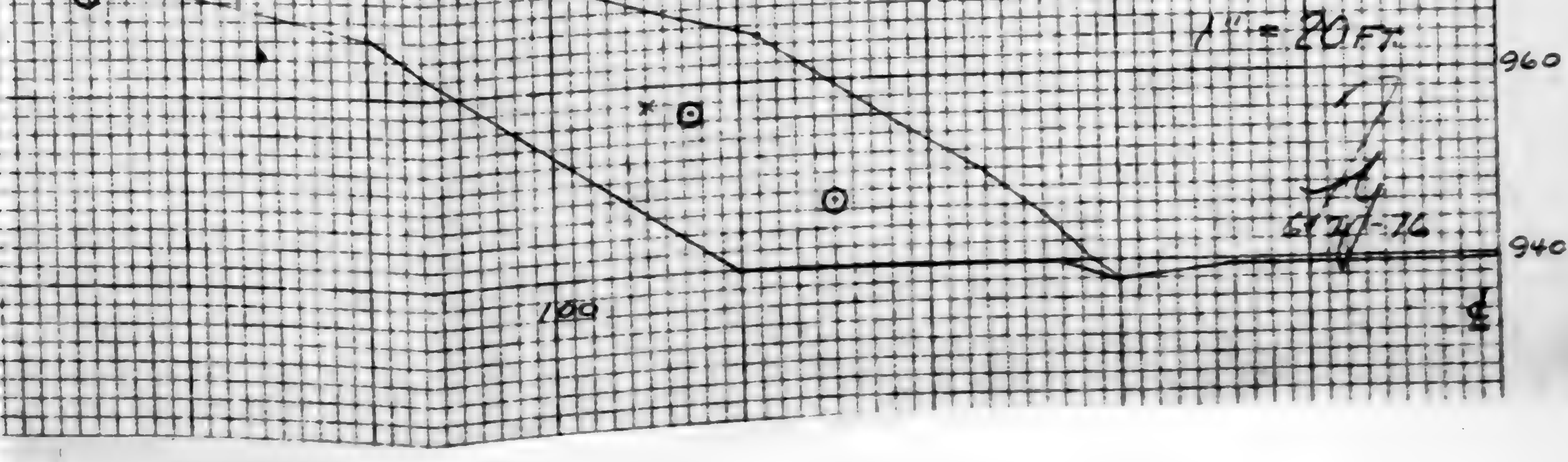
6/2/76


2.0
3.8
2.6
2.0
3.6
3.0
3.2
5.0
3.2
5.8
6.0
6.4
6.2
6.2
.74
1.00
1.18
.38
9.60
4 exc.
300

9.60' × 20' × 20' × 270 × 1/27 = 38.400 CY   38.400 × 1.75 = 67.200



C.Y. 38,400 × 1.75 = 67,200


1000
980
960
940
100
℄

ROBERTS MOUNTAIN SECTION
Pacific Hwy. I-5 Douglas Co.

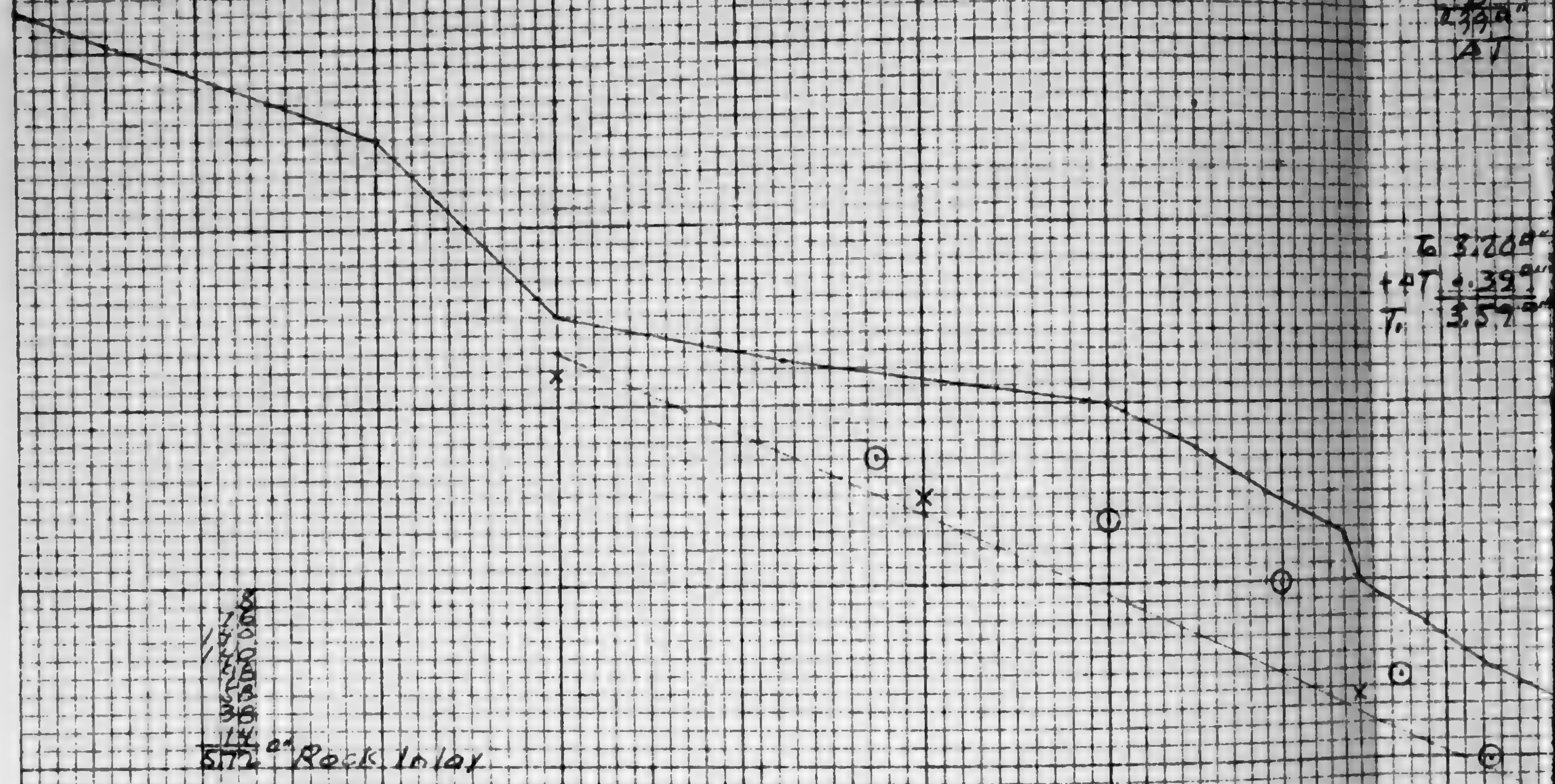
EAST SIDE CUT SLIDE

Slide Excavation

1" = 20 FT.

6-24-76

2
.14
.17
.17
.8
.8
-.8
-.8
2.33
AT



To 3.20
+4T .39
T. 3.59

.8
1.70
1.40
1.40
.58
.58
.36
.14
5.72 Rock Inlay

.40
.78
.76
.7
.65
.65
.4
4.34 Inlay exc.

4.34 × 20 × 20 × 270 × 1/27 = 17,400 CY excavation

5.72 × 20 × 20 × 270 × 1/27 = 23,000 CY rock inlay

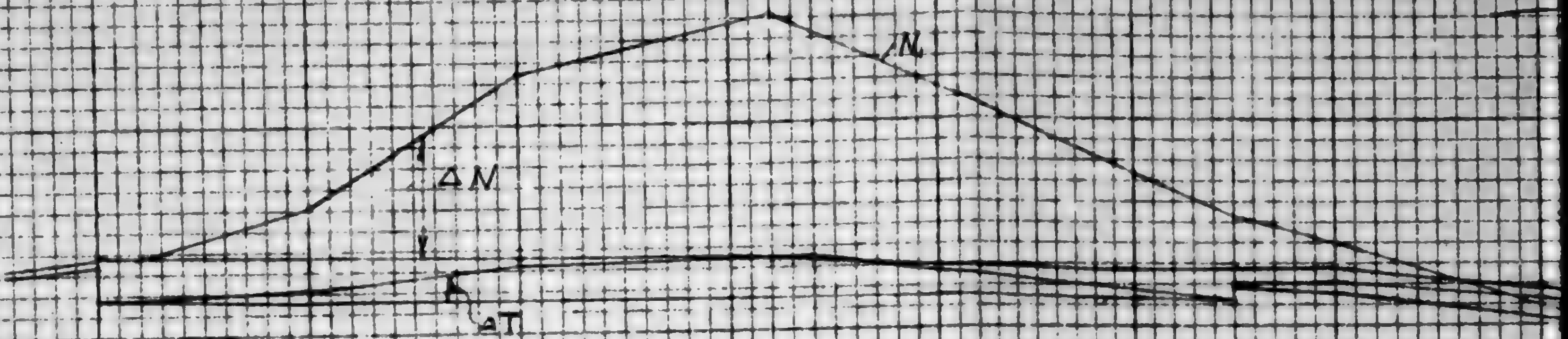
17,400 × 1.75 = 30,500
23,000 × 8.00 = 184,000
Haul Road 26,000
240,500

400

300

2
17
17
17
8
8
8
-8
-8
.39"
ΔT

9
56
100
124
106
28
3
-2
3.64"
ΔN



T 3.209"
ΔT 0.39"
3.59"

N 4.52"
ΔN 3.64"
N 8.16"

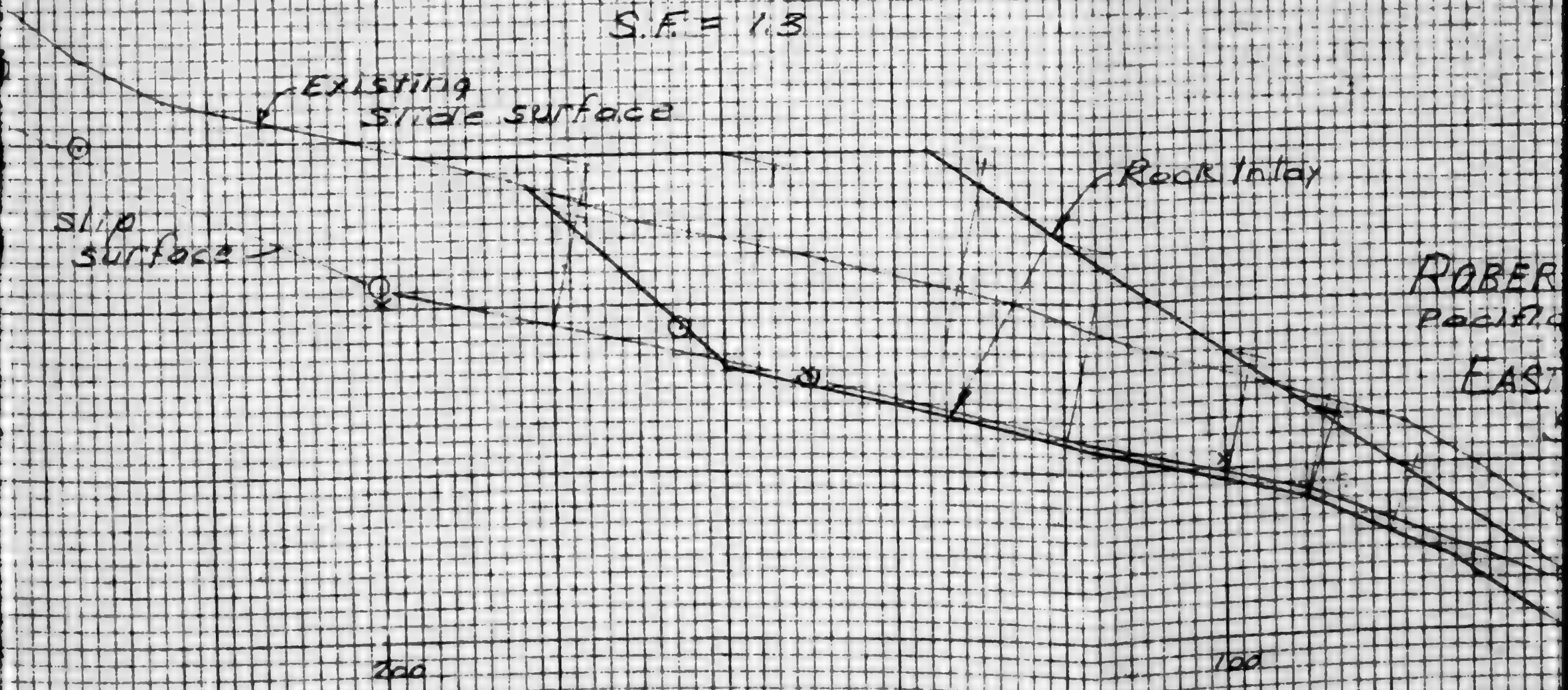
Let: $\tan\phi = 0.4$, $c = 236\,\#/ft^2$ (from slide analysis)

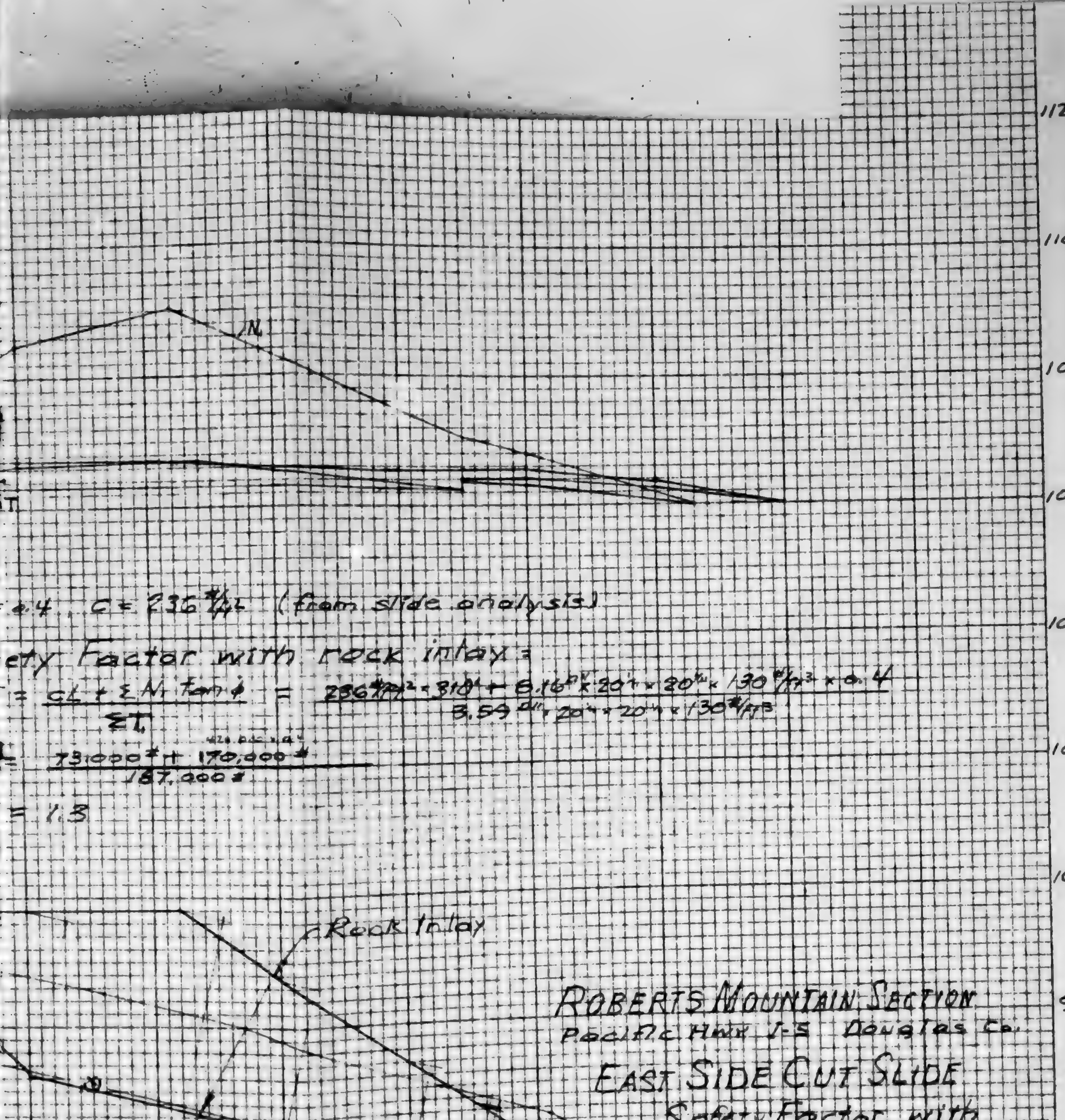
Then: Safety Factor with rock inlay =

$$S.F. = \frac{cL + \Sigma N_i \tan\phi}{\Sigma T} = \frac{236\#/ft^2 \times 318' + 8.16^{D''} \times 20' \times 2}{3.59^{D''} \times 20' \times 20'}$$

$$S.F. = \frac{73{,}000\# + \overset{426{,}000 \times 0.4}{170{,}000\#}}{187{,}000\#}$$

$$S.F. = 1.3$$


Existing
slide surface
Slip
surface →
Rock Inlay
200
100
ROBER
Pacific
EAST


1120
1100
N
1080
1060
1040
1020
1000
Rock Inlay
980
960
940
100
℄

$= 0.4$, $c = 236\ \#/ft^2$ (from slide analysis)

ety Factor with rock inlay =

$$= \frac{cL + \Sigma N_t \tan\phi}{\Sigma T_t} = \frac{236\#/ft^2 \times 310' + 8.16\,ft^2 \times 20' \times 20' \times 130\#/ft^3 \times 0.4}{3.59\,ft^2 \times 20' \times 20' \times 130\#/ft^3}$$

$$= \frac{73{,}000\# + \overset{424{,}000 \times 0.4}{170{,}000\#}}{187{,}000\#}$$

$= 1.3$

ROBERTS MOUNTAIN SECTION
Pacific Hwy I-5 Douglas Co.

EAST SIDE CUT SLIDE
Safety Factor with
Rock Inlay Buttress
1" = 20 Ft.

6-3-76

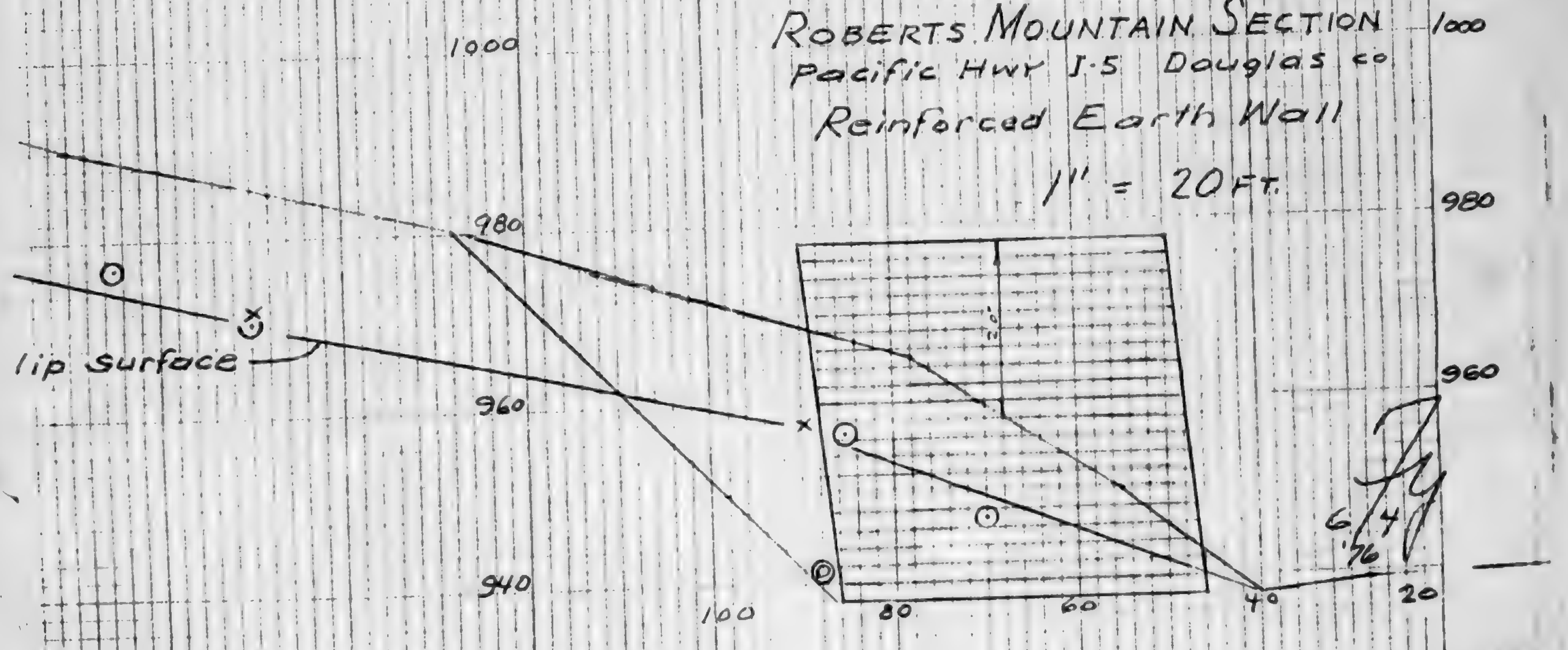
6
66
130
170
40
3.52□" excav.

3.52□" × 20' × 20' × 270 × 1/27 = 14,000 CY exc.

Additional backfill 40' × 20' × 270 × 1/27 = 8,000 CY

Total backfill 22,000 CY

Excavation	14,000 CY	× 1.75	=	24,500
Granular backfill	22,000 CY	× 6.00	=	132,000
Drain	320'	× 10.00	=	3,200
R.E. Wall	40 × 270 = 10800□'	× 16.00	=	173,000
			$	333,000



ROBERTS MOUNTAIN SECTION
Pacific Hwy I-5 Douglas co
Reinforced Earth Wall
1" = 20 FT.

1000
1000
980
980
960
960
940
lip surface
100
80
60
40
20
10'

6/4/76

INCH
ER CO.
751001

270'×40' = 10,000□' @ \$20 = \$200,000		\$216,00
0.4×1.5 = 0.6"×50×50×250×$\frac{1}{27}$ = 14.000 cy exc.	@ 1.75	24,50
.36×1.3 = 0.47"×50×50×250×$\frac{1}{27}$ = 11,000 cy rock inlay	@ 8.00	88,00
.75×.45 = .34 .4×.3 = .12 .46 ×50×50×250×$\frac{1}{27}$ = 11,000 cy common inlay	@ 2.00	22,00
20'×300'×3'×27 = 670 cy special drain sand	@ 10.00	670
300' perf pipe = 300'	@ 10.00	300
		\$ 360,00
Haul Road		26,00
		\$ 386,00

$\frac{1}{2}wh^2$

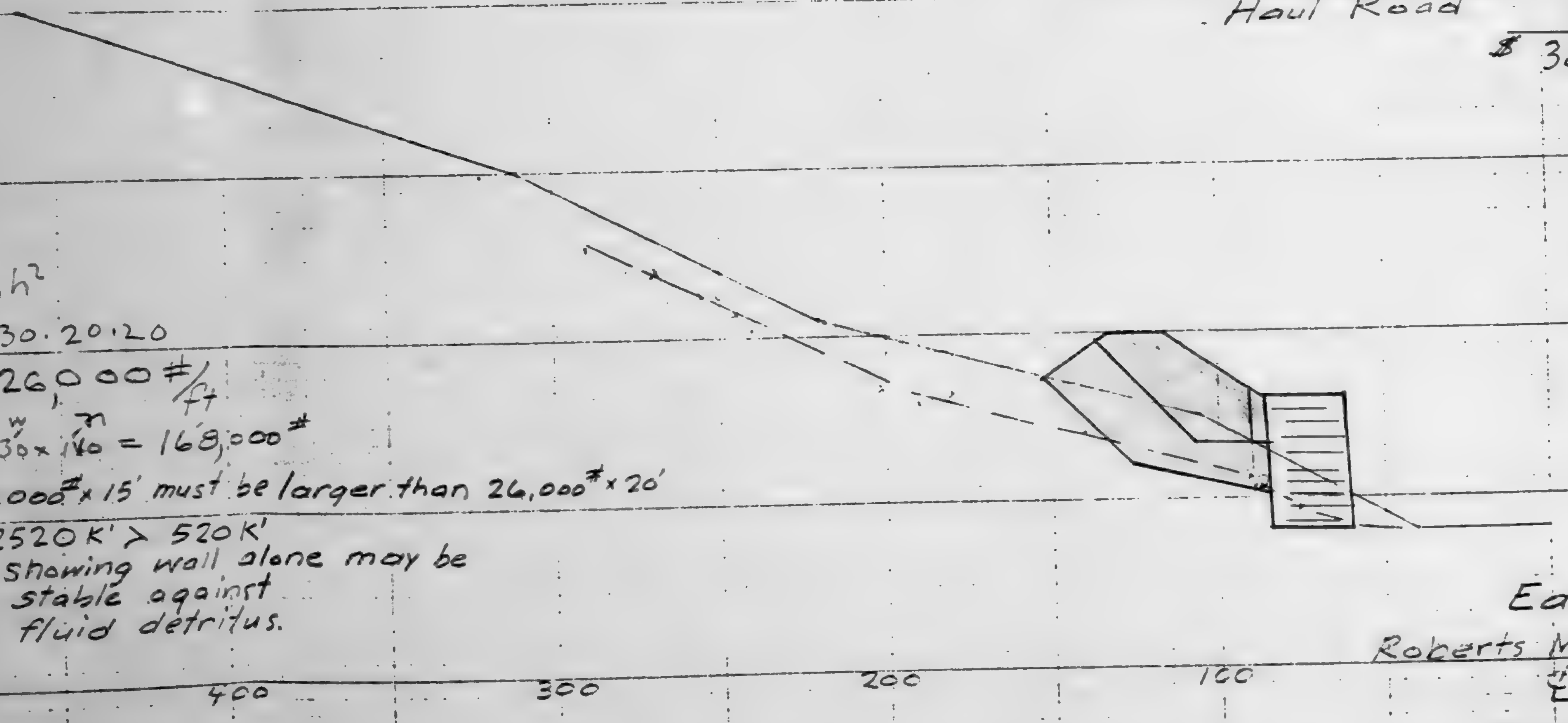
$\frac{1}{2}\cdot 130\cdot 20\cdot 20$

= 26,000#/ft

W $\overset{h}{40'}\times\overset{w}{30'}\times\overset{m}{140}$ = 168,000#

168.000#×15' must be larger than 26,000#×20'

2520K' > 520K'
showing wall alone may be
stable against
fluid detritus.



East S

Roberts Mounta

2968+5

270' x 40' = 10000 □' @ $20 = $200,000 $216,000

0.4 x 1.5 = 0.6" x 50 x 50 x 250 x $\frac{1}{27}$ = 14.000 cy exc. @ 1.75 24,500

.36 x 1.3 = 0.47" x 50 x 50 x 250 x $\frac{1}{27}$ = 11,000 cy rock inlay @ 8.00 88,000

.75 x .45 = .34
.4 x .3 = .12
.46 x 50 x 50 x 250 x $\frac{1}{27}$ = 11,000 cy common inlay @ 2.00 22,000

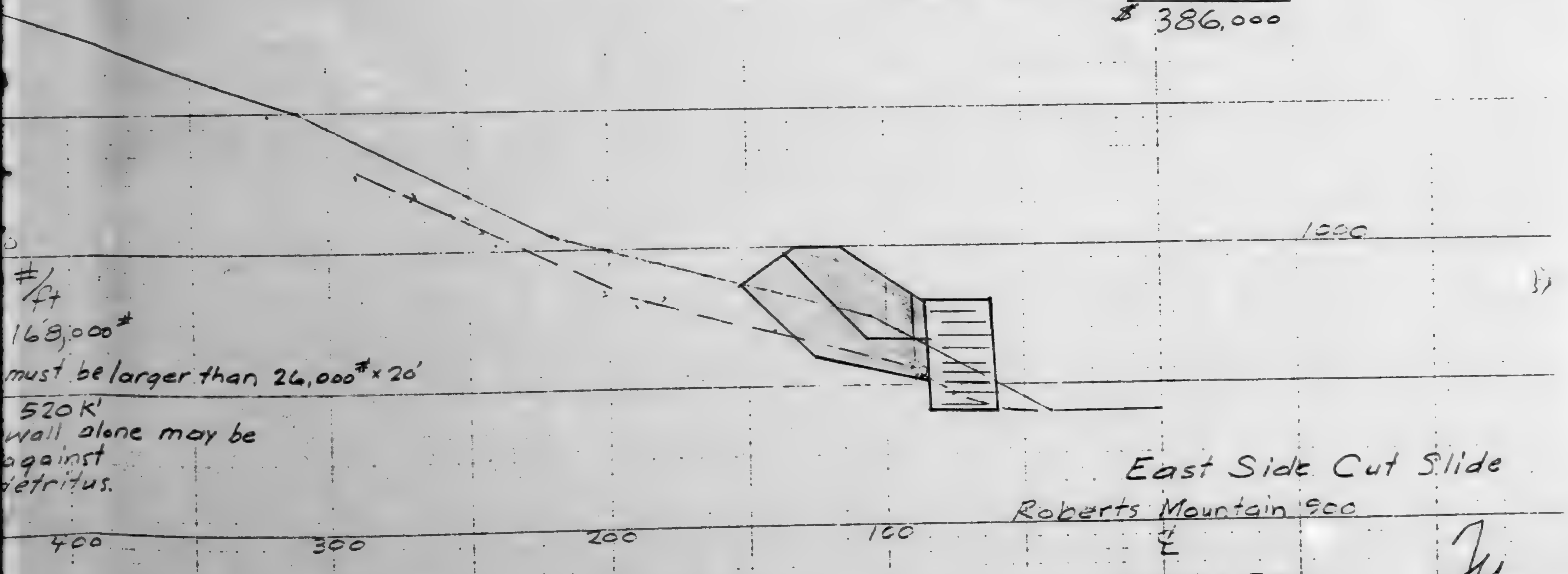
20' x 300' x 3' x $\frac{1}{27}$ = 670 cy special drain sand @ 10.00 6700

300' perf pipe = 300' @ 10.00 3000

$ 360,000 1100

Haul Road 26,000

$ 386,000



#/ft
168,000#
must be larger than 26,000# x 20'
520K'
wall alone may be
against
detritus.

East Side Cut Slide

Roberts Mountain 900

℄ 2968 + 50

5/16/76

H

GEOLOGIC DESCRIPTION of Roberts Mountain Formation

DOTHAN FORMATION

Original description: Diller, J. S., 1907, The Mesozoic sediments of southwestern Oregon: Am. Jour. Sci., 4th, vol. 23, p. 401-421.

Distribution: The Dothan Formation is fairly widespread in southwestern Oregon, forming a belt which averages approximately 10 miles in thickness and extends from the extreme southwestern corner of the state northeastward to a point immediately south of Roseburg. The type locality is located along Cow Creek in the Canyonville quadrangle.

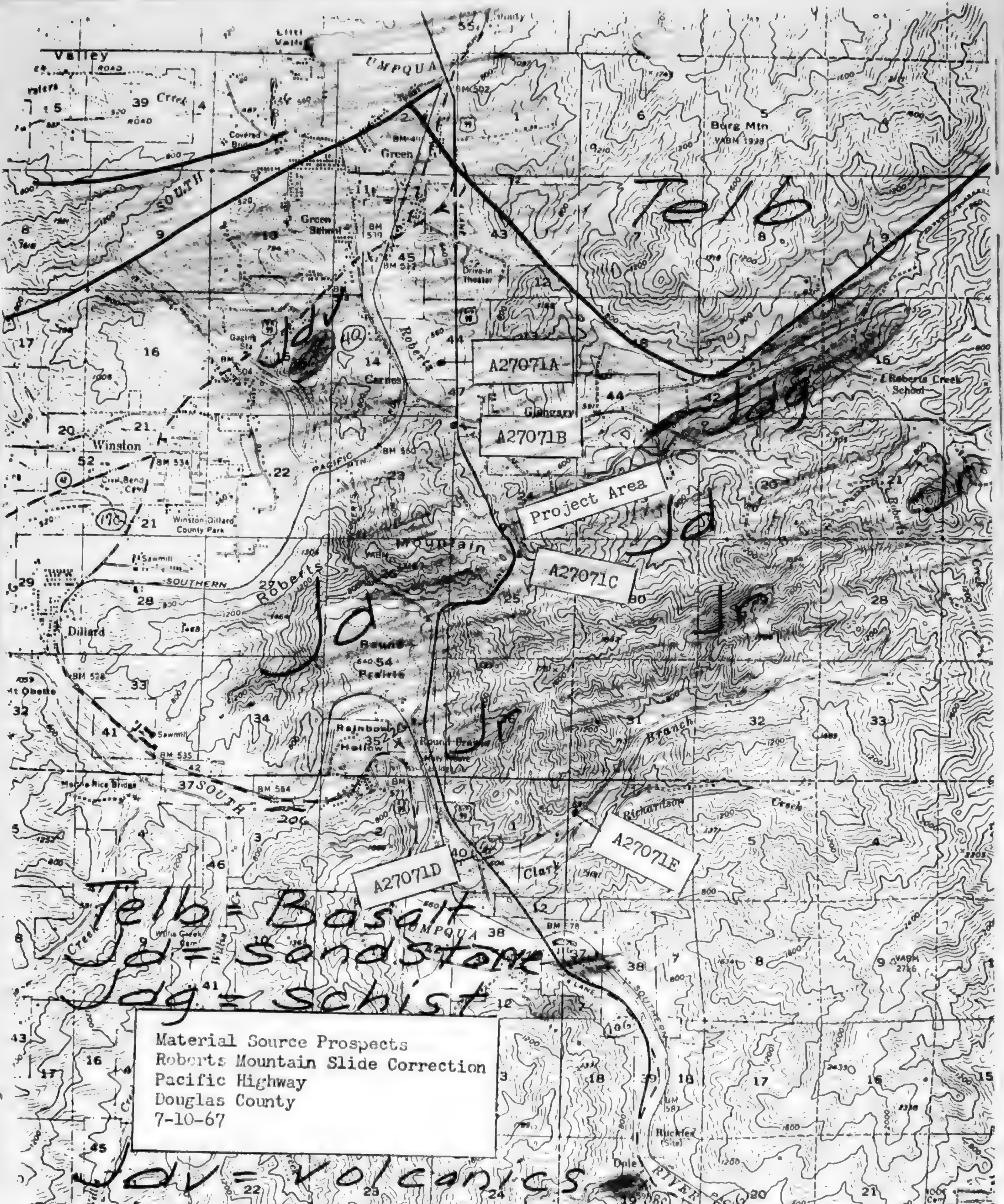
Lithology: The predominate rock type is a massive, well-indurated, medium-grained, poorly to moderately sorted lithic graywacke. Interbeds of dark gray to black mudstone are developed locally, and intercalations of red and white chert and dense pillow lavas altered to greenstone are present in places. Though the scarce conglomerates which make up part of the formation are generally composed of clasts of greenstone and chert, a few conglomerates composed of quartz-rich granitic cobbles have been reported (Dott, 1962). The over-all thickness of the unit is unclear, but must be on the order of several miles.

Structure and contacts: In a regional sense the Dothan Formation is thought to be a large thrust sheet which has been thrust under the older Rogue Formation to the east. In a more local sense the unit is fractured, riddled with quartz veins, steeply dipping and locally sheared especially along contacts with other units such as the Rogue Formation.

Age: The recent discovery of Buchia piochii in the Dothan indicates a Tithonian, (Portlandian-lower Purbeckian) post-Nevadan age for the unit. Other evidence favoring a post-Nevadan age includes the absence of intrusions, the presence [illegible] granitic cobbles, and a fairly high potassium feldspar content in the unit. Dott's (1965) radiometric age assignment of 149 M.Y. for the unit is effectively called into question by Hotz (1969), who considers the Dothan to be younger, and a northward extension of the lower part of the Franciscan Assemblage of California.

References:
Baldwin, 1969
Born, 1963
Dott, 1962
Dott, 1965
Hicks, 1964
Hixson, 1965
Hotz, 1969
Johnson, 1965
Ramp, 1969
Wells and others, 1949
Wells and others, 1953

E. M. Baldwin in Geology of Oregon, p 82, says, "Podlike masses of glaucophane schist, veined by albite and quartz and containing garnet and actinolite are present in shear zones in the Dothan and Galice formations. The pods are usually less than 200-feet in any dimension. They occur in sheared zones which obscure their relationship to the surrounding formations but they are thought to be metamorphic equivalents."


Valley
UMPQUA
SOUTH
Winston
Green
Green School
Roberts
Carnes
Glenbrook
Civil Bend
Winston-Dillard County Park
Sawmill
SOUTHERN
PACIFIC
Roberts
Mountain
Dillard
Round Prairie
Rainbow Hollow
Burg Mtn.
Roberts Creek School
Branch
Richardson
Creek
Clark
UMPQUA
RIVER
Ruckles
Dole
Myrtle Creek Sch
Telb
Jdv
Jdg
Jd
Jr
Jd
Jr
Jr
Jd
A27071A
A27071B
Project Area
A27071C
A27071D
A27071E

Telb = Basalt
Jd = Sandstone
Jdg = Schist

Material Source Prospects
Roberts Mountain Slide Correction
Pacific Highway
Douglas County
7-10-67

Jdv = volcanics
Jr = siltstone

9363 Form FHWA 121 (Rev. 5-73)

2

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
Box 300
Salem OR 97308

DATE: March 18, 1976

In reply refer to: 1041DB.3

SUBJECT: Oregon Project I-5-2(-)
Roberts Creek-Dillard Junction Section
Pacific Highway
Tied-back Retaining Wall

FROM : G. L. Green, Division Administrator

TO : Mr. F. B. Klaboe, Administrator & State Highway Engineer
Salem, Oregon

NOTED
E. S. HUNTER

I approve the general concept of constructing a tied-back retaining wall to arrest the fill slide just north of the Roberts Mountain summit as requested in Mr. Terpin's March 5, 1976 letter.

G.K. Hossner for
G. L. Green

RECEIVED
STATE HWY ENGR
MAR 19 '76
REFER TO
Terpin
FOR
Info ☐ Inves ☐ R/D ☐ D/R ☐ Sign ☐ Act ☑ File ☐

cy [illegible]

9363

I-5

FORM E-30

OREGON STATE HIGHWAY DIVISION

INTER-DEPARTMENT CORRESPONDENCE

Salem, Oregon
March 16, 1976

SUBJECT: Roberts Mountain Section
Widening of the Fill
on the South Side

To: Frank Terpin
Location Engineer

The effect of widening the subject fill on the stability of it has been investigated by eight drill holes and stability analysis using probable shear strength available revealed by them.

The analysis indicates that the fill is marginally stable as it is. Therefore, no widening should be done without counterbalancing by adding an equal or larger width of fill to the lower part of the fill.

F. W. Yarbrough
Soils & Geology Engineer

FWY:af

cc: J. H. Versteeg
A. Shirley

REFERRED TO

Beard
Reed
Cole
Sample
✓ Eriksen F.E.
Watson
Hager
Wolfe
Return Discuss Do File Copy Due
BY FINAL DESIGN ENGINEER

1 Versteeg ✓
Olson
2 Christensen Dbz
Scott
Swenson
Anderson
Trout

RECEIVED
MAR 17 1976
ROAD DESIGN SECTION

Requires Reply ☐
Requires Approval ☐
Receiver Keep ☐
Do not File ☐
Return To
Bring Up / /
Other

2
50
90
98
100
110
124
106
80
50
30
8

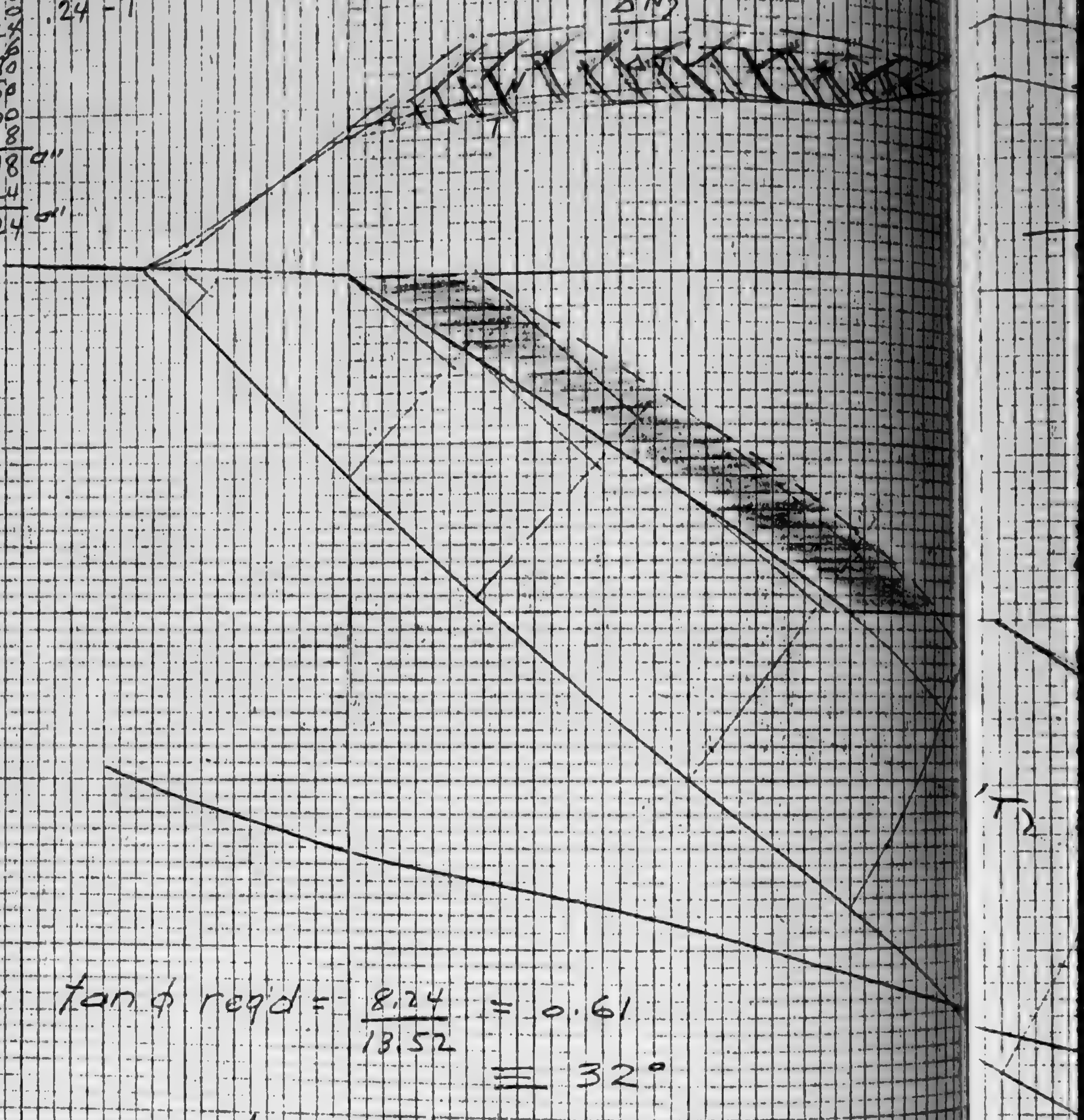
$+T\ 8.48\,\square''$

$-.24$

$\Sigma T = 8.24\,\square''$

.14
.10

$.24 - T$



2
50
48
106
102
120
156
148
126
110
128
114
62
30

$\Sigma N\ 13.52\,\square''$

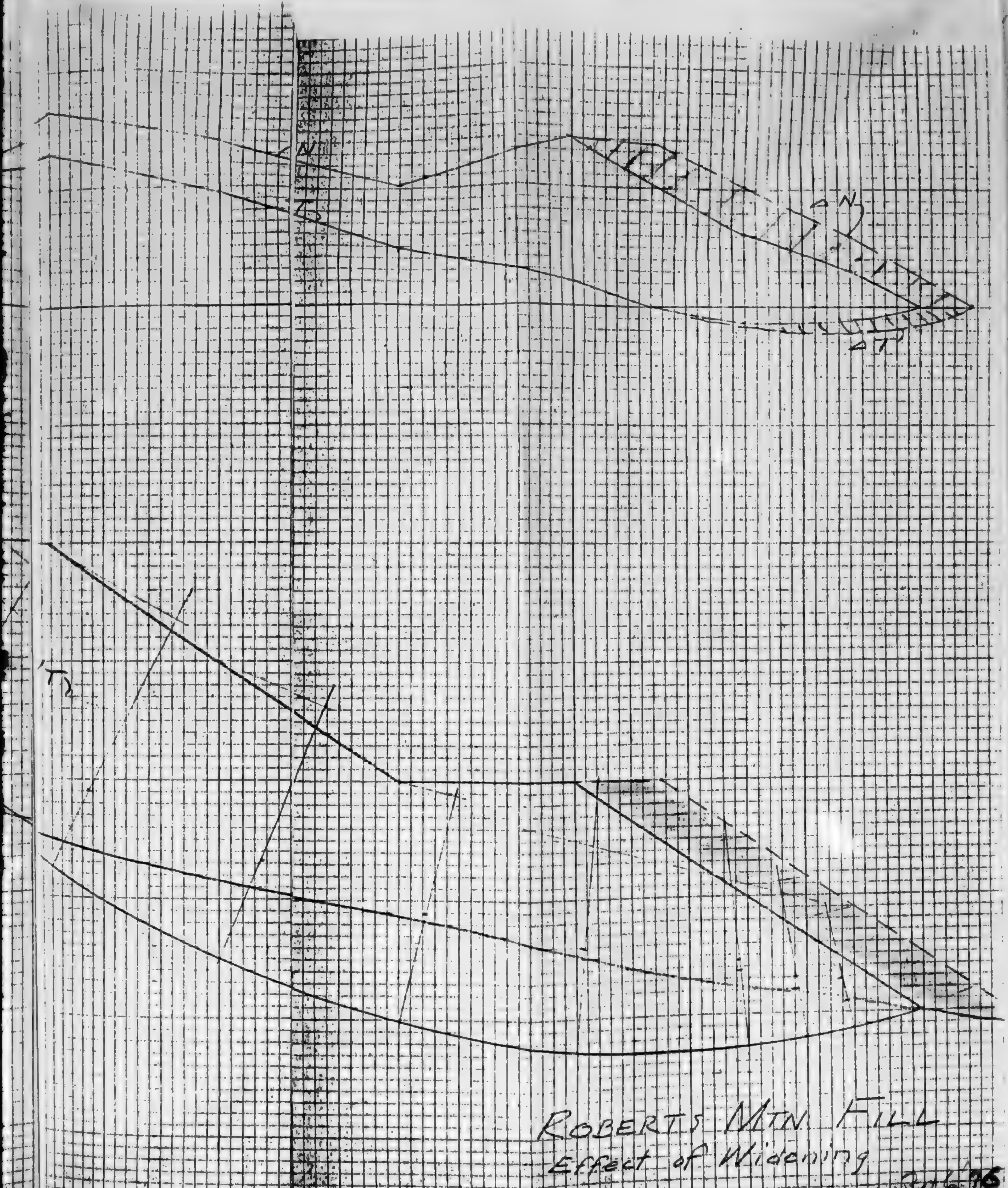
5

$$\tan\phi \text{ reqd} = \frac{8.24}{13.52} = 0.61$$

$$\equiv 32^\circ$$

some layers have 28° or less.

[illegible]


N1
T1
ΔN1
ΔT1
T2

ROBERTS MTN. FILL
Effect of Widening

2776

9363

1-5

1 Versteeg ✓
2 Olson [illegible]
3 Christensen [illegible]
Scott
Swonson
Anderson
Trout

RECEIVED
MAR 8 1976
ROAD
DESIGN
SECTION

Requires Reply ☐
Requires Approval ☐
Receiver Keep ☐
Do not File ☐
Return To
Bring Up / /
Other

March 5, 1976

Mr. Glenn Hossner
District Engineer
Federal Highway Administration
P. O. Box 300
Salem OR 97308

Dear Mr. Hossner:

Re: Roberts Creek-Dillard Jct Sec
Pacific Highway
Douglas County

I am sending you for your review and approval a proposal to construct a tied-back wall on the subject project to correct an embankment slide condition that has existed for several years. A safety and overlay project is being prepared and the work would be performed in conjunction with that project.

If you need additional information I will be happy to provide it.

Very truly yours,

Frank E. Terpin
Location Engineer

Enc.

FET:mc

bc J. H. Versteeg
W. J. Hart
F. W. Yarbrough
Alfred Shirley, Jr.

REFERRED TO
Beard Reed
Cole Sample
✓ Eriksen FE Watson
Hager Wolfe
[✓ Return] Discuss Do File Copy Due
BY FINAL DESIGN ENGINEER

9363

1-5

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

INTER-OFFICE CORRESPONDENCE

FILE:

Salem, Oregon
March 1, 1976

Duane O. Christensen

FROM: Duane O. Christensen
Final Design Engineer

SUBJECT: Roberts Creek-Dillard Junction Sec.
Pacific Highway
Douglas County

TO: MEMO TO THE FILES

A meeting was held on Friday, February 27, 1976, with the following in attendance to discuss the subject project:

Glenn Hossner	FHWA
Tom Lowe	FHWA
J. H. Versteeg	OSHD
F. E. Terpin	OSHD
D. O. Christensen	OSHD
F. W. Yarbrough	OSHD
F. Eriksen	OSHD

Versteeg ✓
Olson
Christensen
Scott
Swenson
Anderson
Trout
Eriksen F.E.

RECEIVED
MAR 1 1976
ROAD DESIGN SECTION

Requires Reply ☐
Requires Approval ☐
Receiver Keep ☐
Do not File ☐
Return To
Bring Up ____/____
Other

Proposed slide corrections along the west side of the highway at Station 2961+00 and along the east side of the highway at Station 2967+00 were discussed as to potential danger and data required for justification to obtain FHWA participation.

Two alternates were discussed for each location. Alternate one consisted of partial removal of the loose overburden, construction of a rack embankment and horizontal drains. Alternate two consisted of removal of loose material down to the slip plane.

It was determined that additional drill holes and analysis would be required by Mr. Yarbrough to enable him to determine a final design recommendation. Assuming this information substantiates previous findings Mr. Hossner felt that FHWA approval would be forthcoming.

Another slide area resulting in a vertical face along the east side of the highway at Station 2953+00 was briefly discussed. It is proposed that a tie back retaining wall be installed at this location. This was verbally approved by Mr. Hossner.

The modification of the northbound outside shoulder on the +6% grade to provide a 12 foot climbing lane was also discussed. Accident data from 1972 through 1975 shows 17 accidents northbound in this area. Slow moving vehicles are very probably contributors to these accidents. This modification can be accomplished without cutting into the existing hillside. Mr. Hossner and Mr. Lowe indicated that they would give preliminary approval subject to review of our formal submittal.

Possible modification of the southbound lanes to provide a sawtooth section between approximately Stations 2985+00 to 3010+00 was also discussed and will be studied further as to the feasibility and safety improvements obtained.

Frank Terpin agreed to have the needed foundation exploration and analysis made concerning the slide areas and the proposed sawtooth section and to assemble and forward it along with justification for the climbing lane to the FHWA by April 1, 1976.

Mr. Hossner indicated that we could expect an answer from the FHWA in about two weeks after they have received the material.

DOC:az
cc: Glenn Hossner, FHWA
J. H. Versteeg
F. E. Terpin
F. W. Yarbrough

9363

L.

FORM E-30

OREGON STATE HIGHWAY DIVISION
INTER-DEPARTMENT CORRESPONDENCE

ROSEBURG, OREGON 97470

RECEIVED
FEB 13 1976
LOCATION
SECTION

DATE January 19, 1976

TO Memo to the file

FROM Elliott Parker
Regional Engineering Geologist
by Peter Bowers Peter Bowers
Engineering Geologist

REFERRED TO Yarbrough
By Location Engineer
R.J. Versteeg
2/17

SUBJECT Roberts Mountain Section
Pacific Highway
Eastside Slide -
Exploration Summary and Recommendations

A field inspection report was submitted on December 23, 1976. A determination was made that evaluation of the slide area would necessarily have to be accomplished using seismic, surface, and probe data.

Evaluation has essentially been completed using the previously determined exploration tools. The information gained should be of considerable assistance in the determination and implementation of corrective action.

SEISMIC DATA

The results of the seismic survey conducted on December 3, 1975 have been received in this office. Seismic sections show the slide material to have a maximum thickness of about 20 feet, with the base appearing to be on approximately a 4:1 slope grading irregularly to 2.5:1 from about elevation 1043 to the ditch level.

PROBE DATA

Ten Penetration Test Holes were put down using a portable hammer driven probe with a 1" cone point, 20 lb. hammer, and an 18" drop. This probe is made to correlate the blow count directly with that of 2" spoons using a 140 lb. hammer and a 30" drop. (See attached P-Hole log sheets.)

The slide debris is a heterogenous mixture of fines, sand, and rock fragments. The blow count indicates this by the irregular rate of penetration. All probe holes were started by pushing in very soft and loose material to depths ranging from 2 feet to 10 feet then the hammer was used to go to refusal. Refusal in most cases was probably on top of large rock fragments and not bedrock.

SURFACE DATA

No accurate contour map of the subject area was available and

S W

17

control lines for location purposes were established using a Brunton Compass, Abney, and cloth tape. Control Line A, bearing approximately S72°E, is near the middle of the slide proper and Control Line B intersects Control Line A at right angles through Station A-5 near the upper limit.

The slide movement currently consists of breaking off at the head of the steep scarp on the easterly and southeasterly sides and slow flowage and tumbling in the rest of the body. This type movement is essentially surficial and requires a certain amount of water present to activate. Ample water is apparently available at certain times of the year and this coupled with the poor drainage tends to not only activate but to increase the length of time the flow remains active. The perimeter of the slide area has the shape of a fan with the feed material being slowly funneled into the main body of the slide. (See enclosed Plan Map and Sections.)

CONCLUSION AND RECOMMENDATIONS

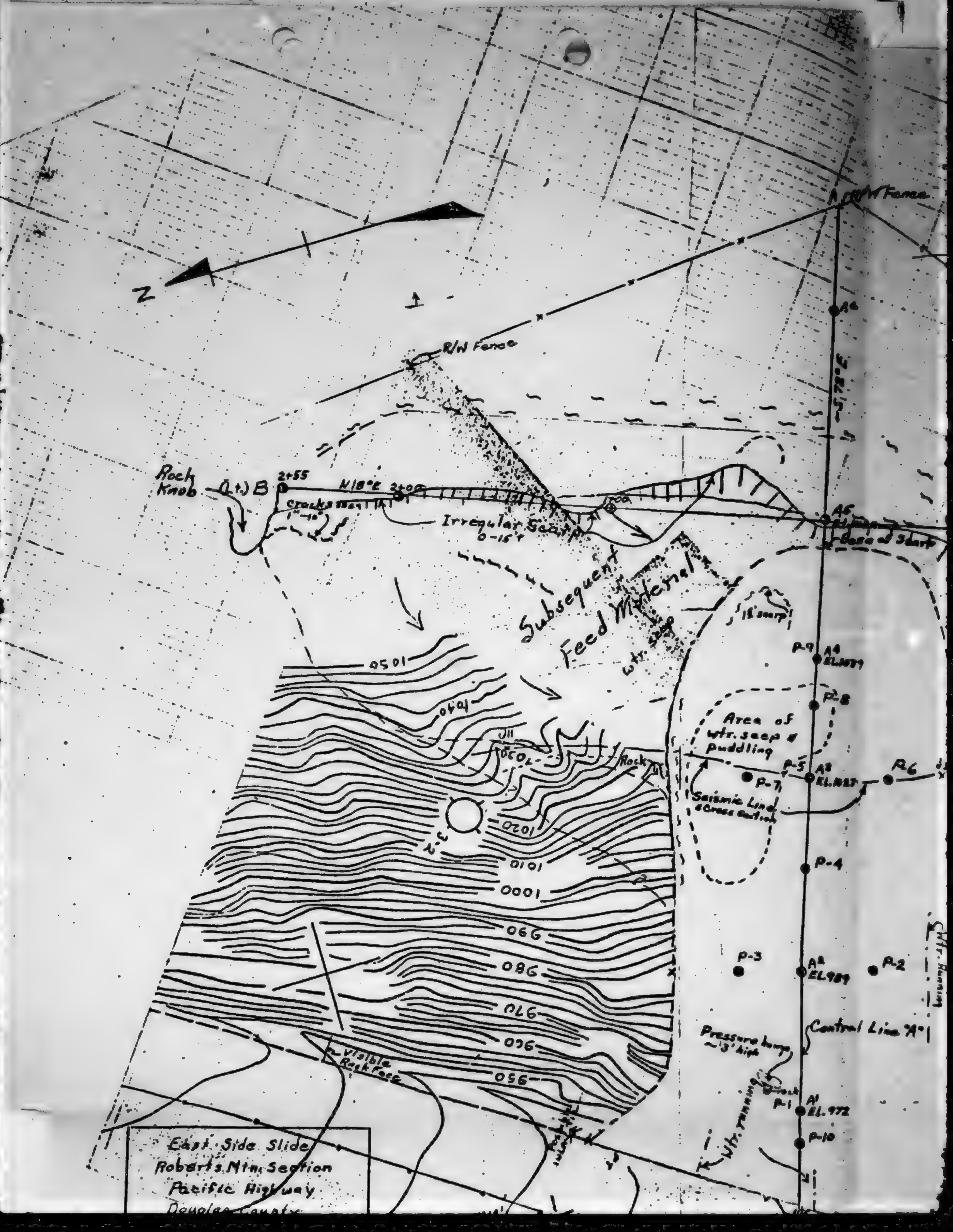
The problem area is believed to be, as previously noted, a debris slide in the upper portion developing into a mud flow as you advance toward the foot with movement mostly surficial.

No contour map of the subject area is available. Due to the relatively continuous slow expansion of the problem area and questionable scope of remedial action needed it is recommended an accurate survey map of the area be made.

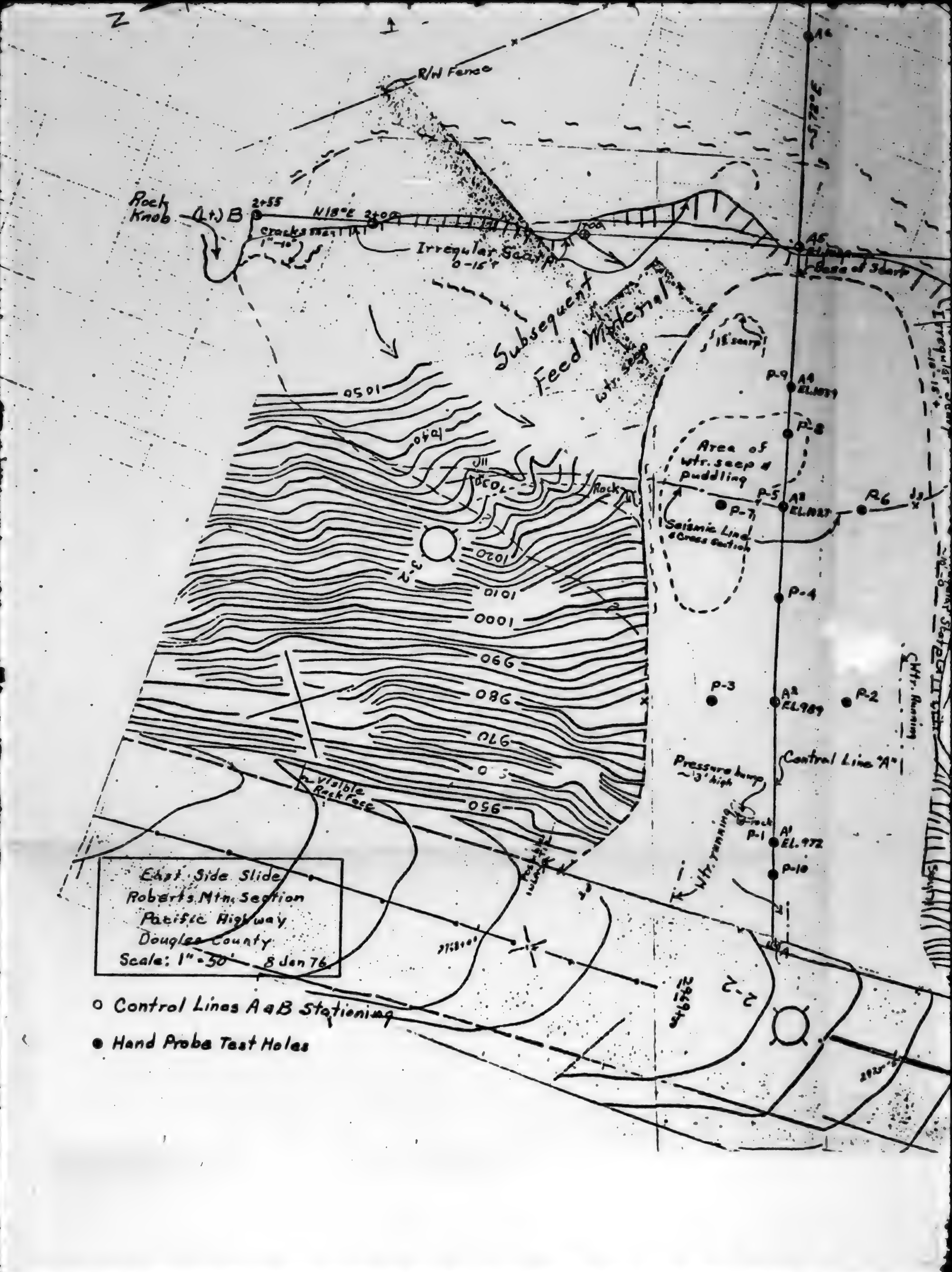
A study and integration of all available data indicates the following are needed to work toward stabilization:

1. Recontouring of affected area.
2. Improved Drainage.
3. Rock Inlay and Blanket.
4. Mulching and Seeding.

cc: C. T. Keasey
Frank Terpin
Al Bates


N
R/W Fence
R/W Fence
Rock Knob
(Lt.) B
2+55
N18°E
2+00
Cracks
1"–10"
Irregular Scarp
0–15'
Subsequent Feed Material
wtr. seep
15' scarp
A6
Base of Scarp
A4
S 78° E
P-9
A4
EL.1039
P-8
Area of wtr. seep & puddling
P-5
A3
EL.1037
P-7
P-6
Seismic Line & Cross Section
P-4
P-3
A2
EL.989
P-2
Wtr. Running
Control Line "A"
Pressure bump ~3' high
rock
P-1
A1
EL.972
P-10
Wtr. running
Visible Rock Face
Rock
1050
1040
1030
1020
1010
1000
990
980
970
960
950

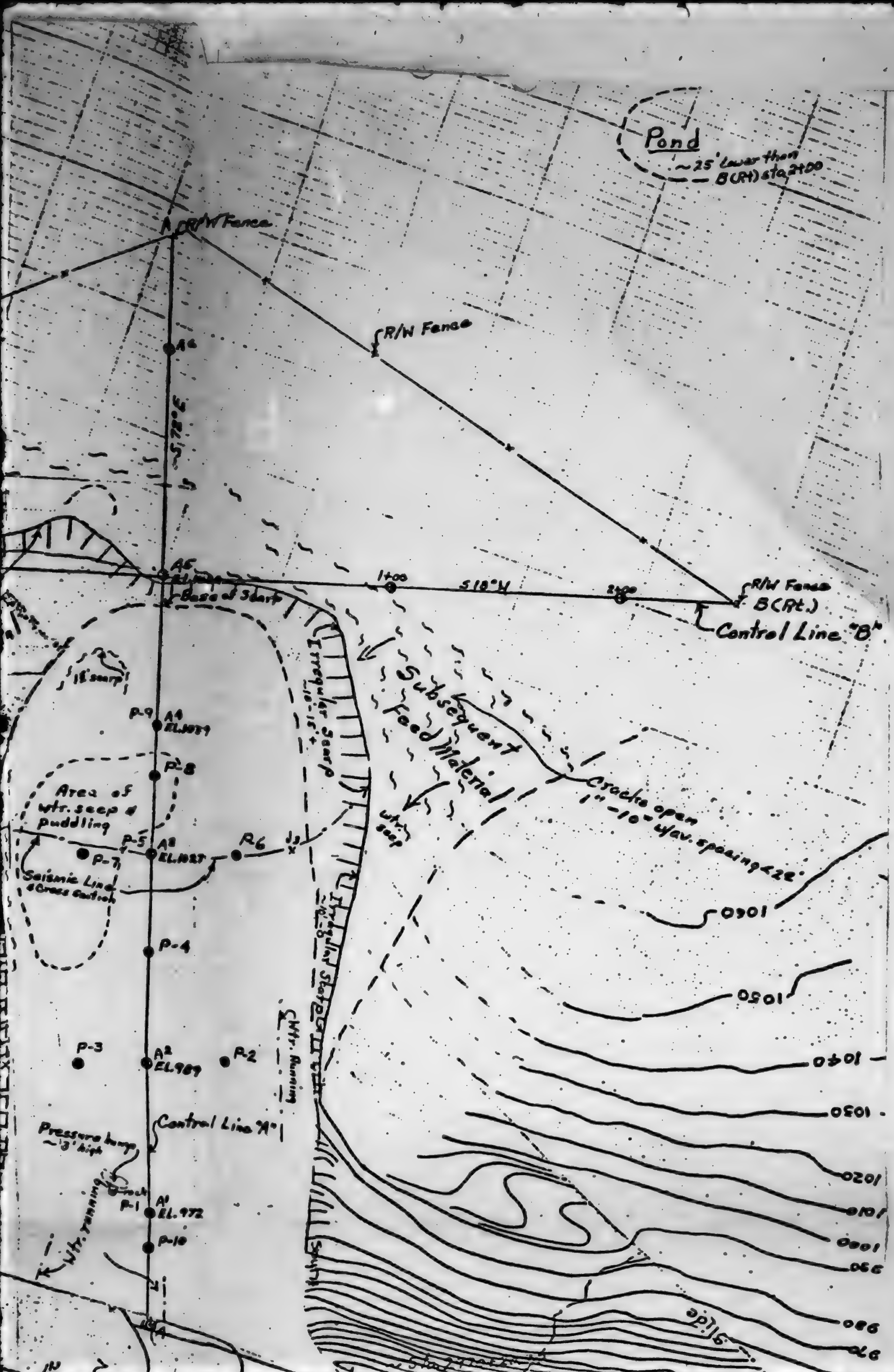
East Side Slide
Robert's Mtn. Section
Pacific Highway
Douglas County

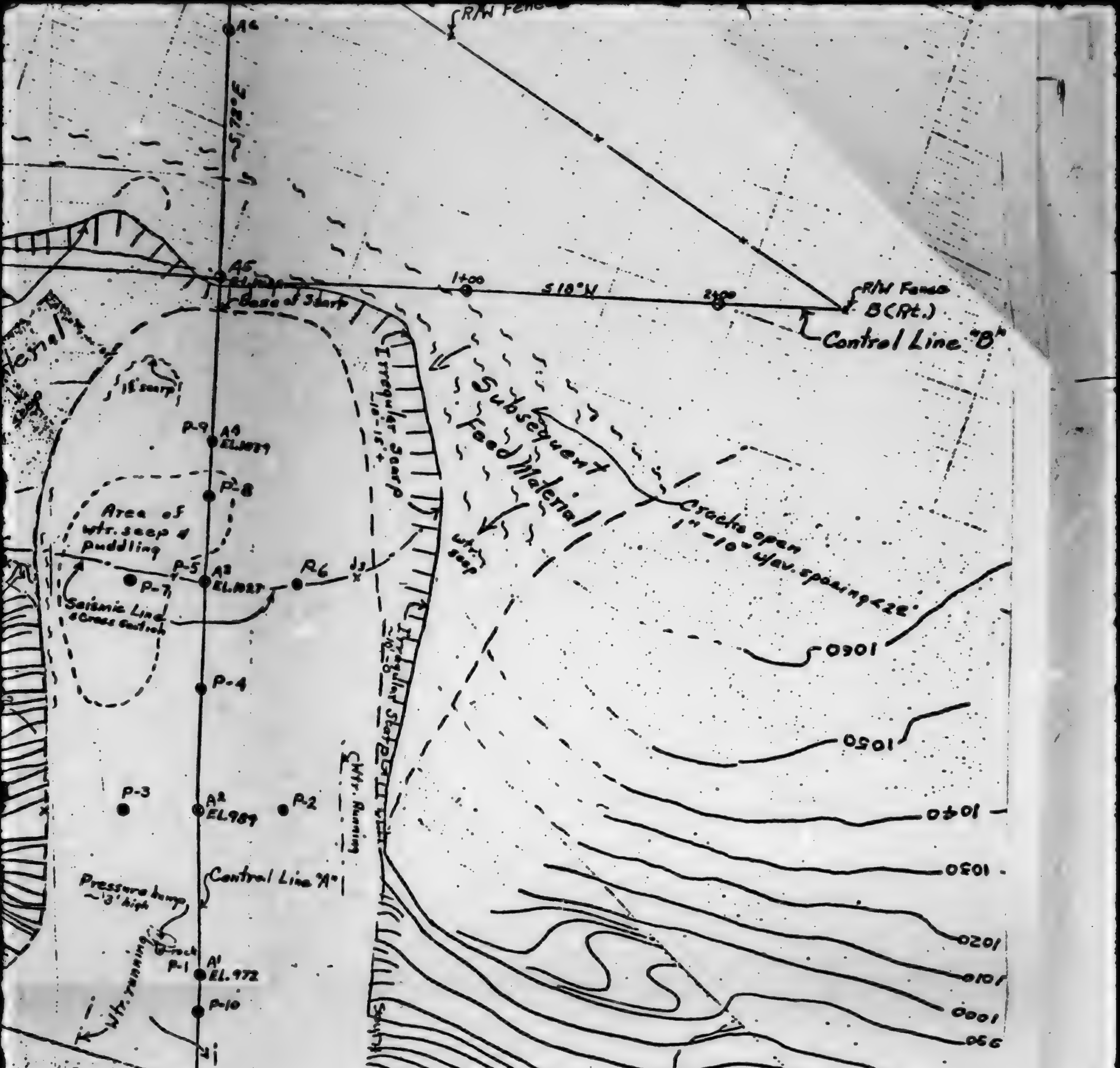

R/W Fence
Rock Knob
(Lt) B
2+55
N18°E
2+00
cracks
1"-10"
Irregular Scarp
0-15'
Subsequent Feed Material
wtr. seep
15' scarp
Base of Scarp
A6
A5
P-9
A4
EL.1039
P-8
Area of wtr. seep & puddling
P-5
A3
EL.1027
P-7
P-6
J1
J2
Rock
Seismic Line & Cross Section
P-4
P-3
A2
EL.989
P-2
Control Line "A"
Pressure bump ~3' high
rock
P-1
A1
EL.972
P-10
Wtr. running
Visible Rock Face
1050
1040
1030
1020
1010
1000
990
980
970
960
950
3-2
2-2
A
Irregular Scarp

East Side Slide
Robert's Mtn. Section
Pacific Highway
Douglas County
Scale: 1" = 50'
8 Jan 76

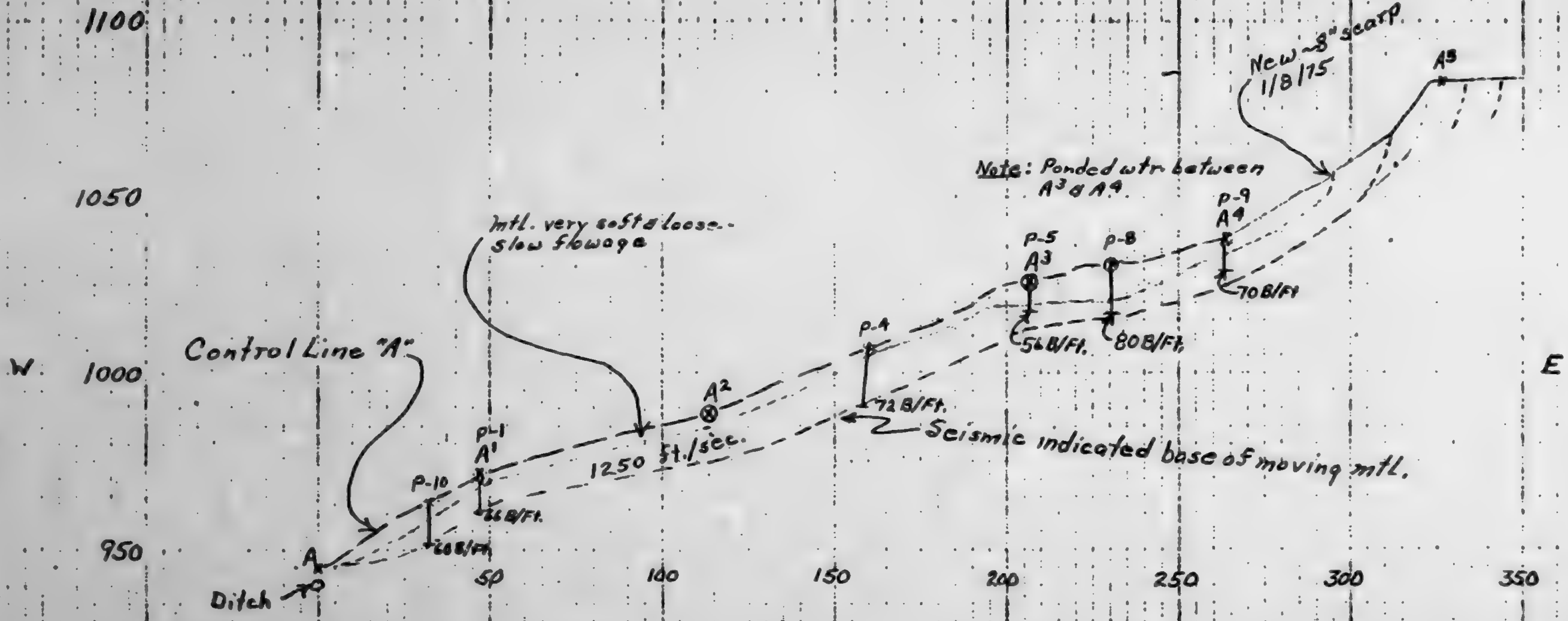
○ Control Lines A & B Stationing

● Hand Probe Test Holes


Pond
~25' Lower than B(Rt) sta 2+00
R/W Fence
R/W Fence
A6
S 7°E
A5
1+00
S 10° W
2+00
R/W Fence
B(Rt.)
Control Line "B"
Base of Scarp
15' scarp
Irregular Scarp 10'-15'±
Subsequent Feed Material
Cracks open 1"-10" w/av. spacing <22'
wtr. seep
P-9
A4
EL.1039
P-8
Area of wtr. seep & puddling
P-5
A3
EL.1027
P-6
J3
P-7
Seismic Line & Cross Section
P-4
Irregular Scarp 2'-8'
Wtr. Running
P-3
A2
EL.989
P-2
Control Line "A"
Pressure bump ~3' high
rock
Wtr. running
P-1
A1
EL.972
P-10
A
1060
1050
1040
1030
1020
1010
1000
990
980
970


R/W Fence
A6
S 12° E
A5
Base of Scarp
15' scarp
Irregular Scarp 10'-15'+
Irregular Scarp ~8'-10'
Subsequent Feed Material
wtr. seep
1+00
S 10° W
2+00
R/W Fence
B (Rt.)
Control Line "B"
Cracks open 1"-10" w/av. spacing < 20'
P-9
A4
EL.1029
P-8
Area of wtr. seep & puddling
P-5
A3
EL.1027
P-7
P-6
Seismic Line & Cross Section
P-4
P-3
A2
EL.989
P-2
Wtr. Running
Control Line "A"
Pressure bump ~3' high
Wtr. running
rock
P-1
A1
EL.972
P-10
A
Slide
1060
1050
1040
1030
1020
1010
1000
990
980
970
960
950
940
Plan Map

Control Line "A" Profile Section

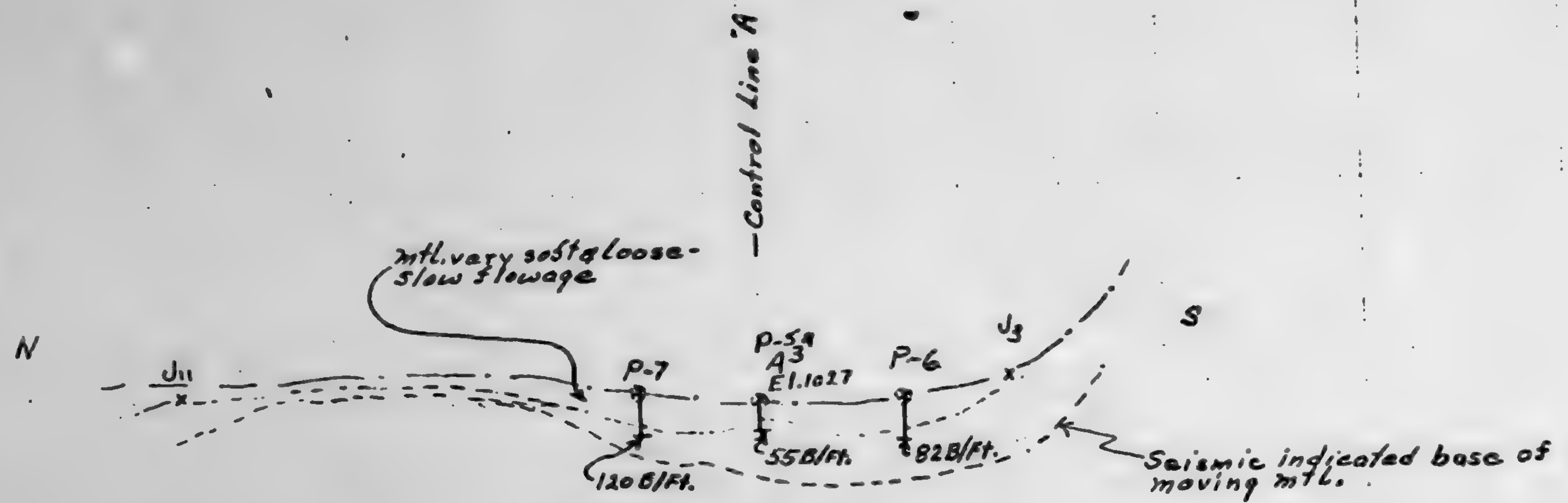

1100
1050
W
1000
950
Control Line "A"
Ditch
A
P-10
60B/Ft.
P-1
A'
26B/Ft.
Mtl. very soft & loose-
slow flowage
1250 ft./sec.
A²
P-4
72B/Ft.
Seismic indicated base of moving mtl.
P-5
A³
56B/Ft.
P-8
80B/Ft.
Note: Ponded wtr. between
A³ & A⁴.
P-9
A⁴
70B/Ft.
New ~8" scarp
1/8/75
A⁵
E
50
100
150
200
250
300
350

Hand Probe Holes w/
Depth & Blows/Foot @ Refusal.

Note: Control Profile Line "A" established
using Abney, Brunton, & Cloth Tape,
~S72°E

East Side Slide
Roberts Mtn. Section
Pacific Highway
Douglas County
Scale: 1" = 50'   8 Jan 76

A³ Cross Section


-Control Line "A"
mtl. very soft & loose - slow flowage
N
J11
P-7
P-5a
A3
El. 1027
P-6
J3
S
120 B/Ft.
55 B/Ft.
82 B/Ft.
Seismic indicated base of moving mtl.

Seismic Section

Hand Probe Holes w/
Depth & Blows/Foot @ Refusal

East Side Slide
Roberts Mtn. Section
Pacific Highway
Douglas County
Scale: 1" = 50'   15 Jan 76

Crew – BB, AM, & PB

Penetration Test w/Hand Probe:

(1" cone point, 20 lb. wt., & 18" drop – made to correlate w/Table for 140 lb. Hammer w/ 30" drop.)

Roberts Mtn. Section
Pacific Highway
Eastside Cut Slide (Sta. 2965+38 – 2970+20)

* P-Holes Located from Control Line "A"

P-1 (Loc. @ Sta A¹)

Depth	Blow Count	
$0^{\underline{0}}-2^{\underline{5}}$	Push	very soft & loose
$2^{\underline{5}}-3^{\underline{0}}$	4	soft & loose
$3^{\underline{0}}-4^{\underline{0}}$	8	"
$4^{\underline{0}}-5^{\underline{0}}$	7	"
$5^{\underline{0}}-6^{\underline{0}}$	16	med. compact
$6^{\underline{0}}-7^{\underline{0}}$	17	"
$7^{\underline{0}}-8^{\underline{0}}$	32	Compact
$8^{\underline{0}}-9^{\underline{0}}$	21	med. compact
$9^{\underline{0}}-10^{\underline{0}}$	19	"
$10^{\underline{0}}-10^{\underline{5}}$	33 - Refusal	very compact & Hard

P-2 (32' Rt. of Sta A²)

Depth	Blow Count	
$0^{\underline{0}}-3^{\underline{0}}$	Push	very soft & loose
$3^{\underline{0}}-4^{\underline{0}}$	2	Soft & loose
$4^{\underline{0}}-5^{\underline{0}}$	7	"
$5^{\underline{0}}-6^{\underline{0}}$	38	Compact
$6^{\underline{0}}-7^{\underline{0}}$	22	med. compact
$7^{\underline{0}}-8^{\underline{0}}$	21	"
$8^{\underline{0}}-9^{\underline{0}}$	50	very compact & Hard
$9^{\underline{0}}-10^{\underline{0}}$	36	Compact
$10^{\underline{0}}-11^{\underline{0}}$	54	very compact & Hard
$11^{\underline{0}}-12^{\underline{0}}$	34	Compact
$12^{\underline{0}}-12^{\underline{5}}$	46 - Refusal	V. compact & Hard

P-3 (30' Lt. of Sta A²)

Depth	Blow Count	
$0^{\underline{0}}-4^{\underline{0}}$	Push	very soft & loose.
$4^{\underline{0}}-5^{\underline{0}}$	17	med. compact - Loose
$5^{\underline{0}}-6^{\underline{0}}$	15	Loose
$6^{\underline{0}}-7^{\underline{0}}$	28	med. compact
$7^{\underline{0}}-8^{\underline{0}}$	26	"
$8^{\underline{0}}-9^{\underline{0}}$	26	"
$9^{\underline{0}}-10^{\underline{0}}$	25	"
$10^{\underline{0}}-11^{\underline{0}}$	36	Compact
$11^{\underline{0}}-12^{\underline{0}}$	25	med. Compact
$12^{\underline{0}}-13^{\underline{0}}$	32	Compact
$13^{\underline{0}}-14^{\underline{0}}$	40	"

- Hole stopped due to probe started working downhill.

Crew - BB, AM, & PB

[illegible]etration Test w/Hand Probe

(1" cone point, 20lb. wt., & 18" drop-mac
to correlate w/Table for 140lb. Hammer
30" drop.)

Roberts Mtn. Section
Pacific Highway
Eastside Cut Slide

* P-Holes Located from Control Line "A"

P-4 (A^{2}+50' on Line)

Depth	Blow Count	
$0^{0}-2^{0}$	Push	very soft & loose
$2^{0}-3^{0}$	24	med. compact
$3^{0}-4^{0}$	15	Loose
$4^{0}-5^{0}$	13	"
$5^{0}-6^{0}$	19	med. compact
$6^{0}-7^{0}$	13	Loose
$7^{0}-8^{0}$	16	med. compact
$8^{0}-9^{0}$	19	"
$9^{0}-10^{0}$	17	"
$10^{0}-11^{0}$	28	"
$11^{0}-12^{0}$	36	compact
$12^{0}-13^{0}$	41	"
$13^{0}-14^{0}$	47	"
$14^{0}-15^{0}$	27	med. compact
$15^{0}-16^{0}$	54	very compact & Hard
$16^{0}-16^{8}$	48 Refusal	"

P-6 (38' Rt. of sta A^{3})

Depth	Blow Count	
$0^{0}-7^{5}$	Push	very soft & Loose
$7^{5}-8^{0}$	19	compact
$8^{0}-9^{0}$	31	"
$9^{0}-10^{0}$	60	very compact & Hard
$10^{0}-10^{5}$	41 Refusal	"

* Tool wet on btm. 2 feet.

P-5 (Loc. @ sta. A^{3})

Depth	Blow Count	
$0^{0}-4^{0}$	Push	very soft & loose
$4^{0}-5^{0}$	17	med. compact
$5^{0}-6^{0}$	17	"
$6^{0}-7^{0}$	18	"
$7^{0}-7^{9}$	50	very compact & Hard

* Refusal - probably on rock frag.

P-7 (30' Lt. of Sta. A^{3}) EL. +3

Depth	Blow Count	
$0^{0}-7^{5}$	Push	very soft & loose
$7^{5}-8^{0}$	11	med. compact
$8^{0}-9^{0}$	24	"
$9^{0}-10^{0}$	56	very compact & Hard
$10^{0}-10^{3}$	40 - Refusal	"

P-8 (A^{3}+25' on Line) EL. +5^{0}

Depth	Blow Count	
$0^{0}-10^{0}$	Push	very soft & loose
$10^{0}-11^{0}$	49	compact
$11^{0}-12^{0}$	15	Loose
$12^{0}-13^{0}$	23	med. compact
$13^{0}-13^{5}$	40 - Refusal	very compact & Hard

* Tool wet on btm. 5 feet.

Tuesday - 13 Jan 16
Cre: BB, AM, & PB
Penetration Test w/Hand Probe:
(1" cone point, 20 lb. wt., & 18" drop - made to correlate w/Table for 140 lb. Hamme 30" drop)

Roberts Mtn. Section
Pacific Highway
Eastside Cut Slide

* P-Holes located from Control Line "A"

P-9 (Loc. @ sta. A^{4})

Depth	Blow Count	
$0^{0}-3^{7}$	Push	very soft & loose
$3^{7}-4^{0}$	7	med. compact
$4^{0}-5^{0}$	11	Loose
$5^{0}-6^{0}$	26	med. compact
$6^{0}-7^{0}$	24	"
$7^{0}-8^{0}$	14	Loose
$8^{0}-8^{6}$	42 - Refusal.	very compact & Hard

P-10 (15' back on line from sta. A')

Depth	Blow Count	
$0^{0}-4^{5}$	Push	very soft & loose
$4^{5}-5^{0}$	12 (on rock frag)	med. Comp
$5^{0}-6^{0}$	7	soft & loose
$6^{0}-7^{0}$	4	"
$7^{0}-8^{0}$	10	"
$8^{0}-9^{0}$	8	"
$9^{0}-10^{0}$	8	"
$10^{0}-11^{0}$	13	Loose
$11^{0}-12^{0}$	14	"
$12^{0}-12^{7}$	40-Refusal-	V. compact & Hard

Form E-80—10M—8-88

Tested
6 . . 53

OREGON STATE HIGHWAY DEPARTMENT
Materials Division

Laboratory Report

Project	**Shady Point-Myrtle Creek**	Prefix No.	**10-1410**
Highway	**Pacific**	County	**Douglas**
Contractor		F. A. Project No.	
Submitted by	**J. A. Rowland**	Date reported	**June 4, 1953**

Contract No.

REPORT ON SAMPLE OF SOIL

Source of material	**Hole #14, Sta. ~~P2 184, 100' Rt.~~**		
Sampled at	**Depth 0-14** 298+25, 60' L—	Date received	**April 20, 1953**
To be used	**Cut Section**	Quantity represented	
Sampled by	**Fields**	Type of Material	**Soil**
Laboratory No.	**305260**	Sample No.	
Data Sheet No.	**A-25928**		

TEST RESULTS

SOIL ANALYSIS:

LL	42	%
PI	23	%
FME		%
SL		%
R		%
Cf		%
LS		%

Classification—Group CoSL

Sp. Gr. (Le Chatelier) 2.72

Sand Equivalent 6.6%

SIEVE ANALYSIS: **WET**

Ret. on	% Single Sieve
3/4	3.2
½	9.7
4	20.2
10	11.3
20	8.6
40	5.3
60	3.3
140	5.0
200	1.7
P200	31.7

24% Lid

DENSITY DETERMINATION:

Dry Density, lbs/c. f.	% Moisture
110.9	12.4
116.9	14.5
111.0	17.7

HYDROMETER ANALYSIS:

	Passing No. 10	Total Sample
Particles larger than 2.0 mm.	0.0 %	44.5 %
Coarse sand, 2.0 to 0.25 mm.	31.0 %	17.2 %
Fine sand, 0.25 to 0.05 mm.	12.5 %	6.9 %
Silt, 0.05 to 0.005 mm.	25.0 %	13.9 %
Clay, smaller than 0.005 mm.	31.5 %	17.5 %
Colloids, smaller than 0.001 mm.	%	%

TRIAXIAL SHEAR TEST:

Sample	Remolded	~~Undisturbed~~	
% Compaction	100	100	100
% Moisture	17.7	19.5	23.6
Depth Ratio Z/R	1.95	3.05	3.70
Pavement Thickness, Z	16	24	30
Angle of Friction, ϕ	5	3	2
Cohesion, C **PSI**	7.5	2	1.5
Remarks: **R Value**	30	15	11

10½ BV w

RECOMMENDATIONS

Material as represented by this sample .... suitable for use.

NOTED
H. C. SMITH

TEST REPORT DISTRIBUTION:
Bureau of Public Roads
x Construction Engineer
Maintenance Engineer
Bridge Engineer
Requisition Office
x Division Engineer **Edwards**
x Resident Engineer **Rowland**
Dist. Maint. Supt.
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x **R. Webber**
x **Unger**

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Form E-80—10M—8-32

Not Charted

OREGON STATE HIGHWAY DEPARTMENT
Materials Division

Laboratory Report

Project	Shady Point-Myrtle Creek		Prefix No.	10-1410
Highway	Pacific		County	Douglas
Contractor		Contract No.	F. A. Project No.	
Submitted by	J. Rowland		Date reported	June 4, 1953

REPORT ON SAMPLE OF SOIL

Source of material	Hole #13, Sta. ~~Pz 174~~ 185 Lt.		
Sampled at	Depth 0-25' [illegible]	Date received	April 20, 1953
To be used	Cut Section	Quantity represented	
Sampled by	Joseph W. Fields	Type of Material	Soil
Laboratory No.	305278	Sample No.	1
Data Sheet No.	A-25927		

TEST RESULTS

SOIL ANALYSIS:

LL	31	%
PI	12	%
FME		%
SL		%
R		%
Cf		%
LS		%

Classification—Group [illegible]

Sp. Gr. (Le Chatelier) 2.69

Sand Equivalent 11.9%

WET SIEVE ANALYSIS:

Ret. on	% Single Sieve
3/4	1.3
1/2	3.9
4	10.4
10	12.9
20	8.1
40	8.0
60	5.1
140	7.2
200	2.1
P200	40.5

HYDROMETER ANALYSIS:

	Passing No. 10	Total Sample
Particles larger than 2.0 mm.	0.0 %	29.0 %
Coarse sand, 2.0 to 0.25 mm.	29.8 %	21.2 %
Fine sand, 0.25 to 0.05 mm.	21.7 %	15.4 %
Silt, 0.05 to 0.005 mm.	26.0 %	18.5 %
Clay, smaller than 0.005 mm.	22.5 %	15.9 %
Colloids, smaller than 0.001 mm.	%	%

DENSITY DETERMINATION:

Dry Density, lbs/c. f. % Moisture

TRIAXIAL SHEAR TEST:

Sample	Remolded	Undisturbed
% Compaction		
% Moisture		
Depth Ratio Z/R		
Pavement Thickness, Z		
Angle of Friction, φ		
Cohesion, C		

Remarks:

Compares to Lab. No. 305256

RECOMMENDATIONS

NOTED
H. G. SMITH

Material as represented by this sample .... suitable for use.

TEST REPORT DISTRIBUTION:
- Bureau of Public Roads
- x Construction Engineer
- Maintenance Engineer
- Bridge Engineer
- Requisition Office
- x Division Engineer Edwards
- x Resident Engineer Rowland
- Dist. Maint. Supt.
- Foreman
- x Files
- x R. Webber
- x Unger

Engineer of Materials

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Form E-[illegible]—10M—[illegible]-53

Charted 1-[illegible]-53

OREGON STATE HIGHWAY DEPARTMENT
Materials Division

Laboratory Report

Project	Shady Point-Myrtle Creek	Prefix No.	10-1410
Highway	Pacific	County	Douglas
Contractor		F. A. Project No.	
Contract No.		Date reported	June 4, 1953
Submitted by	J. A. Rowland		

REPORT ON SAMPLE OF SOIL

Source of material	Hole #12, Sta. ~~P2 168+15, 4' Lt.~~ 2966+70, ℄	Date received	April 20, 1953
Sampled at	Depth 0-15'	Quantity represented	
To be used	Cut Section		
Sampled by	Fields	Type of Material	Soil
Laboratory No.	305257	Sample No.	
Data Sheet No.	A-25926		

TEST RESULTS

SOIL ANALYSIS:

LL	38 %
PI	23 %
FME	%
SL	%
R	%
Cf	%
LS	%
Classification—Group	CL
Sp. Gr. (Le Chatelier)	2.66
Sand Equivalent	2.38%

SIEVE ANALYSIS: WET

Ret. on	% Single Sieve
3/4	1.6
½	.5
4	7.7
10	4.3
20	2.7
40	2.7
60	2.4
140	6.4
200	3.3
P200	68.4

Tabled

HYDROMETER ANALYSIS:

	Passing No. 10	Total Sample
Particles larger than 2.0 mm.	0.0 %	14.1 %
Coarse sand, 2.0 to 0.25 mm.	9.2 %	7.8 %
Fine sand, 0.25 to 0.05 mm.	17.8 %	15.3 %
Silt, 0.05 to 0.005 mm.	36.0 %	30.9 %
Clay, smaller than 0.005 mm.	37.0 %	31.9 %
Colloids, smaller than 0.001 mm.	%	%

DENSITY DETERMINATION:

Dry Density, lbs/c. f.	% Moisture
100.4	14.1
105.0	16.6
108.2	19.4
105.8	20.8

TRIAXIAL SHEAR TEST:

Sample	Remolded	~~Undisturbed~~	
% Compaction	100	100	100
% Moisture	20.8	22.9	27.7
Depth Ratio Z/R	1.85	2.75	3.35
Pavement Thickness, Z	15	22	27
Angle of Friction, ϕ	4	3	2
Cohesion, C PSI	10	4	3
Remarks: R Value	32	18	13

21½ BW

RECOMMENDATIONS

Material as represented by this sample .... suitable for use.

NOTED
H. C. SMITH

TEST REPORT DISTRIBUTION:
Bureau of Public Roads
x Construction Engineer
Maintenance Engineer
Bridge Engineer
Requisition Office
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Form [illegible]—10M—[illegible]

Not Charted

OREGON STATE HIGHWAY DEPARTMENT
Materials Division

Laboratory Report

Project **Shady Point-Myrtle Creek**
Highway **Pacific**
Contractor
Submitted by **J. A. Rowland**
Contract No.
Prefix No. **10-1410**
County **Douglas**
F. A. Project No.
Date reported **June 4, 1953**

REPORT ON SAMPLE OF SOIL

Source of material **Hole #12, Sta. P2 ~~168+15, 4' Lt.~~**
Sampled at **Depth 15'-18'** 2966+70, ℄
To be used **Cut Section**
Sampled by **Fields**
Laboratory No. **305258**
Data Sheet No. **A-25926**
Date received **April 20, 1953**
Quantity represented
Type of Material **Soil**
Sample No. **2**

TEST RESULTS

SOIL ANALYSIS:

LL	30	%
PI	18	%
FME		%
SL		%
R		%
Cf		%
LS		%

Classification—Group SCL

Sp. Gr. (Le Chatelier) 2.69
Sand Equivalent 5.3%

SIEVE ANALYSIS: **WET**

Ret. on	% Single Sieve
4	4.8
10	9.1
20	5.2
40	6.9
60	5.5
140	10.3
200	3.4
P200	54.8

HYDROMETER ANALYSIS:

	Passing No. 10	Total Sample
Particles larger than 2.0 mm.	0.0 %	13.9 %
Coarse sand, 2.0 to 0.25 mm.	20.4 %	17.6 %
Fine sand, 0.25 to 0.05 mm.	22.6 %	19.5 %
Silt, 0.05 to 0.005 mm.	30.0 %	25.8 %
Clay, smaller than 0.005 mm.	27.0 %	23.2 %
Colloids, smaller than 0.001 mm.	%	%

DENSITY DETERMINATION:

Dry Density, lbs/c. f.	% Moisture

TRIAXIAL SHEAR TEST:

Sample	Remolded	Undisturbed
% Compaction		
% Moisture		
Depth Ratio Z/R		
Pavement Thickness, Z		
Angle of Friction, ϕ		
Cohesion, C		

Remarks: **Compares to Lab. No. 305276.**

RECOMMENDATIONS

Material as represented by this sample .... suitable for use.

NOTED
H. G. SMITH

TEST REPORT DISTRIBUTION:
Bureau of Public Roads
x Construction Engineer
Maintenance Engineer
Bridge Engineer
Requisition Office
x Division Engineer **Edwards**
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x **R. Webber**
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G. W. R[illegible]
Engineer of Materials

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Form E-[illegible]—10M—[illegible]

Not Unstable

OREGON STATE HIGHWAY DEPARTMENT
Materials Division

Laboratory Report

Project	**Shady Point-Myrtle Creek**	Prefix No.	10-1410
Highway	Pacific	County	Douglas
Contractor		F. A. Project No.	
Submitted by	J. A. Rowland	Date reported	June 4, 1953

Contract No.

REPORT ON SAMPLE OF SOIL

Source of material	Hole #12, Sta. ~~P2 168+15, 4' Lt.~~ 2966+70, ℄		
Sampled at	Depth 18'-28'	Date received	April 20, 1953
To be used	Cut Section	Quantity represented	
Sampled by	Fields		
Laboratory No.	305259	Type of Material	Soil
Data Sheet No.	A-25926	Sample No.	3

TEST RESULTS

SOIL ANALYSIS:

LL	25 %
PI	13 %
FME	%
SL	%
R	%
Cf	%
LS	%
Classification—Group	SL
Sp. Gr. (Le Chatelier)	2.72
Sand Equivalent	7.7%

SIEVE ANALYSIS: WET

Ret. on	% Single Sieve
3/4	2.1
½	1.2
4	5.2
10	6.6
20	6.3
40	8.5
60	6.6
140	12.1
200	3.7
P200	47.7

HYDROMETER ANALYSIS:	Passing No. 10	Total Sample
Particles larger than 2.0 mm.	0.0 %	15.1 %
Coarse sand, 2.0 to 0.25 mm.	25.2 %	21.4 %
Fine sand, 0.25 to 0.05 mm.	24.8 %	21.1 %
Silt, 0.05 to 0.005 mm.	29.0 %	24.6 %
Clay, smaller than 0.005 mm.	21.0 %	17.8 %
Colloids, smaller than 0.001 mm.	%	%

DENSITY DETERMINATION:

Dry Density, lbs/c. f. % Moisture

TRIAXIAL SHEAR TEST:

Sample	Remolded	Undisturbed
% Compaction		
% Moisture		
Depth Ratio Z/R		
Pavement Thickness, Z		
Angle of Friction, φ		
Cohesion, C		

Remarks: Compares to Lab. No. 304652.

RECOMMENDATIONS

NOTED
H. C. SMITH

Material as represented by this sample .... suitable for use.

TEST REPORT DISTRIBUTION:
Bureau of Public Roads
x Construction Engineer
Maintenance Engineer
Bridge Engineer
Requisition Office
x Division Engineer Edwards
x Resident Engineer Rowland
Dist. Maint. Supt.
Foreman
x Files
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x Unger

Engineer of Materials

State Printing 99773

Form E-90—10M—8-53

OREGON STATE HIGHWAY DEPARTMENT
Materials Division

Laboratory Report

Project	Shady Point-Myrtle Creek	Prefix No.	10-1410
Highway	Pacific	County	Douglas
Contractor		Contract No.	
		F. A. Project No.	
Submitted by	J. A. Rowland	Date reported	June 4, 1953

REPORT ON SAMPLE OF SOIL

Source of material	Hole #11, Sta. P2 ~~152+18, 300'~~ Rt.		
Sampled at	Depth 0-12' 2955+25, 200' Rt	Date received	April 20, 1953
To be used	Cut Section	Quantity represented	
Sampled by	Fields		
Laboratory No.	305256	Type of Material	Soil
Data Sheet No.	A-25900	Sample No.	1

TEST RESULTS

SOIL ANALYSIS:

LL	23 %
PI	10 %
FME	%
SL	%
R	%
Cf	%
LS	%

Classification—Group SL

Sp. Gr. (Le Chatelier) 2.66

Sand Equivalent 6.98%

SIEVE ANALYSIS: WET

Ret. on	% Single Sieve
4	10.5
10	13.6
20	7.7
40	6.1
60	5.3
140	11.4
200	3.9
P200	41.5

13% R

HYDROMETER ANALYSIS:	Passing No. 10	Total Sample
Particles larger than 2.0 mm.	0.0 %	24.1 %
Coarse sand, 2.0 to 0.25 mm.	25.2 %	19.1 %
Fine sand, 0.25 to 0.05 mm.	25.8 %	19.6 %
Silt, 0.05 to 0.005 mm.	26.0 %	19.7 %
Clay, smaller than 0.005 mm.	23.0 %	17.5 %
Colloids, smaller than 0.001 mm.	%	%

DENSITY DETERMINATION:

Dry Density, lbs/c. f.	% Moisture
113.8	10.5
120.9	12.9
116.3	15.4

TRIAXIAL SHEAR TEST:

Sample	Remolded	Undisturbed
% Compaction	100	100 *
% Moisture	15.4	17.0
Depth Ratio Z/R	2.40	3.05
Pavement Thickness, Z	20	24
Angle of Friction, φ	3	3
Cohesion, C PSI	6.5	3
Remarks: R Value	22	15

*Too wet to run.

16" B & W

RECOMMENDATIONS

Material as represented by this sample .... suitable for use.

NOTED
H. G. SMITH

TEST REPORT DISTRIBUTION:

	Bureau of Public Roads	
x	Construction Engineer	
	Maintenance Engineer	
	Bridge Engineer	
	Requisition Office	
x	Division Engineer	Edwards
x	Resident Engineer	Rowland
	Dist. Maint. Supt.	
	Foreman	
x	Files	
x	R. Webber	
x	Unger	

Engineer of Materials

State Printing 30773

30

Form E-334—7500 Sets—1-53

OREGON STATE HIGHWAY DEPARTMENT
SO D GEOLOGICAL EXPLORATIO
Construction Division

Project Shady Pt- Myrtle Ck Highway Pacific Date 4-13, 1953

County Douglas Res. Engineer J. Rowland Prefix 10-1410-900

Exploration equipment used vertical Augur

Exploration area: Cut, depth ..... ft. Embankment fonda.—Emb. ht. 100 ft.

Station P 184+00 Lt. ..... C. L. ..... Rt. 100

Borrow—Quarry—Location .....

Hole location .....

Slide—Horizontal hole ..... Vertical hole .....

Station ..... Lt. ..... C. L. ..... Rt. .....

Hole No. 14

Indicate in Feet Distance from ground surface to various soil and rock formations

Ground Surface Elevation	Sample Data H.D. Sheet No.	DESCRIBE SOIL, ROCK AND MOISTURE CONDITIONS DESCRIBE DRILLING RATE FOR POWER EQUIPMENT
0	A25928	Light brown silty clay containing rock fragments. The moisture content gradually increases with depth, ~~as well as~~ the hardness of The material gradually increases with depth also. Refusal at 23'
23	—	—
		from 14 ft ~~to 23~~ broken rock was encountered, this gradually became harder. A fine grained, hard dark grey shale

NOTE: Prepare a sheet for each hole. Mail copies **at end of day.** Show zones for all samples taken. For horizontal holes indicate skew from center line by rough sketch. Show water zones and level of water in hole after waiting period.

This copy for Construction Engineer

Joseph W. Fields
Soils, Geologist or Driller

31

Form E-334—7500 Sets—1-53

OREGON STATE HIGHWAY DEPARTMENT
SO A) GEOLOGICAL EXPLORATION C
Construction Division

Project Shady Pt- Mrytleck Highway Pacific Date 4-13, 1953

County Douglas Res. Engineer J. Rowland Prefix 10-1410-900

Exploration equipment used vertical Augur

Exploration area: Cut, depth 62 ft. Embankment fonda.—Emb. ht. .... ft.

Station P_2 174+00 Lt. 185 C. L. .... Rt. ....

Borrow—Quarry—Location ....

Hole location ....

Slide—Horizontal hole .... Vertical hole ....

Station .... Lt. .... C. L. .... Rt. ....

Hole No. 13

Indicate in Feet
Distance from ground surface to various soil and rock formations

Ground Surface Elevation	Sample Data H.D. Sheet No.	DESCRIBE SOIL, ROCK AND MOISTURE CONDITIONS DESCRIBE DRILLING RATE FOR POWER EQUIPMENT
0–13	A25927	Light brown silty clay firm drilling; below PL bag & bottle. This clay contains small fragments of underlying rock.
13–25		finegrained hard rock; this rock is probably shale.
25		Refusal at 25'.
		dry hole

NOTE: Prepare a sheet for each hole. Mail copies at end of day. Show zones for all samples taken. For horizontal holes indicate skew from center line by rough sketch. Show water zones and level of water in hole after waiting period.

This copy for Construction Engineer

Joseph W. Fields
Soils, Geologist or Driller

32

Form E-334—7500 Sets—1-53

OREGON STATE HIGHWAY DEPARTMENT
SO D GEOLOGICAL EXPLORATION
Construction Division

Project Shady Pt-Myrtle ck Highway Pacific Date 4-13, 1953
County Douglas Res. Engineer J. Rowland Prefix 10-1410-900
Exploration equipment used vertical Augur
Exploration area: Cut, depth 96 ft. Embankment fonda.—Emb. ht. .... ft.
Station P2 168+15 Lt. 4' C. L. .... Rt. ....
Borrow—Quarry—Location ....
Hole location ....
Slide—Horizontal hole .... Vertical hole ....
Station .... Lt. .... C. L. .... Rt. ....
Hole No. 12

Indicate in Feet Distance from ground surface to various soil and rock formations Ground Surface Elevation	Sample Data H.D. Sheet No.	DESCRIBE SOIL, ROCK AND MOISTURE CONDITIONS DESCRIBE DRILLING RATE FOR POWER EQUIPMENT
0 – 15	A25926	Light brown silty Clay Containing small rock fragments. Firm drilling below PL bag & bottle Cl-
15 – 18	A25926	dark brown to grey sandy silt firm drilling; below PL bag & bottle
18 – 28	A25926	blue shale hard drilling from 22' to 28' below PL bag & bottle
28		Refusal at 28'

NOTE: Prepare a sheet for each hole. Mail copies at end of day. Show zones for all samples taken. For horizontal holes indicate skew from center line by rough sketch. Show water zones and level of water in hole after waiting period.

This copy for Construction Engineer

Joseph W. Fields
Soils, Geologist or Driller

33

Form E-334—7500 Sets—1-53

OREGON STATE HIGHWAY DEPARTMENT
SO AND GEOLOGICAL EXPLORATIO OG
Construction Division

Project Shady Pt. Mrytle Ck Highway Pacific Date 4-13, 1953
County Douglas Res. Engineer J Rowland Prefix 10-1410-900
Exploration equipment used vertical Augur
Exploration area: Cut, depth 159 ft. Embankment fonda.—Emb. ht. .... ft.
Station P2 162+18 Lt. .... C. L. .... Rt. 300'
Borrow—Quarry—Location ....
Hole location ....
Slide—Horizontal hole .... Vertical hole ....
Station .... Lt. .... C. L. .... Rt. ....
Hole No. 11

Indicate in Feet
Distance from ground surface to various soil and rock formations

Ground Surface Elevation	Sample Data H.D. Sheet No.	DESCRIBE SOIL, ROCK AND MOISTURE CONDITIONS DESCRIBE DRILLING RATE FOR POWER EQUIPMENT
0	A25900	weathered sandstone firm drilling 0-6; hard drilling from 6-12 below PL. sack & Jar
12		Refusal 12' dry hole

NOTE: Prepare a sheet for each hole. Mail copies **at end of day**. Show zones for all samples taken. For horizontal holes indicate skew from center line by rough sketch. Show water zones and level of water in hole after waiting period.

4R

This copy for Construction Engineer

Joseph W. Fields
Soils, Geologist or Driller

34

ROBERTS	
FED. ROAD Div. No.	
8	O

STATE OF OREGON

STATE HIGHWAY DEPARTMENT

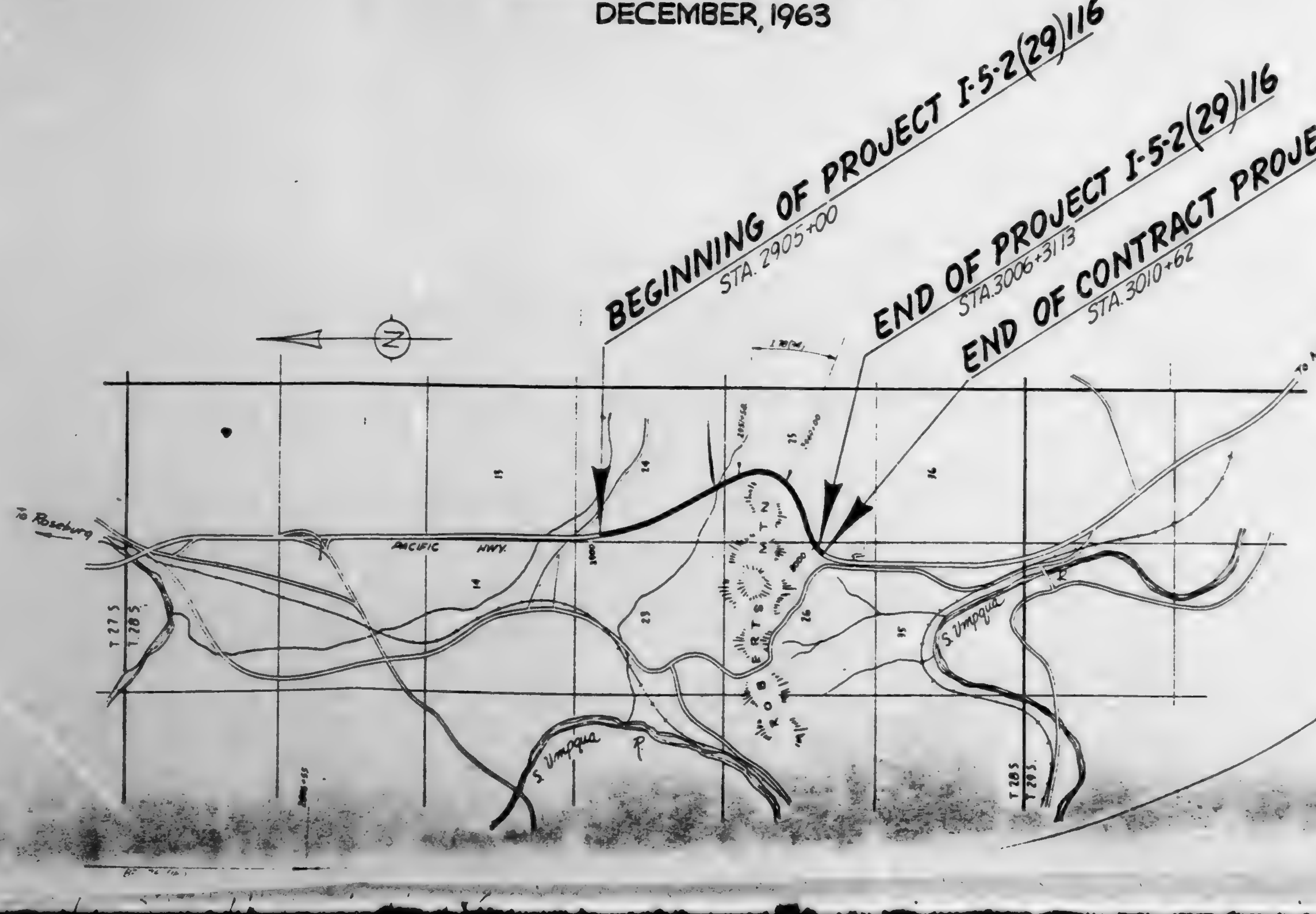
PLANS FOR PROPOSED PROJECT

GRADING & PAVING

ROBERTS MOUNTAIN SECTION

PACIFIC HIGHWAY
DOUGLAS COUNTY
DECEMBER, 1963

Portland
Salem
Eugene
Roseburg
OR
30
26
20
99


BEGINNING OF PROJECT I-5-2(29)116
STA. 2905+00
END OF PROJECT I-5-2(29)116
STA. 3006+31.13
END OF CONTRACT PROJECT
STA. 3010+62
N
To Roseburg
To Myrtle Creek
PACIFIC HWY.
ROBERTS MTN
S. Umpqua R.
S. Umpqua
T 27 S
T 28 S
T 28 S
T 29 S
13
14
23
24
25
26
35
36

Fre
sti
19

ROBERTS MOUNTAIN SECTION PACIFIC HIGHWAY DOUGLAS COUNTY				SHEET No. 1
FED. ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
8	OREGON	I-5-2(29)116		See Index

SIGNED AS CONSTRUCTED
2-8-66 CONTRACT 6362

STATE OF OREGON

STATE HIGHWAY DEPARTMENT

PLANS FOR PROPOSED PROJECT

GRADING & PAVING

ERTS MOUNTAIN SECTION

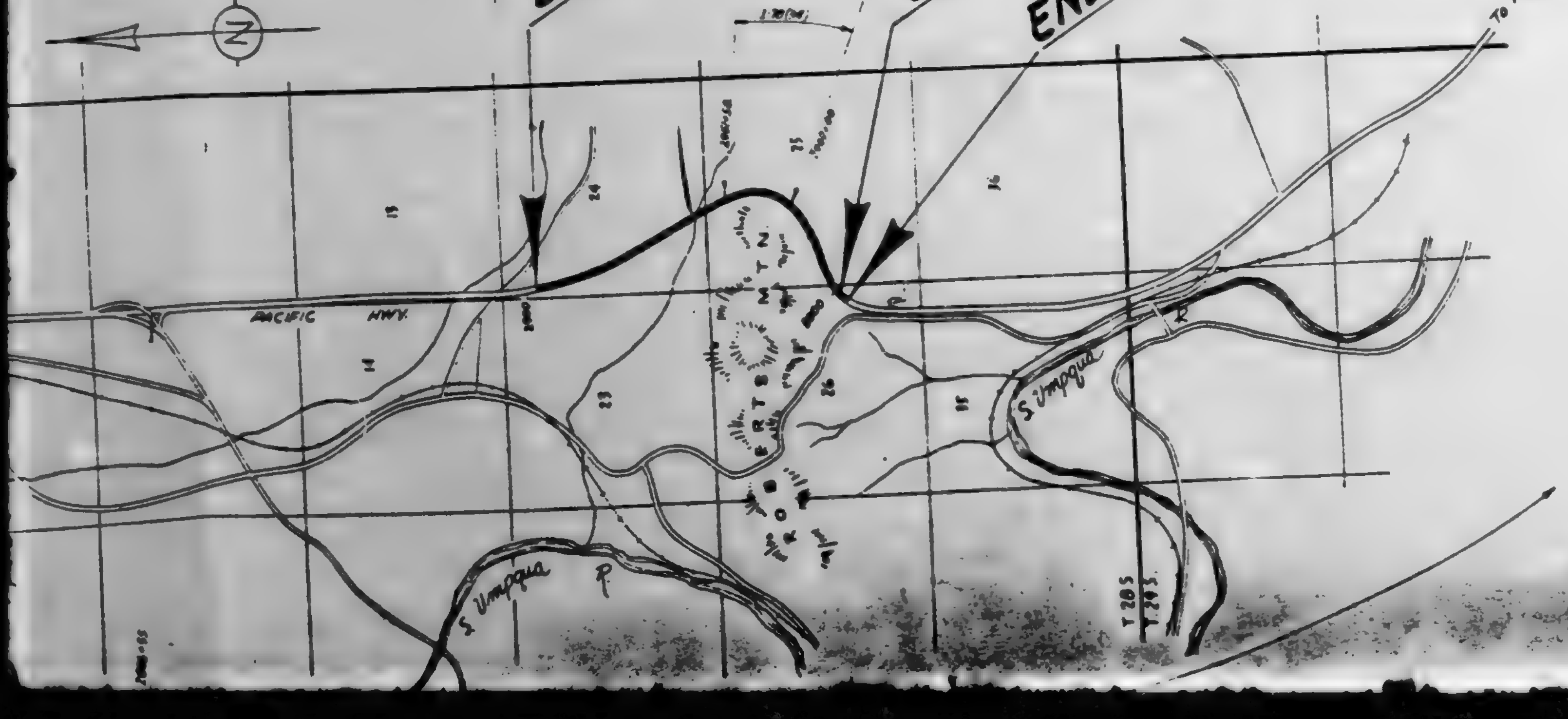
PACIFIC HIGHWAY
DOUGLAS COUNTY
DECEMBER, 1963

Portland
Salem
Eugene
Roseburg
Pendleton
La Grande
Baker
Burns
OREGON

BEGINNING OF PROJECT I-5-2(29)116
STA. 2905+00

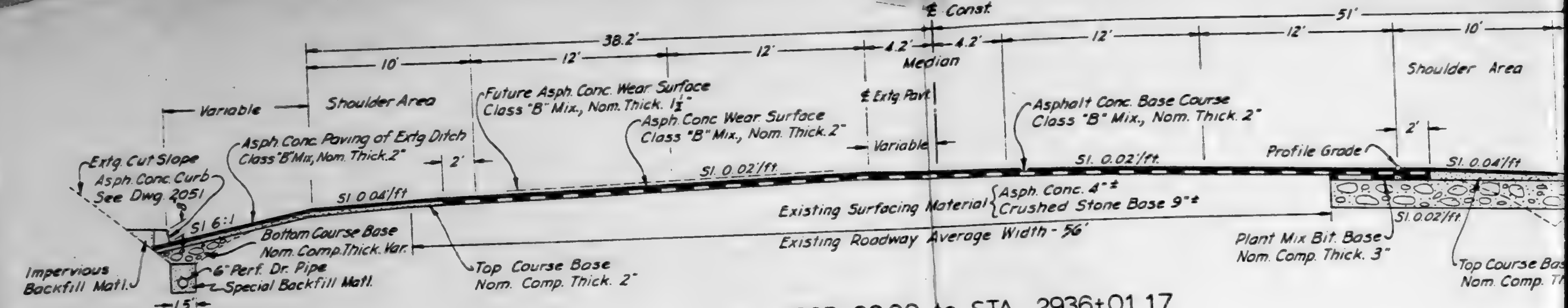
END OF PROJECT I-5-2(29)116
STA. 3006+31.13

END OF CONTRACT PROJECT
STA. 3010+62

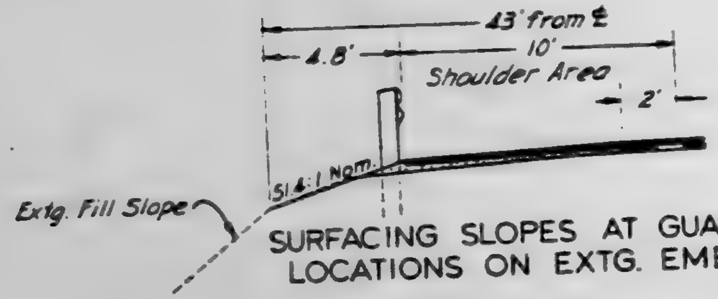

N
PACIFIC HWY.
ROBERTS MTN
S. Umpqua R.
To Myrtle Creek
T 28S
T 29S

Freeway
Construction
1964

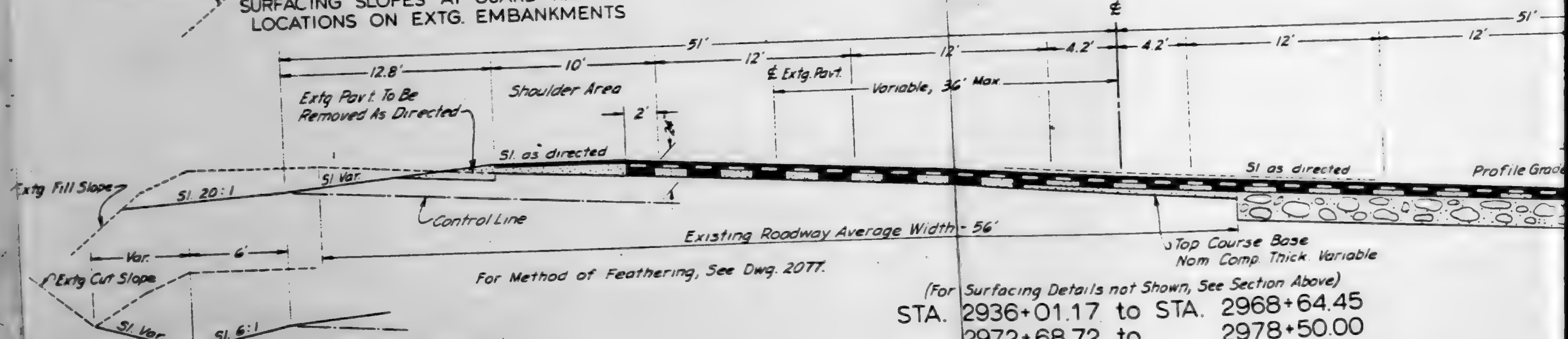
TYPICAL SECTIONS


℄ Const.
51'
38.2'
10'
12'
12'
4.2'
4.2'
12'
12'
10'
Median
Variable
Shoulder Area
Shoulder Area
Future Asph. Conc. Wear. Surface
Class "B" Mix., Nom. Thick. 1½"
Asph. Conc. Wear. Surface
Class "B" Mix., Nom. Thick. 2"
℄ Extg. Pavt.
Variable
Asphalt Conc. Base Course
Class "B" Mix., Nom. Thick. 2"
Profile Grade
2'
2'
Asph. Conc. Paving of Extg. Ditch
Class "B" Mix, Nom. Thick. 2"
Extg. Cut Slope
Asph. Conc. Curb
See Dwg. 2051
Sl. 6:1
Sl. 0.04'/ft.
Sl. 0.02'/ft.
Sl. 0.02'/ft.
Sl. 0.04'/ft
Sl. 0.02'/ft.
Existing Surfacing Material
Asph. Conc. 4"±
Crushed Stone Base 9"±
Existing Roadway Average Width - 56'
Bottom Course Base
Nom. Comp. Thick. Var.
Impervious
Backfill Matl.
6" Perf. Dr. Pipe
Special Backfill Matl.
1.5'
Top Course Base
Nom. Comp. Thick. 2"
Plant Mix Bit. Base
Nom. Comp. Thick. 3"
Top Course Bas
Nom. Comp. Th

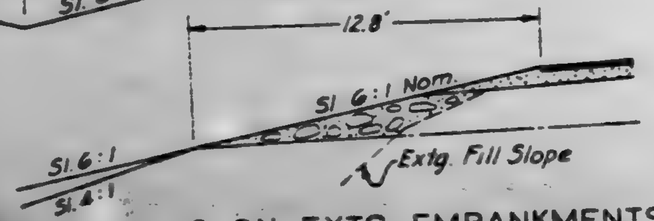
STA. 2905+00.00 to STA. 2936+01.17
2968+64.45 to 2972+68.72
2998+51.40 to 3006+31.13
3006+31.13 to 3010+62.00 (Grading Only)


43' from ℄
4.8'
10'
Shoulder Area
2'
Sl. 4:1 Nom.
Extg. Fill Slope

SURFACING SLOPES AT GUARD RAIL
LOCATIONS ON EXTG. EMBANKMENTS


℄
51'
51'
12.8'
10'
12'
12'
4.2'
4.2'
12'
12'
Shoulder Area
℄ Extg. Pavt.
Variable, 36' Max.
Extg. Pavt. To Be
Removed As Directed
2'
Sl. as directed
Sl as directed
Profile Grade
Extg. Fill Slope
Sl. 20:1
Sl. Var.
Control Line
Existing Roadway Average Width - 56'
Top Course Base
Nom. Comp. Thick. Variable
Var.
6'
Extg. Cut Slope
Sl. Var.
Sl. 6:1
For Method of Feathering, See Dwg. 2077.

(For Surfacing Details not Shown, See Section Above)
STA. 2936+01.17 to STA. 2968+64.45
2972+68.72 to 2978+50.00
2991+03.12 to 2998+51.40


12.8'
Sl. 6:1 Nom.
Sl. 6:1
Sl. 4:1
Extg. Fill Slope

WIDENING ON EXTG. EMBANKMENTS
NOT PROTECTED BY GUARD RAIL

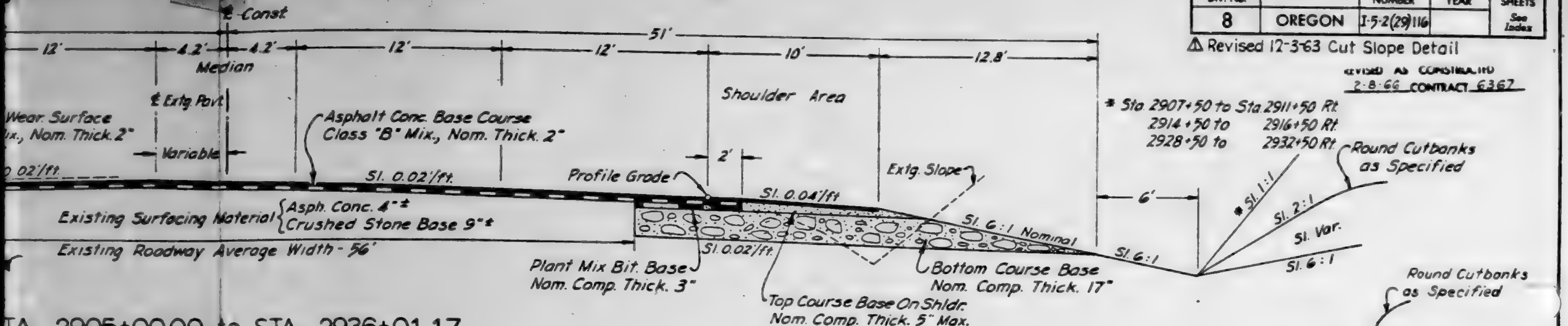
SURF
LO

TYPICAL SECTIONS

ROBERTS MOUNTAIN SECTION PACIFIC HIGHWAY DOUGLAS COUNTY				SHEET No. 2
FED. ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
8	OREGON	I-5-2(29)116		See Index

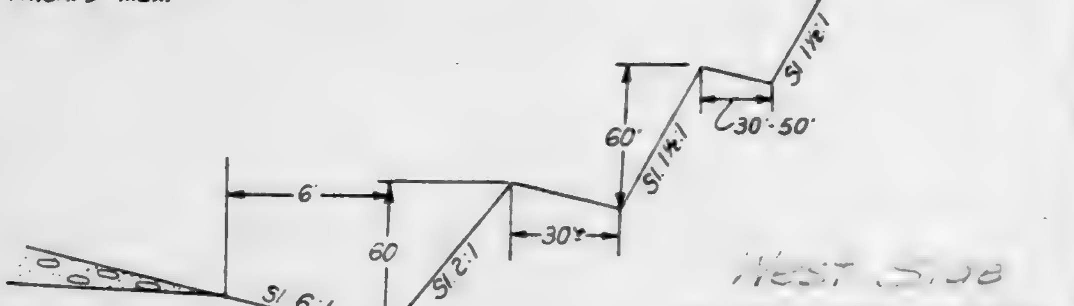
△ Revised 12-3-63 Cut Slope Detail

REVISED AS CONSTRUCTED 2-8-66 CONTRACT 6367



℄ Const.
51'
12'
4.2'
4.2'
Median
12'
12'
10'
12.8'
℄ Extg. Pavt.
Variable
Wear Surface
…ix., Nom. Thick. 2"
…0.02'/ft.
Asphalt Conc. Base Course
Class "B" Mix., Nom. Thick. 2"
Sl. 0.02'/ft.
Shoulder Area
Profile Grade
2'
Sl. 0.04'/ft.
Extg. Slope
Existing Surfacing Material {Asph. Conc. 4"± / Crushed Stone Base 9"±
Existing Roadway Average Width - 56'
Plant Mix Bit. Base
Nom. Comp. Thick. 3"
Sl. 0.02'/ft.
Top Course Base On Shldr.
Nom. Comp. Thick. 5" Max.
Bottom Course Base
Nom. Comp. Thick. 17"
Sl. 6:1 Nominal
Sl. 6:1
6'
* Sta 2907+50 to Sta. 2911+50 Rt.
2914+50 to 2916+50 Rt.
2928+50 to 2932+50 Rt.
* Sl. 1:1
Sl. 2:1
Sl. Var.
Sl. 6:1
Round Cutbanks as Specified

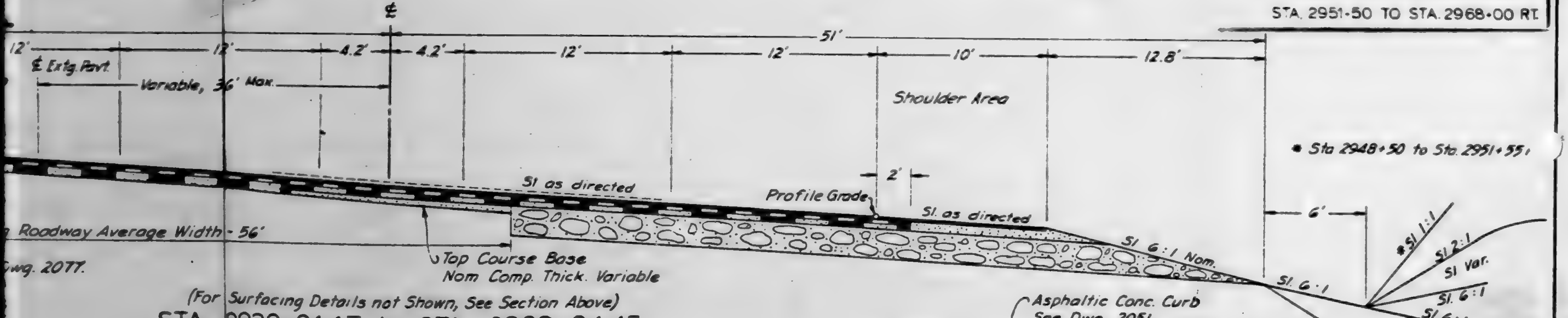
STA. 2905+00.00 to STA. 2936+01.17
2968+64.45 to 2972+68.72
2998+51.40 to 3006+31.13
3006+31.13 to 3010+62.00 (Grading Only)



Round Cutbanks as Specified
Sl. 1½:1
30'-50'
60'
Sl. 1½:1
30'±
6'
60
Sl. 2:1
Sl. 6:1
West Slope

SLOPE STABILIZATION

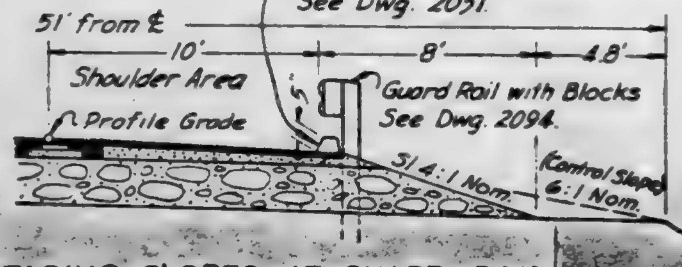
STA. 2951+50 TO STA. 2968+00 RT.



℄
51'
12'
12'
4.2'
4.2'
12'
12'
10'
12.8'
℄ Extg. Pavt.
Variable, 36' Max.
Shoulder Area
Sl. as directed
Profile Grade
2'
Sl. as directed
…Roadway Average Width - 56'
…wg. 2077.
Top Course Base
Nom. Comp. Thick. Variable
Sl. 6:1 Nom.
Sl. 6:1
6'
* Sta 2948+50 to Sta. 2951+55
* Sl. 1:1
Sl. 2:1
Sl. Var.
Sl. 6:1
Sl. 6:1
Sl. Var.
Sl. 2:1

(For Surfacing Details not Shown, See Section Above)

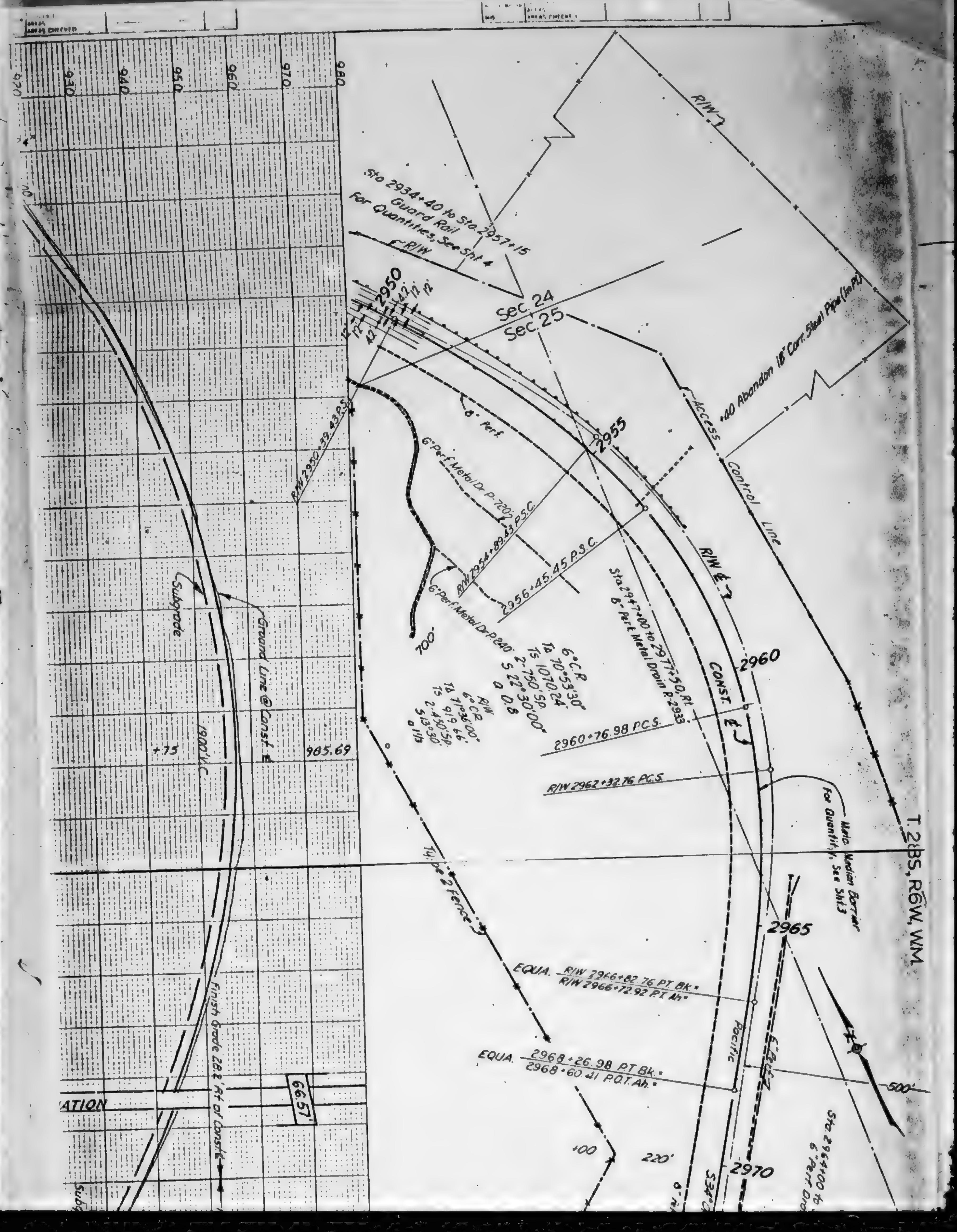
STA. 2936+01.17 to STA. 2968+64.45
2972+68.72 to 2978+50.00
2991+03.12 to 2998+51.40

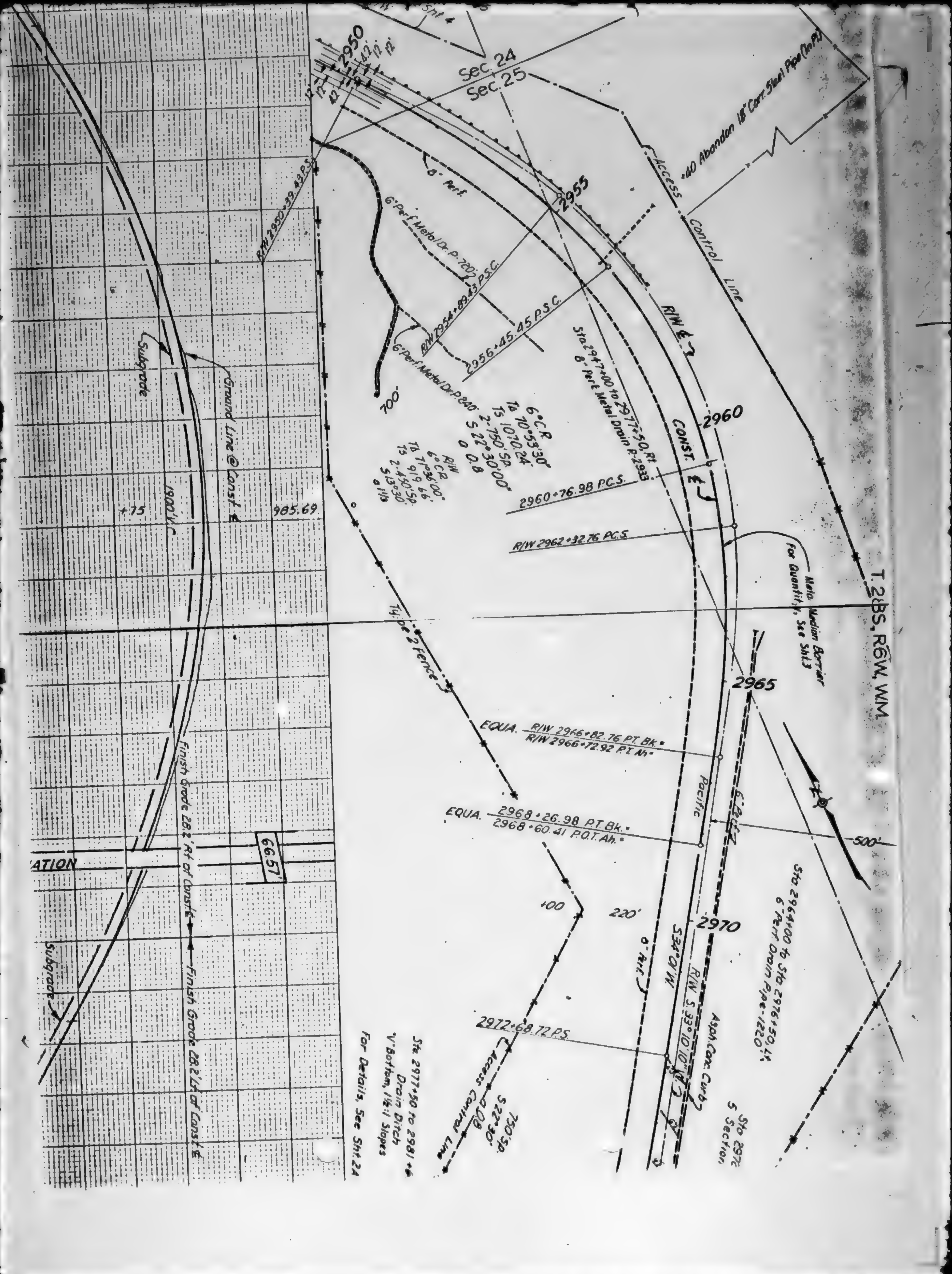


Asphaltic Conc. Curb
See Dwg. 2051.
51' from ℄
10'
8'
4.8'
Shoulder Area
5"
Guard Rail with Blocks
See Dwg. 2094.
Profile Grade
Sl. 4:1 Nom.
Control Slope 6:1 Nom.
Sl. 2:1

SURFACING SLOPES AT GUARD RAIL LOCATIONS ON NEW EMBANKMENTS

Sanford


920
930
940
950
960
970
980
Sta 2934+40 to Sta. 2957+15
Guard Rail
For Quantities, See Sht. 4
R/W
R/W
2950
2955
2960
2965
2970
Sec. 24
Sec. 25
+40 Abandon 18" Corr. Steel Pipe (In Pl.)
Access Control Line
8" Perf.
6" Perf. Metal Dr. P. 720'
6" Perf. Metal Dr. P. 240'
R/W 2950+39.43 P.S.
R/W 2954+89.43 P.S.C.
2956+45.45 P.S.C.
700'
Sta. 2947+00 to 2977+50, Rt.
8" Perf. Metal Drain P. 2933
R/W ℄
CONST. ℄
6° C.R.
Δ 70°53'30"
Ts 1070.24'
2-750' SP.
S 22°30'00"
0 0.8
R/W
6° C.R.
Δ 71°36'00"
Ts 919.66'
2-450' SP.
S 13°30'
0 1.13
2960+76.98 P.C.S.
R/W 2962+32.76 P.C.S.
Subgrade
Ground Line @ Const. ℄
1900' V.C.
+75
985.69
Finish Grade 28.2' Rt. of Const. ℄
ATION
6657'
Subg
Type 2 Fence
Metal Median Barrier
For Quantity, See Sht. 3
T. 2S, R6W, W.M.
EQUA. R/W 2966+82.76 P.T. Bk. = R/W 2966+72.92 P.T. Ah.
EQUA. 2968+26.98 P.T. Bk. = 2968+60.41 P.O.T. Ah.
Pacific
℄ Pac.
500'
+00
220'
S34°
8" P
Sta. 2964+00 to
6" Perf. Dra


2950
Sec. 24
Sec. 25
Sht. 4
+40 Abandon 18" Corr. Steel Pipe (In Pl.)
Access Control Line
R/W 2950+39.43 P.S.
6" Perf.
6" Perf. Metal Dr. P. 720'
R/W 2954+89.43 P.S.C.
2955
2956+45.45 P.S.C.
6" Perf. Metal Dr. P. 240'
700'
R/W ℄
Sta. 2947+00 to 2977+50 Rt.
8" Perf. Metal Drain P. 2933'
6° C.R.
Δ 70°53'30"
Ts 1070.24'
2-750' Sp.
S 22°30'00"
0 0.8
R/W
6° C.R.
Δ 71°36'00"
Ts 919.66'
2-450' Sp.
S 13°30'
0.113
CONST.
2960
2960+76.98 P.C.S.
CONST. ℄
R/W 2962+32.76 P.C.S.
Metal Median Barrier
For Quantity, See Sht. 13
T. 2 BS, R6W, W.M.
Type 2 Fence
2965
EQUA. R/W 2966+82.76 P.T. Bk.=
R/W 2966+72.92 P.T. Ah.=
EQUA. 2968+26.98 P.T. Bk.=
2968+60.41 P.O.T. Ah.=
Pacific
500'
Sta. 2964+00 to Sta. 2976+50 Lt.
6" Perf. Drain Pipe - 1220'
+00
220'
6" Perf.
2970
S 34°01' W.
R/W S 33°10'10" W.
2972+68.72 P.S.
Asph. Conc. Curb
Sta. 2976
5 Section
750' Sp.
S 22°30'
0.08
Access Control Line
Sta. 2977+50 to 2981+
Drain Ditch
V Bottom, 1½:1 Slopes
For Details, See Sht. 2A
Subgrade
Ground Line @ Const. ℄
1900' V.C.
+75
985.69
66.57
STATION
Finish Grade 28.2' Rt. of Const. ℄
Finish Grade 28.2' Lt. of Const. ℄
Subgrade

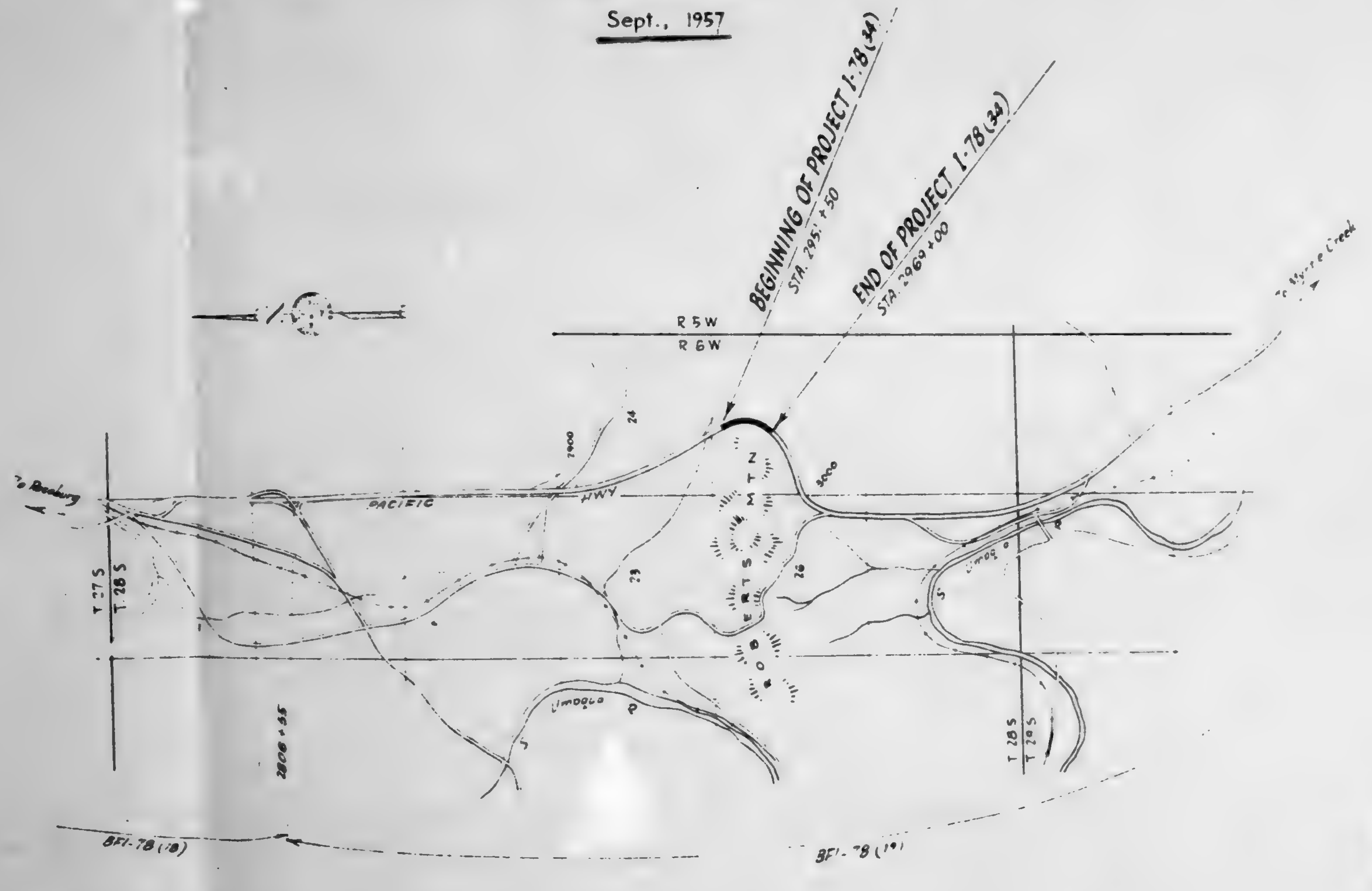
SLOPE STABILIZATION

ROBERTS MTN. SUMMIT SECTION

PACIFIC HIGHWAY

DOUGLAS COUNTY

Sept., 1957


BEGINNING OF PROJECT I-78 (34)
STA. 2951+50
END OF PROJECT I-78 (34)
STA. 2969+00
To Myrtle Creek
R 5 W
R 6 W
To Roseburg
T 27 S
T 28 S
PACIFIC
HWY
2900
24
3000
23
26
ROBERTS MTN
Umpqua R
2806+55
T 28 S
T 29 S
BFI-78 (18)
BFI-78 (19)

Sketch Map

Scale 0 2000 4000 Feet

Registered Professional Engineer 157 Oregon Nov 8 1919 R H Baldock

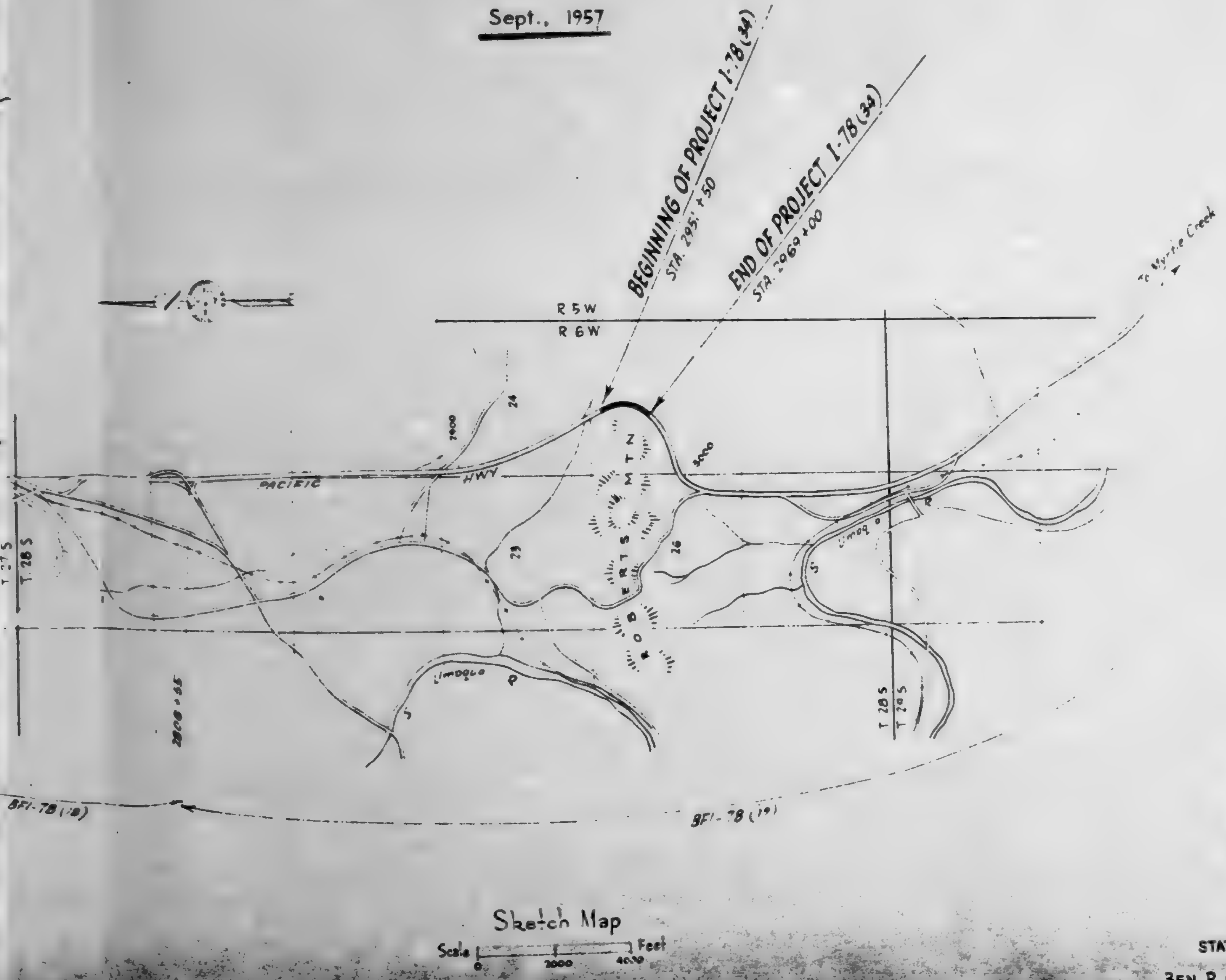
STATE HIGHWAY COMMISSION

BEN R CHANDLER Chairman
CHAS H REYNOLDS Commissioner
M K MCIVER Commissioner

SLOPE STABILIZATION

ROBERTS MTN. SUMMIT SECTION

PACIFIC HIGHWAY
DOUGLAS COUNTY
Sept., 1957



BEGINNING OF PROJECT I-78 (34)
STA. 295+50
END OF PROJECT I-78 (34)
STA. 2969+00
R 5 W
R 6 W
T 27 S
T 28 S
T 28 S
T 29 S
PACIFIC HWY
ROBERTS MTN
23
24
26
2900
3000
2808+55
Umpqua R
To Myrtle Creek
BFI-78 (18)
BFI-78 (19)
Scale
0
2000
4000
Feet

Sketch Map

Slope
Stabilization
1957

1345
W. C. Williams

STATE HIGHWAY ENGINEER

157
Nov 8 1919
R. H. BALDOCK

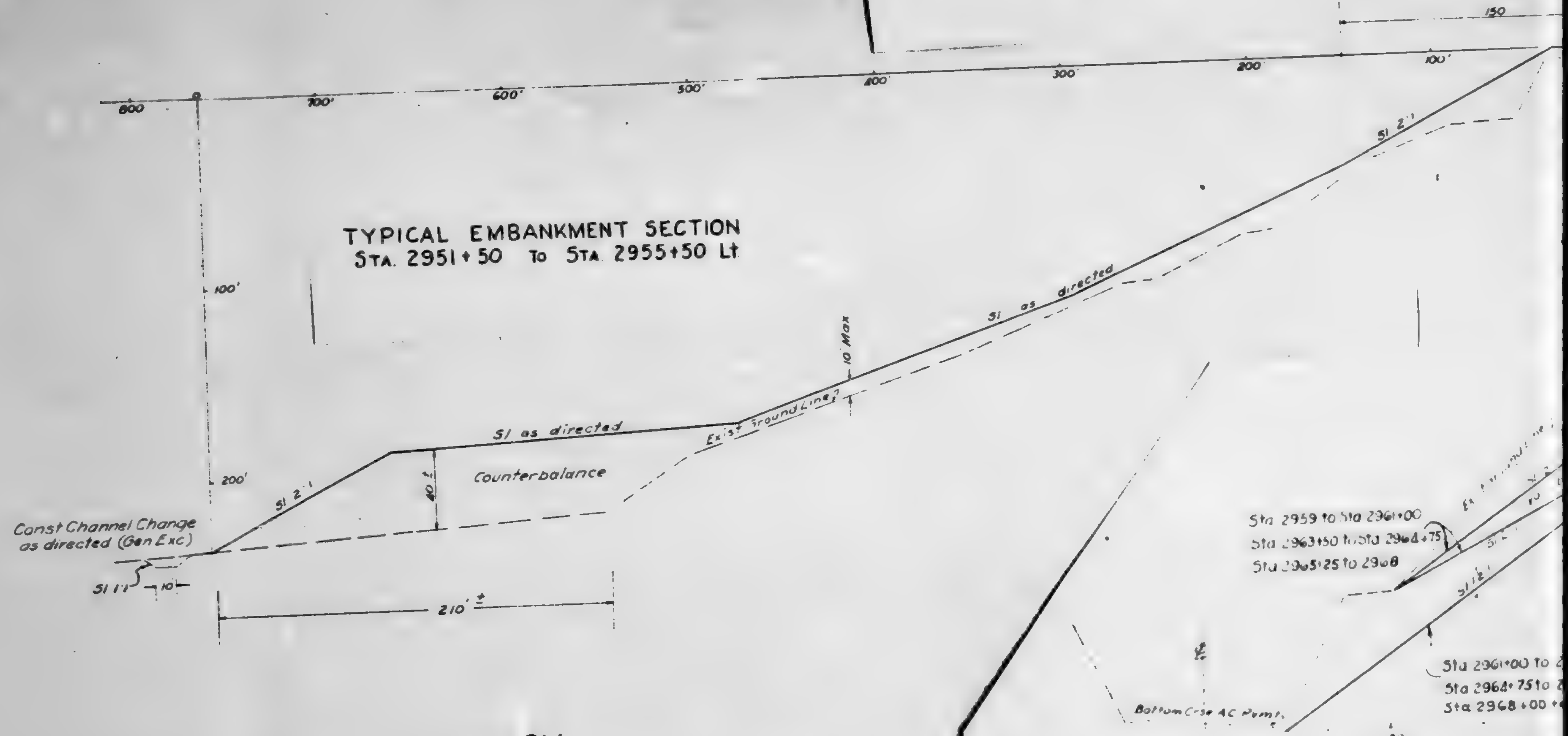
STATE HIGHWAY COMMISSION
BEN R CHANDLER Chairman
CHAS. H REYNOLDS Commissioner
M K McIVER Commissioner

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
APPROVED

SLOPE STABILIZATION ROBERTS MTN. SUMMIT SECTION PACIFIC HWY. DOUGLAS COUNTY				SHEET No. 2
FED. ROAD Div No	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
8	OREGON	I-78(34)		See Index

REVISED AS CONSTRUCTED
12-57 CONTRACT 4392
12-57 4392

TYPICAL EMBANKMENT SECTION
STA. 2951+50 To STA. 2955+50 Lt


800
700'
600'
500'
400'
300'
200
100'
150
100'
200'
Sl 2:1
Sl as directed
Counterbalance
40'±
Exist Ground Line?
10 Max
Sl as directed
Sl 2:1
Const Channel Change as directed (Gen Exc)
Sl 1:1
10'
210'±
Sta 2959 to Sta 2961+00
Sta 2963+50 to Sta 2964+75
Sta 2965+25 to 2968
Sl 1½:1
Bottom Crse AC Pvmt.
100
Sta 2961+00 to
Sta 2964+75 to
Sta 2968+00

SUMMARY

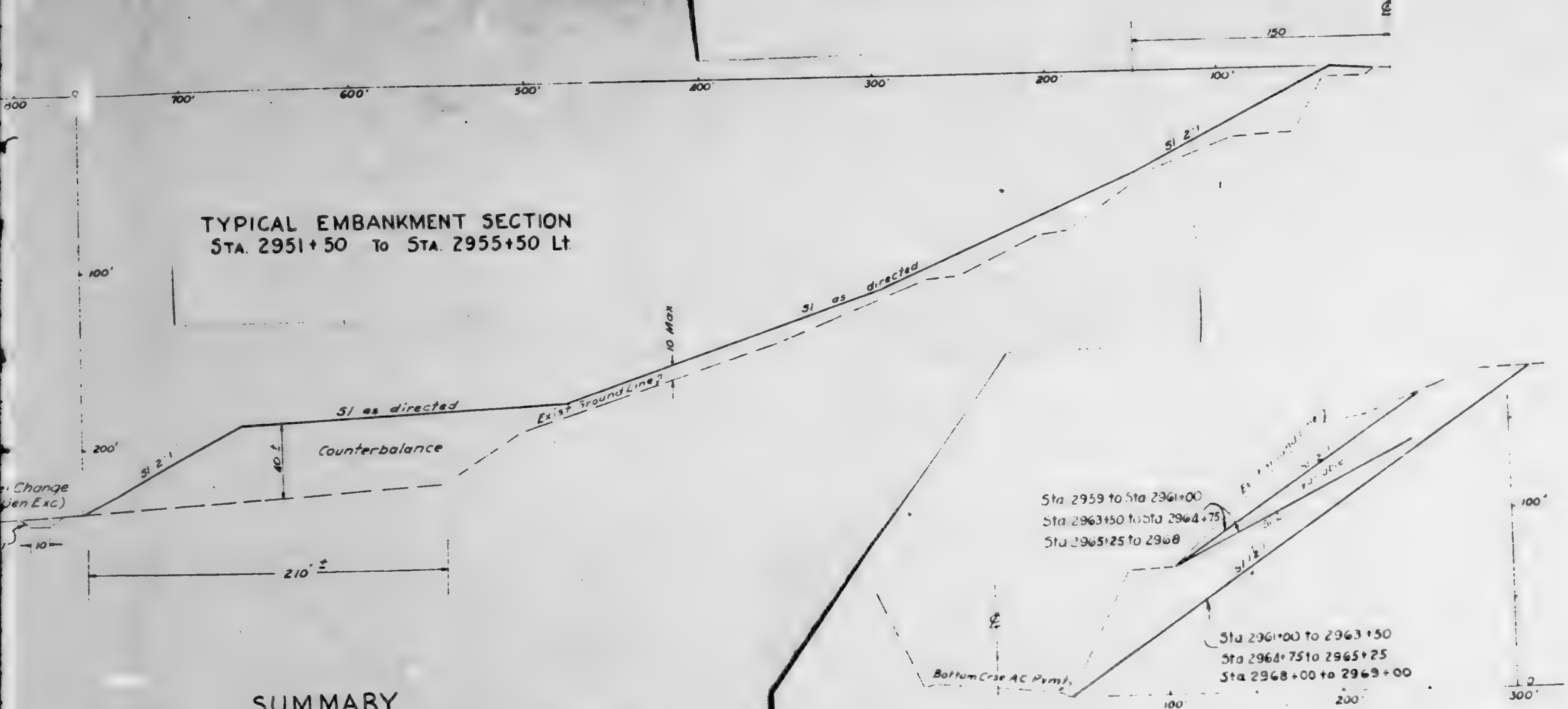
Length of FAI Project 0.331 Mile

ITEM	UNIT	NET QUANTITY	ALLOWANCE	TOTAL
General Excavation, Unclassified	Cu Yd	114,350	11,650	126,000
Type 2 Fence	Rod	130	10	140

TYPICAL EXCAVATION SECTION
Summit Cut

SLOPE STABILIZATION ROBERTS MTN. SUMMIT SECTION PACIFIC HWY. DOUGLAS COUNTY				SHEET No. 2
FED. ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
8	OREGON	I-78(34)		See Index

REVISED AS CONSTRUCTED
12 57 CONTRACT 4892
12-57 4392


150
℄
100'
200'
300'
400'
500'
600'
700'
800
0
100'
200'
Sl 2:1
Sl as directed
Sl as directed
10 Max
Exist Ground Line?
40'±
Counterbalance
Sl 2:1
Change
(Gen Exc)
10
210'±
Sta 2959 to Sta 2961+00
Sta 2963+50 to Sta 2964+75
Sta 2965+25 to 2968
Sl 1½:1
Sta 2961+00 to 2963+50
Sta 2964+75 to 2965+25
Sta 2968+00 to 2969+00
℄
Bottom Crse AC Pvmt.
100'
200'
300'
100'
0

TYPICAL EMBANKMENT SECTION

STA. 2951+50 TO STA. 2955+50 Lt.

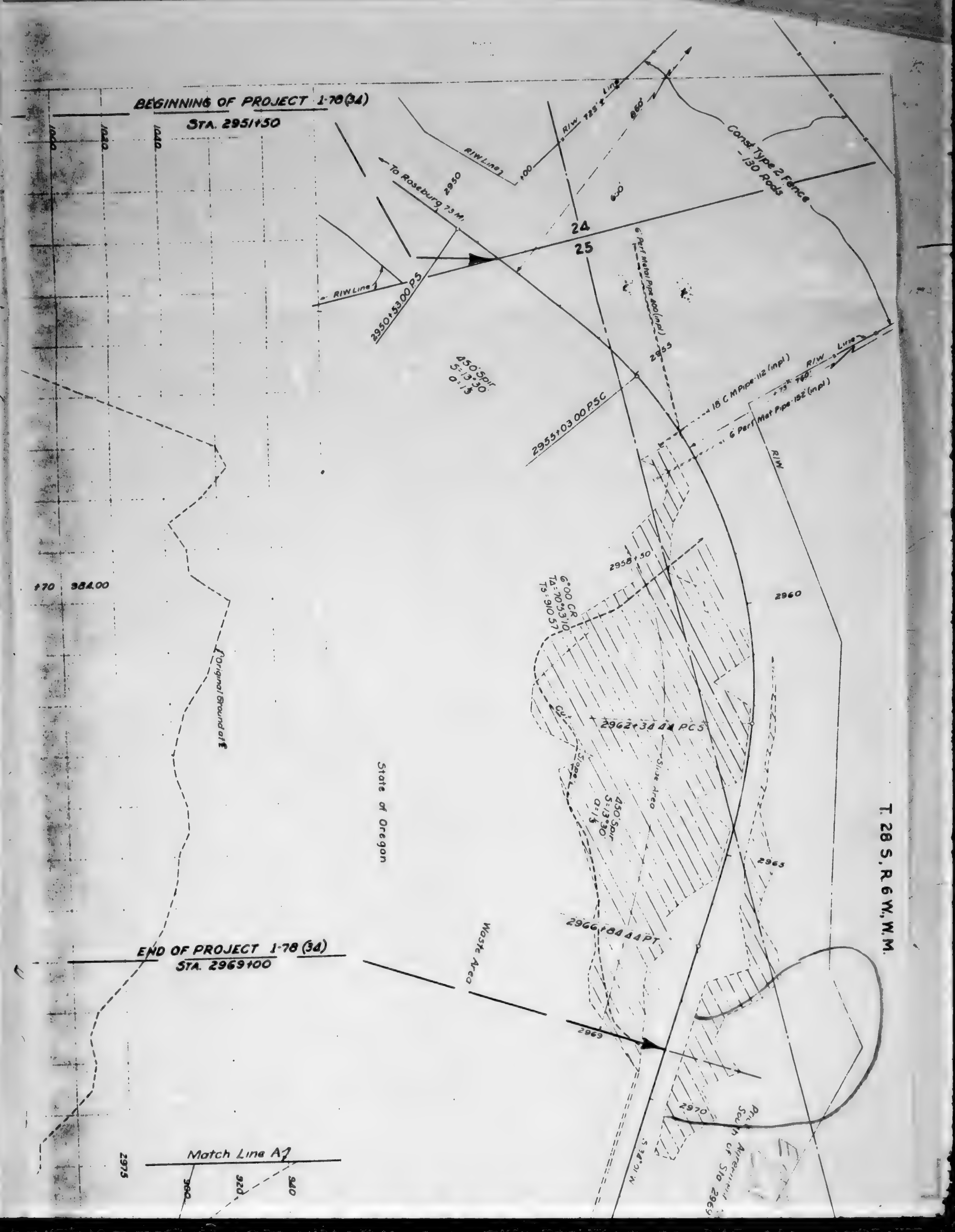
TYPICAL EXCAVATION SECTION

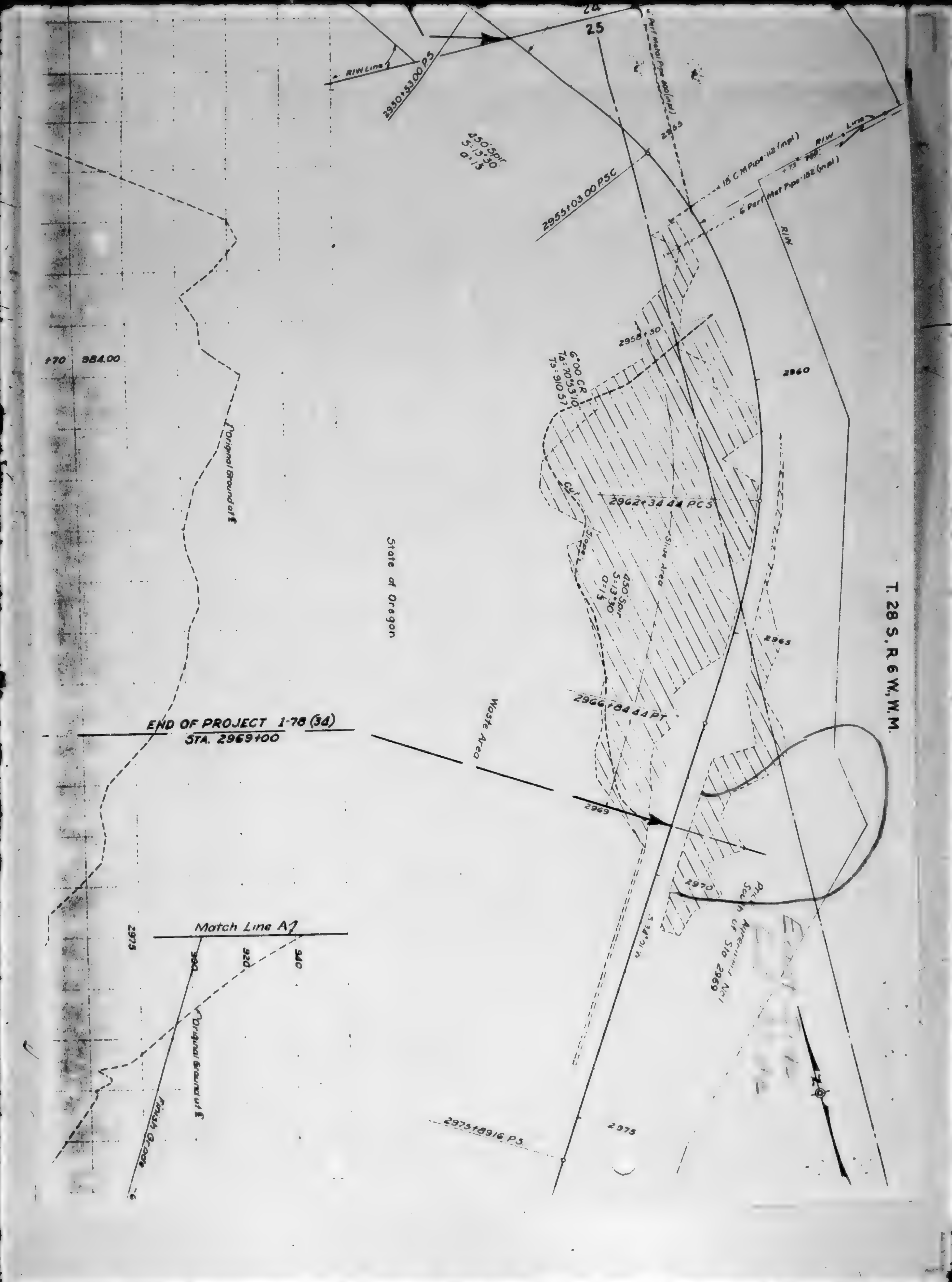
Summit Cut

SUMMARY

Length of F.A.I. Project 0.331 Mile

ITEM	UNIT	NET QUANTITY	ALLOWANCE	TOTAL
General Excavation, Unclassified	Cu Yd	114,350	11,650	126,000
Type 2 Fence	Rod	130	10	140

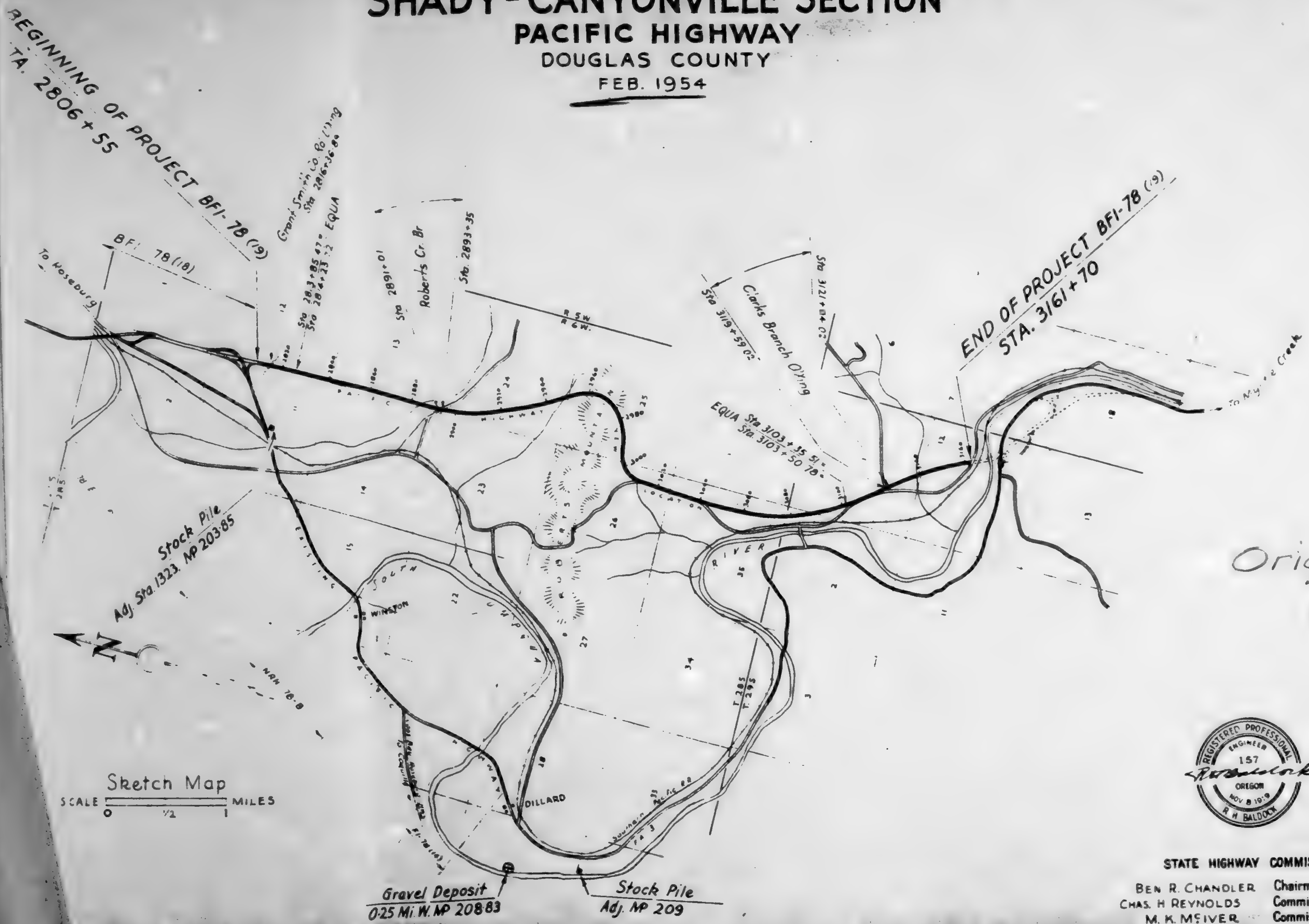

BEGINNING OF PROJECT I-78 (34)
STA. 2951+50
1000
1020
1040
R/W
R/W Line
+00
R/W 125' ℄ Line
860'
Const Type 2 Fence
-130 Rods
To Roseburg 73 Mi
2950
24
25
6'0"
6" Perf Metal Pipe 400 (incl)
R/W Line
2950+53.00 P.S.
450' Spir
S=13°30'
Q=1/3
2955+03.00 P.S.C.
2955
18" C M Pipe 112 (incl)
R/W Line
+75 ±60'
6" Perf Met Pipe 152 (incl)
R/W
+70
984.00
2958+50
6°00 CR
TΔ=70°53'10"
Ts=910.57
2960
Original Ground at ℄
Cut
Slope
2962+34.44 P.C.S.
Slide Area
450' Spir
S=13°30'
Q=1/3
State of Oregon
2965
T. 28 S., R. 6 W., W.M.
2966+84.44 P.T.
END OF PROJECT I-78 (34)
STA. 2969+00
Waste Area
2969
2970
N. 10°14' E.
Prior South Approach of Sta 2969
Match Line A
2975
900
920
940


24
25
R/W Line
2950+53.00 PS
Perf Metal Pipe 800 (in pl)
450' Spir
S:13°30
a:1.5
2955
18 C M Pipe-112 (in pl)
R/W Line
6 Perf Met Pipe-152 (in pl)
2955+03.00 PSC
R/W
2958+50
6°00 CR
TA: 70°33'10
TS: 910.57
2960
+70 984.00
Original Ground at ℄
Cut Slope
Slide Area
2962+34.44 PCS
State of Oregon
450' Spir
S:13°30
a:1.5
2965
T. 28 S., R. 6 W., W.M.
2966+84.44 PT
Waste Area
END OF PROJECT I-78 (34)
STA. 2969+00
2969
2970
Sanction Agreement No. 1
Sta 2969
Match Line A
2975
900
920
940
Original Ground at ℄
Finish Grade
2973+89.16 PS
2975
N

SHADY-BOOTH RANCH UNIT
SHADY-CANYONVILLE SECTION
PACIFIC HIGHWAY
DOUGLAS COUNTY
FEB. 1954

SHADY-BOOTH SHADY-CANYO PACIFIC HIG DOUGLAS C	
FED. ROAD DIV. No	STATE
8	OREGO

REVISED A
2-58


BEGINNING OF PROJECT BFI-78 (19)
TA. 2806+55
To Roseburg
BFI 78 (18)
Grant Smith Co. Ro. O'xing
Sta. 2816+36.84
Sta. 2813+85.47 = Sta. 2814+23.12 EQUA
Sta. 2891+01
Roberts Cr. Br
Sta. 2893+35
R. 5 W.
R. 6 W.
Sta. 3119+59.02
Clarks Branch O'xing
Sta. 3121+84.02
EQUA Sta. 3103+35.51 = Sta. 3103+50.78
END OF PROJECT BFI-78 (19)
STA. 3161+70
To Myrtle Creek
PACIFIC HIGHWAY
ROBERTS MOUNTAIN
SOUTH UMPQUA RIVER
WINSTON
DILLARD
T. 28 S.
T. 29 S.
N
Stock Pile
Adj. Sta. 1323. MP 203.85
Sketch Map
SCALE 0 1/2 1 MILES
Gravel Deposit
0.25 Mi. W. MP 208.83
Stock Pile
Adj. MP 209

Original
Exc
19

157
NOV 8 1919
R. H. BALDOCK

STATE HIGHWAY COMMISSION

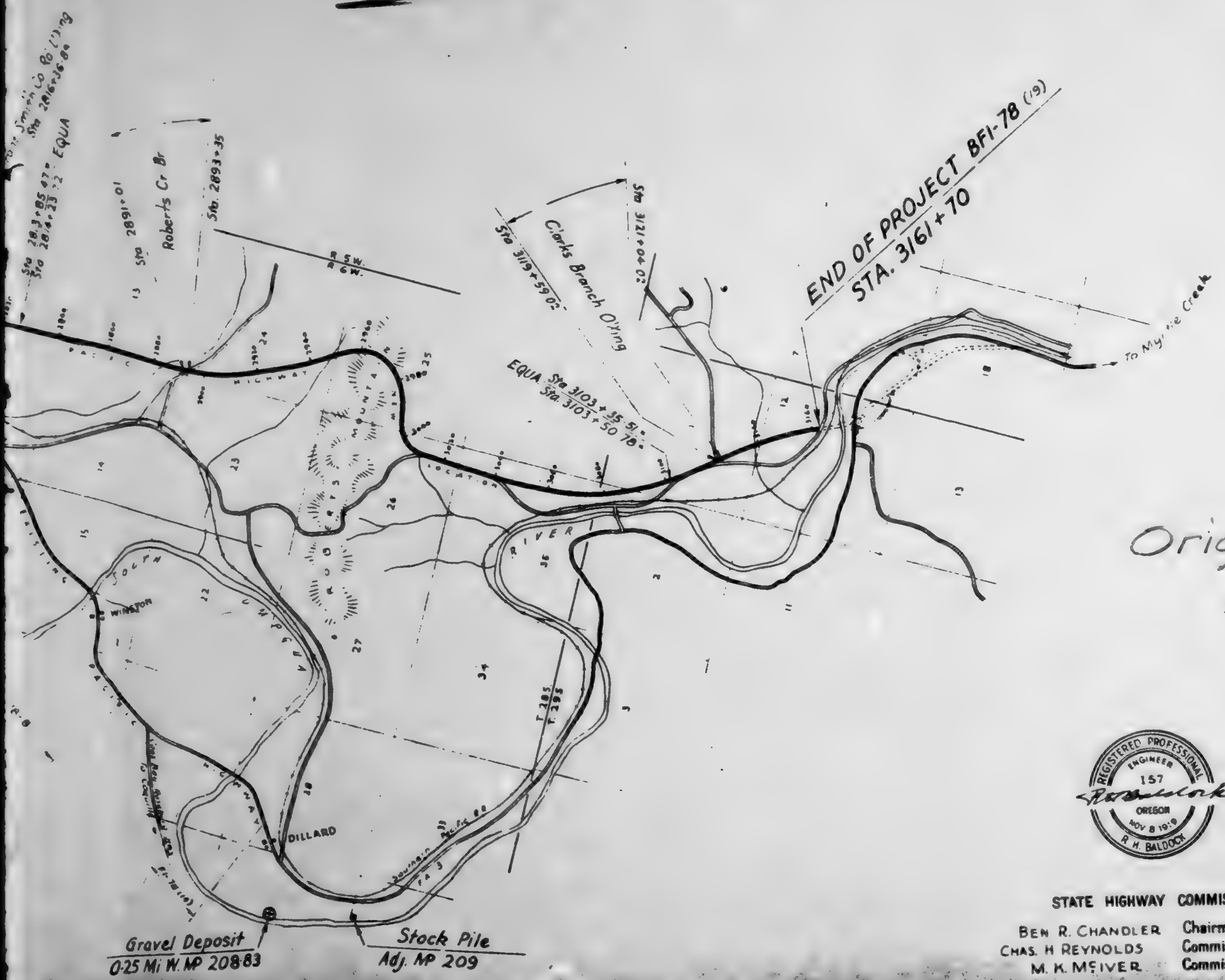
BEN R. CHANDLER	Chairman
CHAS. H. REYNOLDS	Commissioner
M. K. McIVER	Commissioner

APPROV

SHADY-BOOTH RANCH UNIT
SHADY-CANYONVILLE SECTION
PACIFIC HIGHWAY
DOUGLAS COUNTY
FEB. 1954

SHADY-BOOTH RANCH UNIT SHADY-CANYONVILLE SEC. PACIFIC HIGHWAY DOUGLAS COUNTY				SHEET No
				1
FED ROAD Div. No	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
8	OREGON	BFI 78 (19)		See Index

REVISED AS CONSTRUCTED
2 58 CONTRACT 4153


Sta 28.3+85.47 = Sta 2816+36.80
Sta 2814+23.72 EQUA
Sta 2891+01
Roberts Cr Br
Sta. 2893+35
R 5 W.
R 6 W.
Sta 3119+59.02
Clarks Branch O'Xing
Sta 3121+04.02
EQUA Sta 3103+35.51 = Sta 3103+50.78
END OF PROJECT BFI-78 (19)
STA. 3161+70
To Myrtle Creek
PACIFIC HIGHWAY
LOCATION
MOUNTAIN
RIVER
SOUTH UMPQUA
WINSTON
DILLARD
T. 28 S.
T. 29 S.
Gravel Deposit
0.25 Mi W. MP 208.83
Stock Pile
Adj. MP 209

Original Highway
Excavation
1954-55

R H Baldock
STATE HIGHWAY ENGINEER

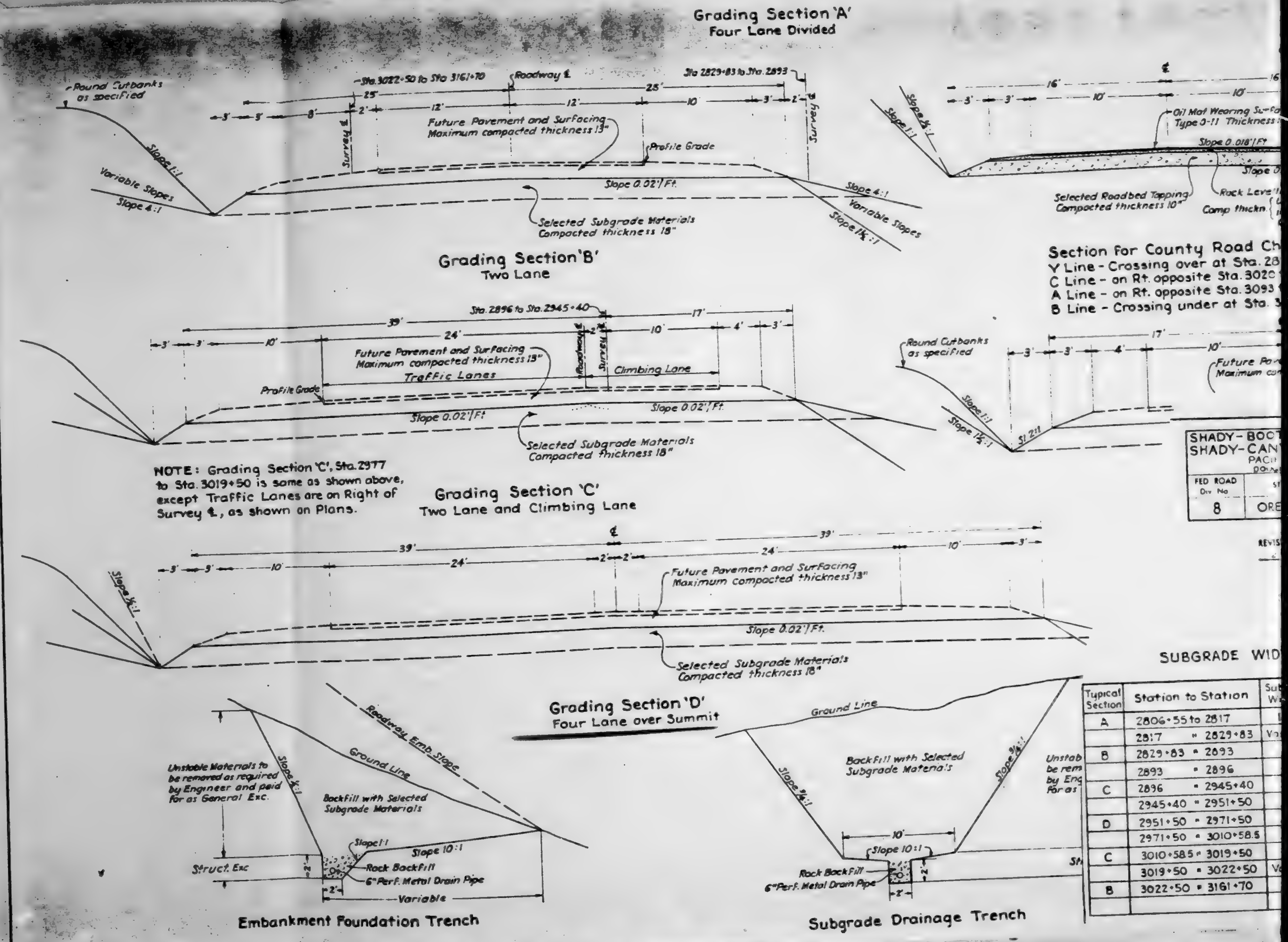
REGISTERED PROFESSIONAL ENGINEER
157
R H Baldock
OREGON
R. H. BALDOCK

STATE HIGHWAY COMMISSION
BEN R. CHANDLER Chairman
CHAS. H REYNOLDS Commissioner
M. K. McIVER Commissioner

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED.

DIVISION ENGINEER DATE


Round Cutbanks as specified
Sta. 3022+50 to Sta. 3161+70
Roadway ℄
Sta. 2829+83 to Sta. 2893
25'
12'
12'
25'
10'
3'
2'
3'
3'
8'
2'
Survey ℄
Survey ℄
Future Pavement and Surfacing Maximum compacted thickness 13"
Profile Grade
Slope 1:1
Variable Slopes
Slope 4:1
Slope 0.02'/Ft.
Slope 4:1
Variable Slopes
Slope 1½:1
Selected Subgrade Materials Compacted thickness 18"
16'
℄
16'
3'
3'
10'
10'
Slope ½:1
Slope 1:1
Oil Mat Wearing Surface Type 0-11 Thickness
Slope 0.018'/Ft
Slope 0
Selected Roadbed Topping Compacted thickness 10"
Rock Levelling
Comp thickn.
Sta. 2896 to Sta. 2945+40
39'
17'
3'
3'
10'
24'
2'
10'
4'
3'
Future Pavement and Surfacing Maximum compacted thickness 13"
Roadway ℄
Survey ℄
Traffic Lanes
Climbing Lane
Profile Grade
Slope 0.02'/Ft.
Slope 0.02'/Ft
Selected Subgrade Materials Compacted thickness 18"
Round Cutbanks as specified
17'
3'
3'
4'
10'
Future Pavement
Maximum compacted
Slope 1:1
Slope 1½:1
Sl 2:1
℄
39'
39'
3'
3'
10'
24'
2'
2'
24'
10'
3'
Slope ½:1
Future Pavement and Surfacing Maximum compacted thickness 13"
Slope 0.02'/Ft.
Selected Subgrade Materials Compacted thickness 18"
Unstable Materials to be removed as required by Engineer and paid for as General Exc.
Slope ½:1
Roadway Emb. Slope
Ground Line
Backfill with Selected Subgrade Materials
Slope 1:1
Slope 10:1
Struct. Exc.
2'
Rock Backfill
6" Perf. Metal Drain Pipe
2'
Variable
Ground Line
Backfill with Selected Subgrade Materials
Slope ¼:1
Slope ¼:1
10'
Slope 10:1
Rock Backfill
6" Perf. Metal Drain Pipe
2'
2'
Unstab
be rem
by Eng
for as
St

Grading Section 'A'
Four Lane Divided

Section for County Road Ch
Y Line - Crossing over at Sta. 28
C Line - on Rt. opposite Sta. 3020
A Line - on Rt. opposite Sta. 3093
B Line - Crossing under at Sta. 3

Grading Section 'B'
Two Lane

NOTE: Grading Section 'C', Sta. 2977 to Sta. 3019+50 is same as shown above, except Traffic Lanes are on Right of Survey ℄, as shown on Plans.

Grading Section 'C'
Two Lane and Climbing Lane

Grading Section 'D'
Four Lane over Summit

Embankment Foundation Trench

Subgrade Drainage Trench

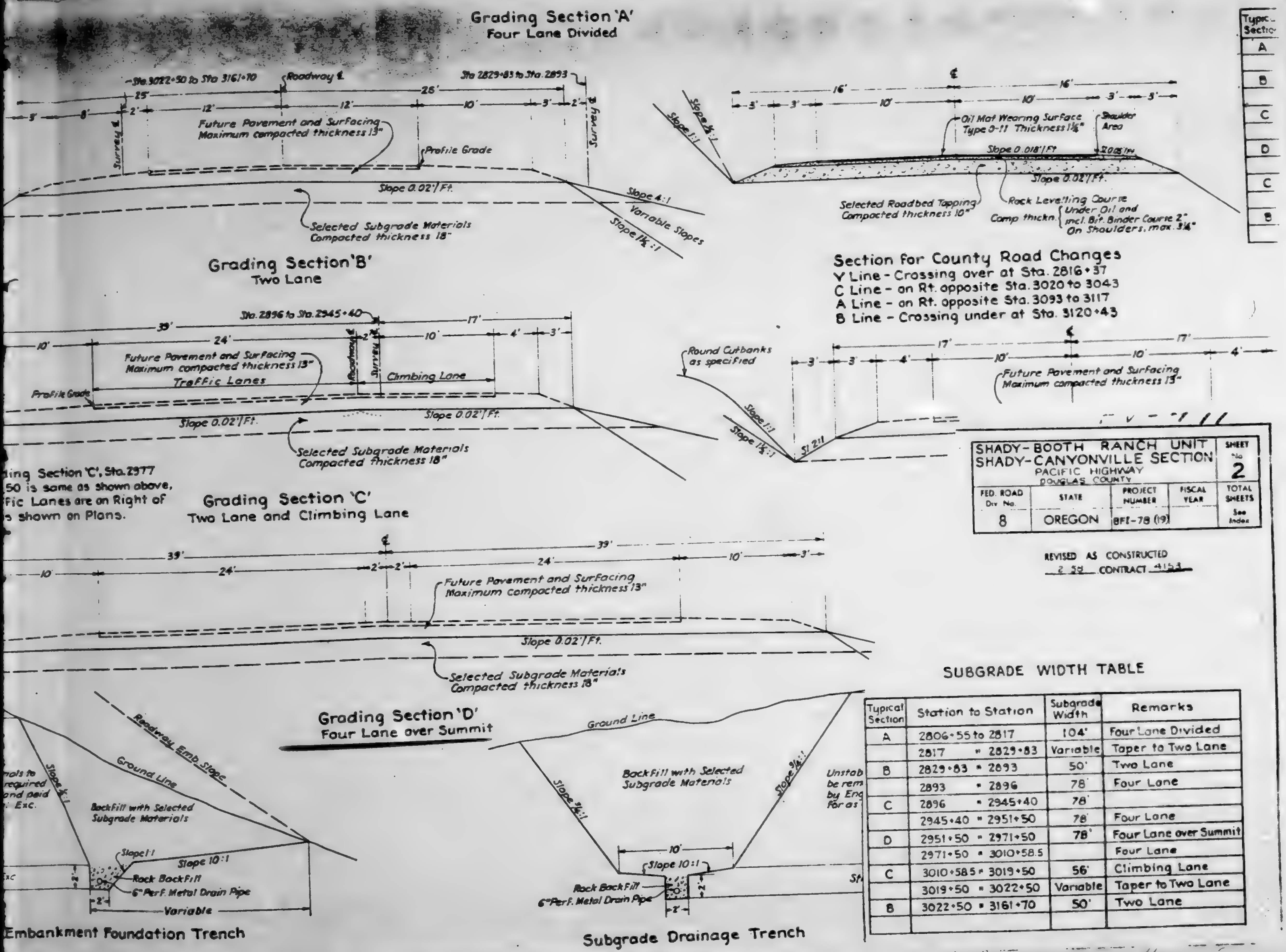
SUBGRADE WID

Typical Section	Station to Station	Sub W
A	2806+55 to 2817	
	2817 " 2829+83	Va
B	2829+83 " 2893	
	2893 " 2896	
C	2896 " 2945+40	
	2945+40 " 2951+50	
D	2951+50 " 2971+50	
	2971+50 " 3010+58.5	
C	3010+58.5 " 3019+50	
	3019+50 " 3022+50	Va
B	3022+50 " 3161+70	

SHADY-BOOT
SHADY-CAN
PACI

FED ROAD Div No	ST
8	ORE

REVIS


Grading Section 'A'
Four Lane Divided
Sta. 3022+50 to Sta. 3161+70
Roadway ℄
Sta. 2829+83 to Sta. 2893
25'
25'
5'
8'
2'
12'
12'
10'
3'
2'
Survey ℄
Survey ℄
Future Pavement and Surfacing
Maximum compacted thickness 13"
Profile Grade
Slope 0.02'/Ft.
Slope 4:1
Variable Slopes
Slope 1½:1
Selected Subgrade Materials
Compacted thickness 18"
Typic.
Sectio
A
B
C
D
C
B
℄
16'
16'
3'
3'
10'
10'
3'
3'
Slope 1:1
Slope 1½:1
Oil Mat Wearing Surface
Type 0-11 Thickness 1½"
Shoulder Area
Slope 0.018'/Ft.
2.05'/Ft.
Slope 0.02'/Ft.
Selected Roadbed Topping
Compacted thickness 10"
Rock Levelling Course
Comp thickn. Under Oil and incl. Bit. Binder Course 2"
On Shoulders, max. 3¼"
Grading Section 'B'
Two Lane
Sta. 2896 to Sta. 2945+40
39'
17'
10'
24'
2'
10'
4'
3'
Future Pavement and Surfacing
Maximum compacted thickness 13"
Traffic Lanes
Roadway ℄
Survey
Climbing Lane
Profile Grade
Slope 0.02'/Ft.
Slope 0.02'/Ft.
Selected Subgrade Materials
Compacted thickness 18"
Section for County Road Changes
Y Line - Crossing over at Sta. 2816+37
C Line - on Rt. opposite Sta. 3020 to 3043
A Line - on Rt. opposite Sta. 3093 to 3117
B Line - Crossing under at Sta. 3120+43
Round Cutbanks as specified
℄
17'
17'
3'
3'
4'
10'
10'
4'
Future Pavement and Surfacing
Maximum compacted thickness 13"
Slope 1:1
Slope 1½:1
Sl. 2:1
ding Section 'C', Sta. 2977
50 is same as shown above,
ffic Lanes are on Right of
s shown on Plans.
Grading Section 'C'
Two Lane and Climbing Lane
℄
39'
39'
10'
24'
2'
2'
24'
10'
3'
Future Pavement and Surfacing
Maximum compacted thickness 13"
Slope 0.02'/Ft.
Selected Subgrade Materials
Compacted thickness 18"
Grading Section 'D'
Four Lane over Summit
rials to
required
and paid
Exc.
Exc
Roadway Emb. Slope
Ground Line
Slope ¼:1
Backfill with Selected
Subgrade Materials
Slope 1:1
Slope 10:1
Rock Backfill
6" Perf. Metal Drain Pipe
2'
2'
Variable
Embankment Foundation Trench
Ground Line
Backfill with Selected
Subgrade Materials
Slope ¾:1
Slope ¾:1
10'
Slope 10:1
Rock Backfill
6" Perf. Metal Drain Pipe
2'
2'
Subgrade Drainage Trench
Unstab
be rem
by Eng
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St

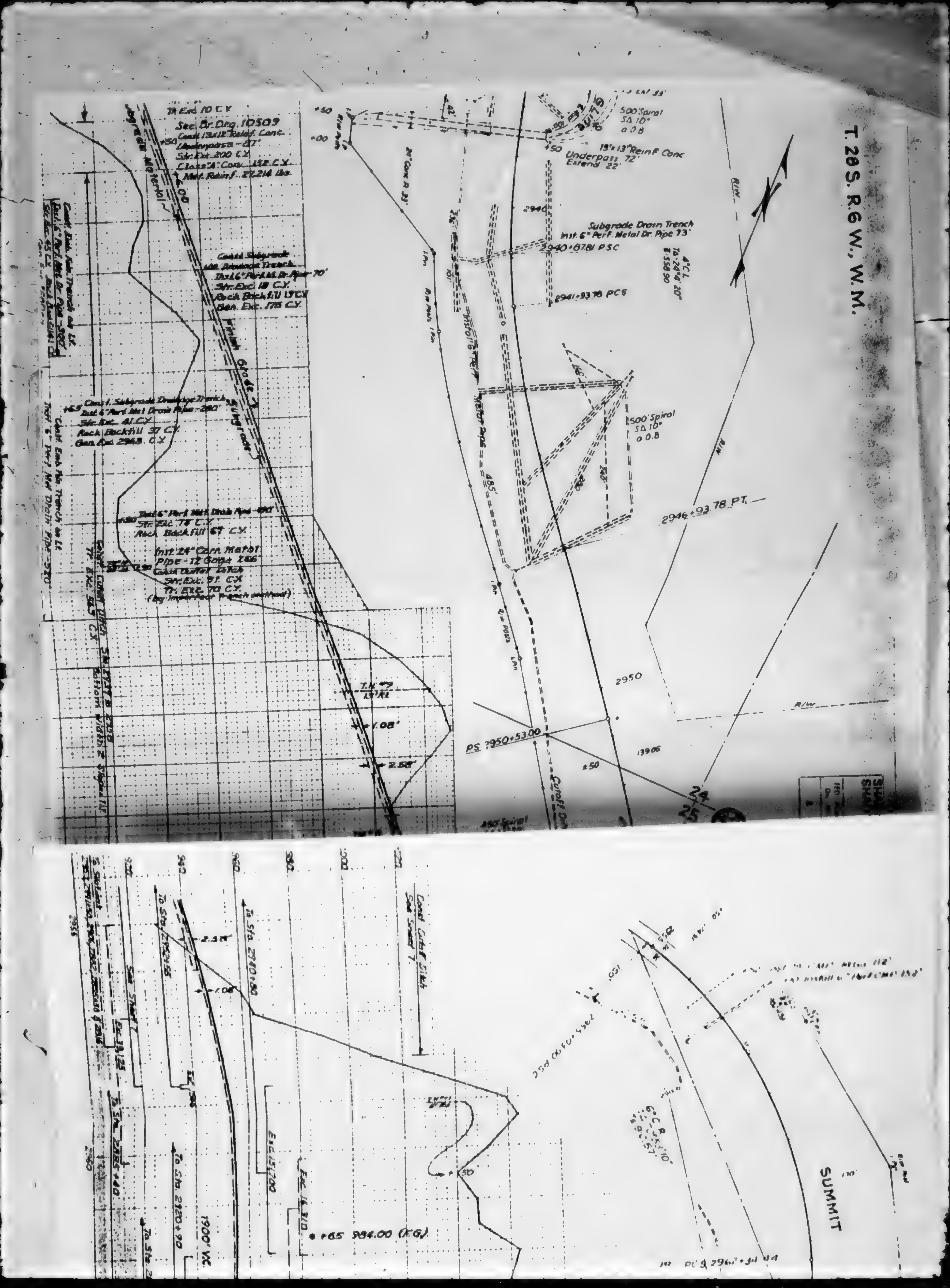
SHADY-BOOTH RANCH UNIT
SHADY-CANYONVILLE SECTION
PACIFIC HIGHWAY
DOUGLAS COUNTY

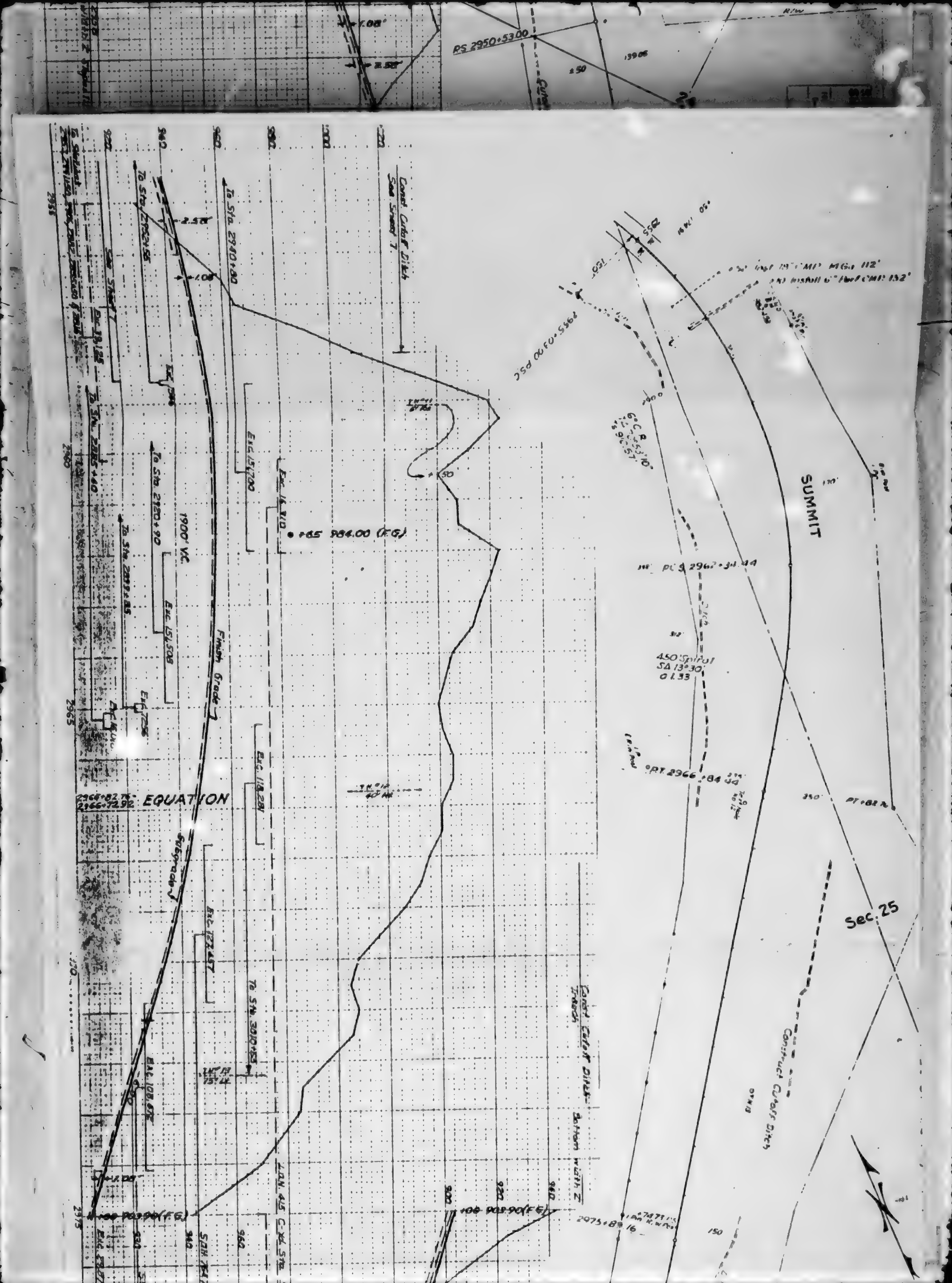
FED. ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR	SHEET No. 2 TOTAL SHEETS
8	OREGON	BFI-78 (19)		See Index

REVISED AS CONSTRUCTED
2 58 CONTRACT 4153

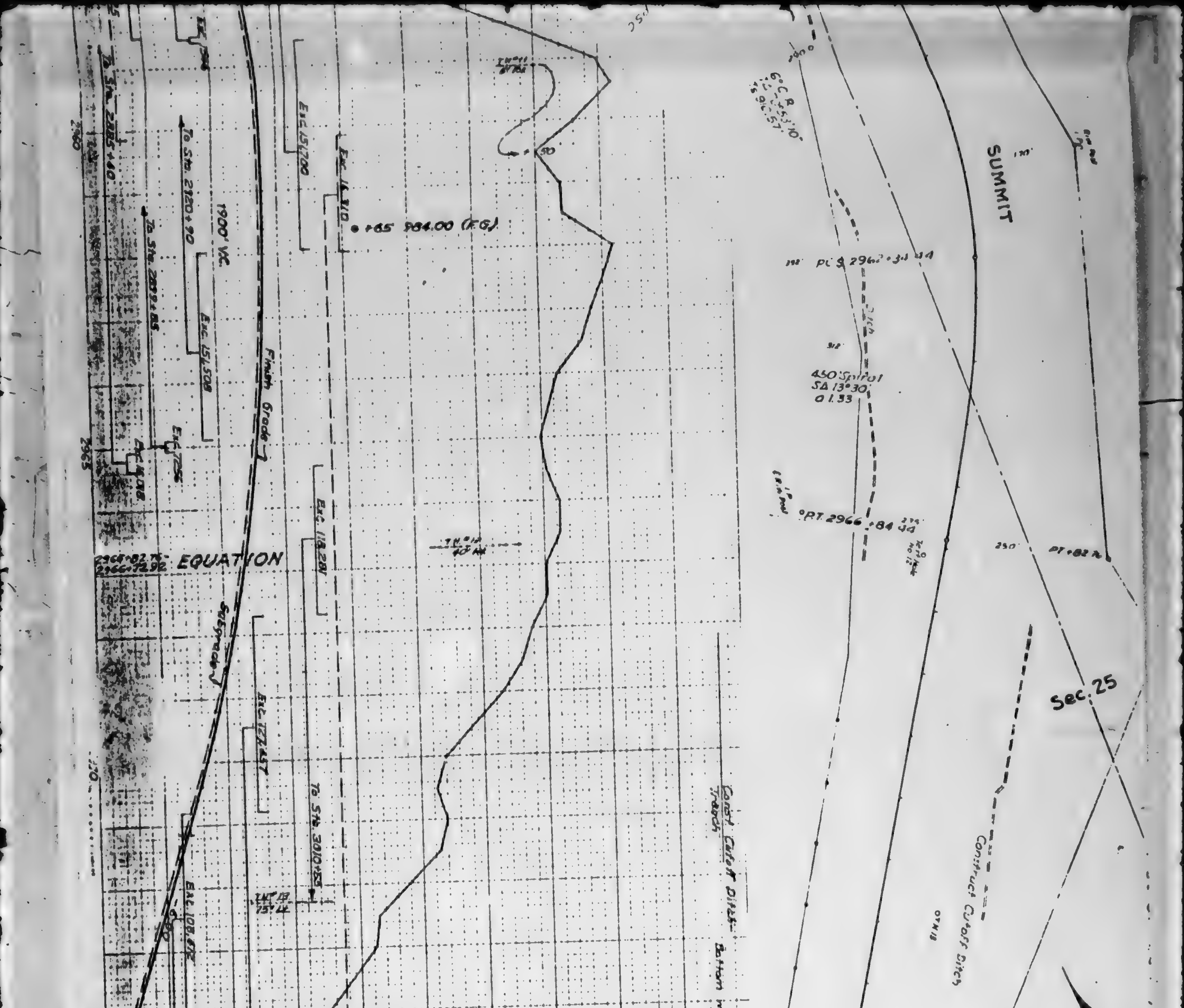
SUBGRADE WIDTH TABLE

Typical Section	Station to Station	Subgrade Width	Remarks
A	2806+55 to 2817	104'	Four Lane Divided
	2817 " 2829+83	Variable	Taper to Two Lane
B	2829+83 " 2893	50'	Two Lane
	2893 " 2896	78'	Four Lane
C	2896 " 2945+40	78'	
	2945+40 " 2951+50	78'	Four Lane
D	2951+50 " 2971+50	78'	Four Lane over Summit
	2971+50 " 3010+58.5		Four Lane
C	3010+58.5 " 3019+50	56'	Climbing Lane
	3019+50 " 3022+50	Variable	Taper to Two Lane
B	3022+50 " 3161+70	50'	Two Lane


T. 28 S. R.6 W., W.M.
Tr. Exc. 10 C.Y.
See Br. Drg. 10509
Const. 13x12 Reinf. Conc. Underpass - 87'
Str. Exc. 200 C.Y.
Class "A" Conc. 152 C.Y.
Met. Reinf. 27,214 lbs.
500' Spiral
SΔ 10°
θ 0.8
13'x13' Reinf. Conc. Underpass 72'
Extend 22'
Subgrade Drain Trench
Inst. 6" Perf. Metal Dr. Pipe 73'
2940+87.81 PSC
2941+93.78 PCS
2946+93.78 P.T.
Const. Subgrade Drainage Trench
Inst. 6" Perf. Met. Dr. Pipe 70'
Str. Exc. 18 C.Y.
Rock Backfill 13 C.Y.
Gen. Exc. 175 C.Y.
Finish Grade
Subgrade
Const. Subgrade Drainage Trench
Inst. 6" Perf. Met. Drain Pipe 280'
Str. Exc. 41 C.Y.
Rock Backfill 37 C.Y.
Gen. Exc. 2963 C.Y.
Inst. 6" Perf. Met. Drain Pipe 490'
Str. Exc. 78 C.Y.
Rock Backfill 67 C.Y.
Inst. 24" Corr. Metal Pipe - 12 Gage 286'
Const. Outlet Ditch
Str. Exc. 91 C.Y.
Tr. Exc. 70 C.Y.
(by imperfect trench method)
Metal Pipe
485'
R/W
2950
PS 2950+53.00
Cutoff Ditch
1.08'
2.58'
24
25
Const. Cutoff Ditch
See Sheet 7
To Sta. 2930+80
To Sta. 2920+90
To Sta. 2925+40
See Sheet 7
Exc. 15,700
Exc. 16,310
+65 984.00 (F.G.)
1900' V.C.
SUMMIT



RS 2950+53.00
R/W
-1.08'
-2.58'
Const Cutoff Ditch
See Sheet 7
To Sta 2940+80
To Sta 2952+56
See Sheet 7
Exc 13,125
To Sta 2985+40
To Sta 2970+90
To Sta 2989+85
1900' V.C.
Exc 151,700
Exc 16,310
+65 984.00 (F.G.)
Exc 151,508
Finish Grade
Exc 725
2966+82.76
2966+72.92 EQUATION
Subgrade
Exc 118,281
Exc 123,457
To Sta 3010+85
Exc 108,675
+00 903.90(F.G.)
Const Cutoff Ditch
Bottom Width 2'
920
940
960
980
1000
1020
2960
2965
2970
2975
2955+03.00 PSC
Inst 18" CMP MG 112'
Install 6" Perf CMP 132'
SUMMIT
PC S 2962+31.44
450' Spiral
SΔ 13°30'
PT 2966+84.44
Sec. 25
Construct Cutoff Ditch
2975+89.16


SUMMIT
EQUATION
2966+82.76
2966+72.92
Finish Grade
Sub Grade
1900' V.C.
Exc. 151,700
Exc. 151,508
Exc. 118,281
Exc. 127,457
Exc. 108,832
To Sta. 2985+40
To Sta. 2920+90
To Sta. 2939+85
To Sta. 3010+55
+65 984.00 (F.G.)
+00 903.90 (F.G.)
PC S 2962+34.44
PT 2966+84.44
PT+82.76
450' Spiral
SΔ 13°30'
Θ 1.33
300' Spiral
PSC 2979+89.16
2975+89.16
Construct Cutoff Ditch
Const. Cutoff Ditch Trench Bottom Width 2'
SDH 236,200 Yd. Sta.
SDH 22,979 Yd. Sta.
SDH 76,472 Yd. Sta.
LDN 415 C.Yd. Sta.
LDN 4,706 C.Yd. Sta.
Sec. 25
Sec. 25
2.58
900
920
940
960
2965
2975
2980
150
230
250
130

#7363 1-5 L

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION FILE:

INTER-OFFICE CORRESPONDENCE

Salem, Oregon

January 22, 1976

Fred Eriksen

FROM: Fred Eriksen
Design Team Supervisor

SUBJECT: Roberts Mountain Section
Pacific Highway
Douglas County

TO: MEMO TO THE FILES

Corrective measures proposed for the Roberts Mountain slide areas were reviewed January 19, 1976 in Mr. Versteeg's office. Present were Messrs. Hal Versteeg, Frank Terpin, George Wills, Fred Yarbrough, Frank Roberts and myself.

The slide areas are in the cut sections, right of station 2960 and left of station 2967. The slide area at station 2960 is at the grade summit. Both slides, in Mr. Yarbrough's opinion, are the result of sub-surface water problems.

Two methods of stabilizing the slide areas are proposed. One method, which Mr. Yarbrough prefers, is to remove the sliding material. About 400,000 cy. of excavation would be removed at a cost of $850,000. Mr. Yarbrough said this proposal should remove about 80% of the sliding material. If all of the sliding material were removed it would amount to about 500,000 cy. of excavation at a cost of $1,100,000.

The other method is to construct rock inlays in the lower portion of the slopes. The rock inlays require 135,000 cy. of rock and 135,000 cy. of excavation. The work is estimated to cost $1,650,000. A source for the rock material has not been determined at this time.

It was recommended that horizontal drains be installed in the cut slopes adjacent to each slide area. The location and lengths of these drains will be furnished by Fred Yarbrough. The cost of the horizontal drains will be added to the above estimates.

Methods of stabilizing the slopes were discussed. It was thought that the material at the slip plane would be fairly hard rock and serrated slopes would be difficult to construct. Provision for establishing vegetative cover on the slopes should be included in the work plans.

The accident history of this area and the probable causes for them were discussed. The general feeling was that it is most likely a combination of factors: Pavement distortion, curvature and superelevation.

FE:az
cc: A. Shirley
J. H. Versteeg
G. C. Wills
F. W. Yarbrough
F. A. Roberts

RECEIVED
1976
ROAD
DESIGN

Requires Reply
Approval
Do not file
Anderson

9363

FORM E-30

OREGON STATE HIGHWAY DIVISION

INTER-DEPARTMENT CORRESPONDENCE

Salem, Oregon
January 2, 1976

SUBJECT: Geophysical Investigation
Cut Slope Slides
Roberts Mountain
Pacific Highway I-5
Douglas County

To: F.W. Yarbrough
Soils & Geology Engineer

As requested the above investigation was recently completed. The results are shown on the accompanying sheets of drawings.

It is to be noted that:

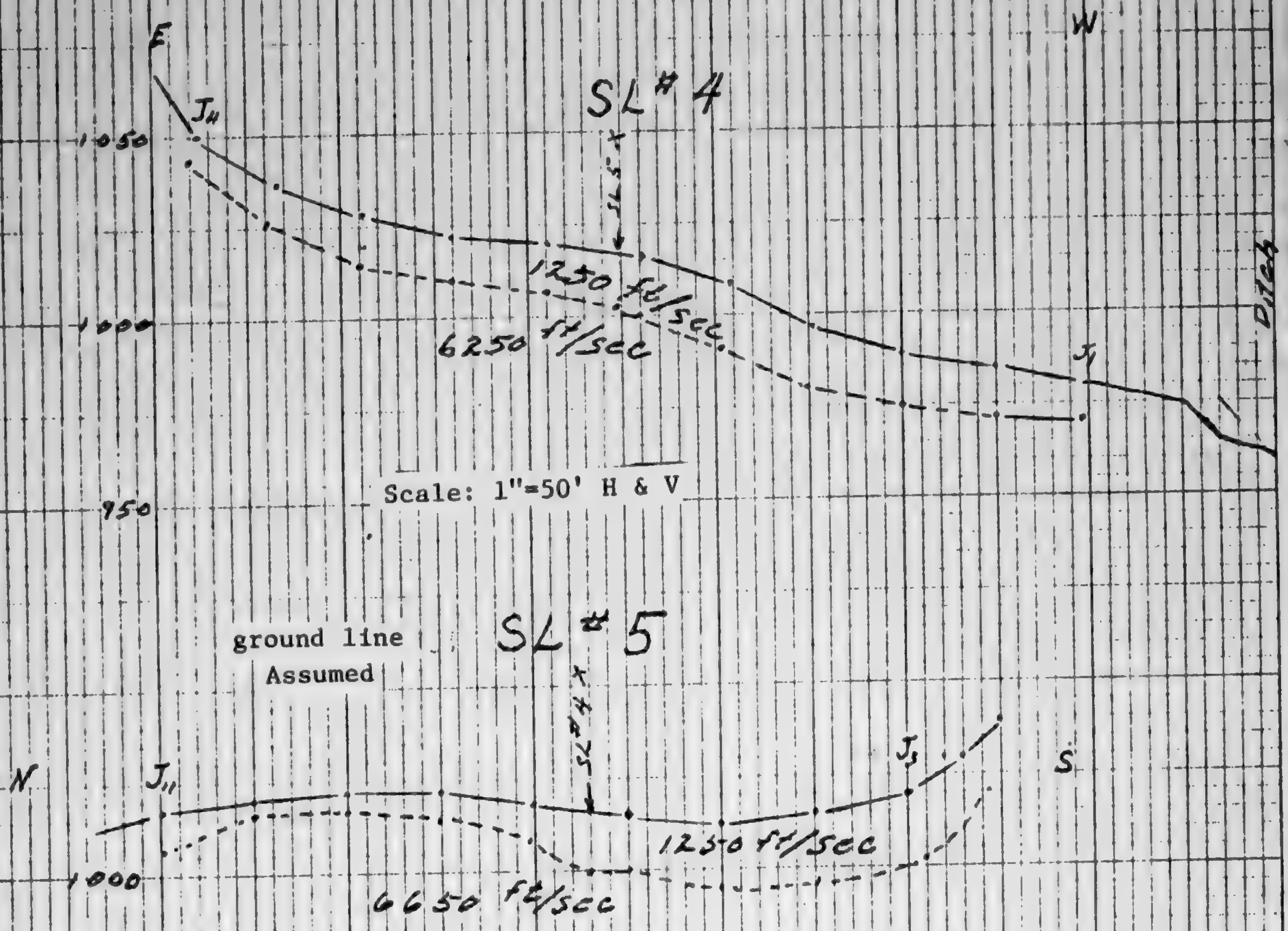
1. The rock is badly fractured, irregular lenses floating in incompetent material.
2. The base of rapid movement appears to be on a 2 1/2:1 slope on South Bound side while on the North Bound side the base of rapid movement appears to be on a 4:1 slope.
3. Tension cracks appear beyond the catch point of the designed slope.

William P. Milne
William P. Milne
Geophysicist
John F. Demezas
John F. Demezas
Geophysicist

WPM:jmw
Attachment
cc: Victor D. Wolfe
Alfred Shirley
Elliott Parker

OREGON STATE HIGHWAY DIVISION

LOCATION SECTION

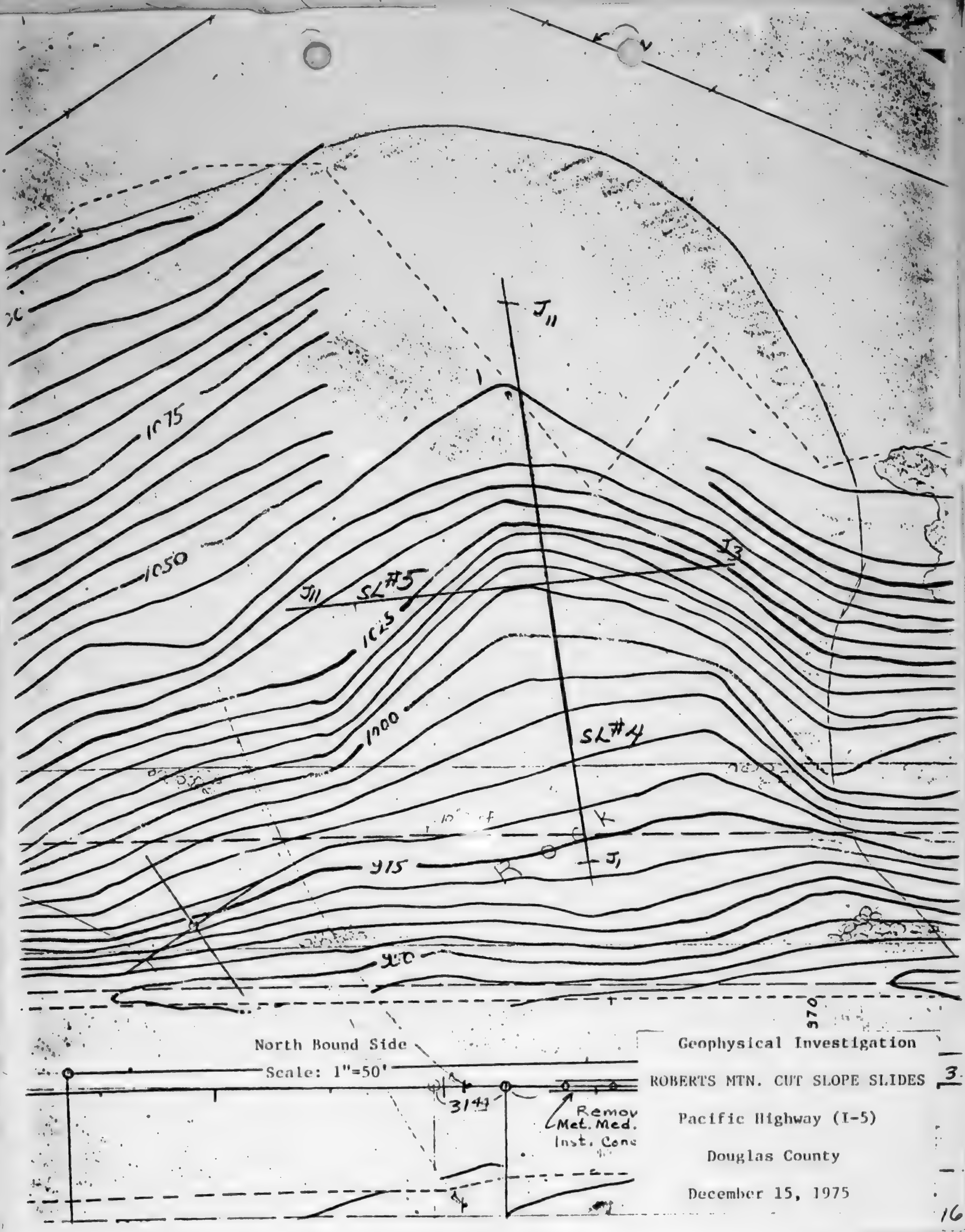


Scale: 1"=50' H & V

SEISMIC SECTIONS
North Bound Side

Geophysical Investigation
ROBERTS MTN. CUT SLOPE SLIDES
Pacific Highway (I-5)
Douglas County
December 15, 1975

MADE IN U.S.A.
10 X 10 PER INCH


J11
1075
1050
J11
SL#5
1025
J3
1000
SL#4
K
ROCK
J1
975
950
970
3149
Remov
Met. Med.
Inst. Conc

North Bound Side

Scale: 1"=50'

Geophysical Investigation

ROBERTS MTN. CUT SLOPE SLIDES

Pacific Highway (I-5)

Douglas County

December 15, 1975

3

16

9363 Form FHWA 121 (Rev. 5-73)

2.

UNITED STATES GOVERNMEN

Memorandum

DEPAR NT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
Box 300
Salem OR 97308

DATE: September 3, 1975

In reply refer to: 1041DB.A

SUBJECT: Oregon Project I-5-2(-)
Roberts Mt. Slides
Pacific Highway
Interstate Eligibility

NOTED
H. S. COULTER

FROM : G. L. Green, Division Administrator

TO : Mr. F. B. Klaboe, Administrator & State Highway Engineer

On August 21, 1975, a review of soil-related problems on I-5 just south of Roseburg was conducted by:

Elliot Parker, Regional Geologist, OSHD
Al Bates, Resident Engineer, OSHD
Andy Munoz, Regional Soils & Pavement Engineer, FHWA
Tom Lowe, Area Engineer, FHWA

If the State intends to submit proposals for correcting these problems with FAI funds, the following support data will be needed to determine eligibility:

1. A history of the project including soil and geologic information pertaining to the original design and redesign studies.

2. The Design Studies and Analyses for corrective schemes with calculated safety factor.

3. Estimated costs for the proposed corrective schemes.

G.K. Hossner
for G. L. Green

cc:
OSHD (Region 3)(Bud Shirley)

RECEIVED
STATE HWY ENGR
SEP 5 '75
REFER TO
Over - Wolfe
FOR
Info | Inves | R.D. | R.S. | Sign | Act ☒ | File

RECEIVED
SEP 8 1975
Office of
Assistant State Highway Engineer
K

RECEIVED
SEP 8 1975
Assistant State Highway Engineer

1981 Blind Slough (Barendse 9364
Rd.) Br. Sec. of FAS A736.
(Structure Repair)

C4a 7377 10-14-80

9364

HIGHWAY DIVISION INVOICE

INVOICE NUMBER	140366
DATE	11/8/84
YOUR ORDER NUMBER	
BILLING REQ. NUMBER	CA 3479

SEND REMITTANCE TO:
OREGON STATE HIGHWAY DIVISION
TRANSPORTATION BUILDING
SALEM, OREGON 97310

CODE
NEW: CLATS0C

- CLATSOP COUNTY
- COURTHOUSE
- 749 COMMERCIAL ST
- ASTORIA, OR 97103

PREFIX	FUNC	SUB FUNC	OBJECT	P/N GROUP	AMOUNT
	325	00			$297.51
504-1037	296	00	000		297.51
504-1037	297	00	000		(297.51)

↑ FOLD

DESCRIPTION		TOTAL PRICE
FINAL BILLING: BLIND SLOUGH BRIDGE FAP NO. RS A 736(1)		
COUNTY SHARE OF CONSTRUCTION COSTS PER ATTACHED STATEMENT	$2,297.51	
LESS COUNTY'S ADVANCE DEPOSIT	(2,000.00)	
BALANCE DUE FROM COUNTY		$297.51
110.00-FINAL BILLING		

PROGRAM SECTION
MANAGER ____ RESOURCE UNIT ____
FA UNIT ____ PROGRAM UNIT ____
NOV 14 1984
REFER TO ____
R/D ____ ACT ____ REPLY ____
DISC ____ INFO ____ FILE ____

IF YOU HAVE QUESTIONS ON THIS INVOICE, PLEASE CONTACT:
MIKE SHULTZ PH: 378-6514 FOR CORRECTNESS OF CHARGES
OR JANE HENSLEY PH: 378-5035 PREPARER OF INVOICE

9364

OREGON STATE HIGHWAY DIVISION

ITEMIZED STATEMENT OF FINAL COSTS DATE: 8/29/84

COUNTY: CLATSOP AGREEMENT NO: 7377 PROJECT NO: RS-A736(1)

CONTRACT NO: 9364 SECTION: Blind Slough (Barenose Rd.) Br.

CONSTRUCTION (Prefix No. 504-1037):

	PARTICIPATING	NONPARTICIPATING
Work Performed by Contractor	$ 25,676.00	$ 22.47
Interest on Final Payment		1,059.94
Engineering Expense	1,529.57	
Program Management	15.77	
Materials Lab	428.11	
Technical Services	213.99	
Construction Branch	131.72	
Region Office Charges	1,532.24	
TOTAL CONSTRUCTION COST	$ 29,527.40	$1,082.41

SUMMARY:

Total Participating P.E. Cost	$ 29,527.40
Total Federal Funds (88.18%)	(26,037.26)
SUBTOTAL	$ 3,490.14
Less 50% State Share	(1,745.07)
Less State Share 50% Non Participating Construction Engineering	(529.97)
Plus Non Participating County Cost	1,082.41
Less Advance Deposit #956	(2,000.00)
BALANCE DUE FROM COUNTY	$ 297.51

MKS:pf

504-1037

ORIGINAL 9364

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

7-12-84

FINAL VOUCHER FOR PAYMENT UNDER 23 U.S.C. 117

D.O. VOUCHER NO.

STATE VOUCHER NO.

DATE

FHWA SCHEDULE NO.

PAID BY

Appropriation:

The United States, Dr., TO Treasurer of the State of Oregon

Address Capitol Building, Salem, OR 97310

STATE Oregon

FEDERAL AID PROJECT NO. RS-A736(1)

PROGRAM APPROVED

VOUCHER PERIOD From: 9/2/81 To: 2/4/83

FINANCIAL DATA

TOTAL ACTUAL COST	TOTAL PARTICIPATING COST	PRO-RATA OF PARTICIPATING COST CLAIMED FROM U.S.	TOTAL AMOUNT CLAIMED FROM U.S.	LESS PREVIOUS PAYMENTS	NET AMOUNT CLAIMED
$30,609.81	$29,527.40	.8818	$26,037.26	$26,037.26	0

The undersigned State highway agency certifies as follows: The above-mentioned project has been completed; the plans, design and construction for said project are in accord with the laws, standards and procedures of this State applicable to projects in this category approved by the Federal Highway Administration or such project exceptions as have been approved by FHWA; and no claim has been presented to or payment made by the United States for the work for which payment is claimed herein.

Oregon *State Highway Agency*

SIGN ORIGINAL ONLY

By Controller *Authorized Officer* 7/12/84 *Date*

I certify that a final inspection of the above project has been made by an authorized official of the Federal Highway Administration. On the basis of such inspection and the State highway agency's certification the amount claimed is approved for payment.

Amount submitted $ 0.00

Adjustments $

Amount Approved $

SIGN ORIGINAL COPY

Signature of Authorized FHWA Representative *Date*

Form FHWA-1447 (4-78) PREVIOUS EDITIONS ARE OBSOLETE

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (Payee must not use this column)
	Blind Slough (Barendse Road) Bridge Section Barendse Road (County Road) Clatsop County					
	Construction Type Code X080 Structure Br. No. 11138B (Sta. 4+09 to Sta. 8+55)					
	Final Contract Payment Summary	Lump Sum			$25,676.00	
	Construction Engineering					
	State	All Required			3,851.40	
	Total Participating Construction Cost				$29,527.40	
	Non Participating Project Cost					
	Interest on Final Payments	All Required			$ 22.47	
	Construction Engineering	All Required			1,059.94	
	Total Non Participating Project Cost				$ 1,082.41	
	Total Project Cost				$30,609.81	
	Prepared based on the Participating cost as shown on the Federal Billing as of 7/19/84.					
	AMOUNT CARRIED FORWARD					

OREGON STATE HIGHWAY DEPARTMENT
FHWA BILLING VOUCHER

801
BILLING NUMBER 06

PREFIX GRP FED AID PROJ FL APPR	AGREEMENT AMOUNT	TOTAL COSTS TO DATE	PARTIC. AMOUNT	% OF PARTIC	FEDERAL SHARE	AMOUNT PREV CLAIMED	ADJUSTMENT AND CODE	AMOUNT OF THIS VOUCHER
502-1001 18 RS -A616-002 APPR-075	158,912.29	180,446.65	180,274.86	88.15	158,912.29	158,912.29		
502-1002 18 PMS -0005-101 APPR-140	63,010.26	63,143.86	63,010.26	100.00	63,010.26	63,010.26		
503-1024 1 RRS -A595-001 APPR-138	58,378.00	207.46	207.46	90.00	186.71	186.71		
503-1043 1 RS -A619-002 APPR-075	347,961.00	384,095.56	349,931.87	88.15	308,464.94	308,464.94		
8 RS -A619-002 APPR-075	1,000.00			88.15				
9		480,334.72						
503-1043 PREFIX TOTALS	348,961.00	864,430.28	349,931.87		308,464.94	308,464.94		
503-1061 1 RRP -A473-001 APPR-139	126,828.00	32,543.94	32,543.94	90.00	29,289.56	29,289.56		
504-1037 18 RS -A736-001 APPR-075	26,037.26	30,609.81	29,527.40	88.18	26,037.26	26,037.26		
504-1038 18 RS -A737-002 APPR-075	272,718.86	309,412.25	309,275.18	88.18	272,718.86	272,718.86		
505-1004 18 BHS -A752-002 APPR-118	129,287.71	169,256.98	161,609.64	80.00	129,287.71	129,287.71		
505-1006 1 RRP -A747-001 APPR-139	51,772.00	3,606.10	3,606.10	90.00	3,244.59	3,244.59		
505-1007 1 RS -A744-001 APPR-075	150,125.00	109,008.27	109,008.27	88.15	96,090.79	96,090.79		
505-1093 18 RS -A756-001 APPR-075	566,447.09	649,392.93	647,600.67	86.77	566,447.09	566,447.09		
505-1098 18 BRS -A743-001 APPR-118	129,168.82	167,549.54	161,461.02	80.00	129,168.82	129,168.82		
505-1084 1 RS -A426-002 APPR-075	168,935.00	169,278.44	169,278.44	88.15	149,218.94	149,204.43		14.51
506-1091 1 HES -A431-001 APPR-141				90.00				
508-1063 18 RS -A301-003 APPR-075	290,715.26	329,989.82	329,683.90	88.18	290,715.26	290,715.26		
509-1033 1 RS -A345-003 APPR-075	345,375.00	194,303.08	194,266.09	88.15	171,245.56	171,247.97		2.41CR
9		68,894.76						
509-1033 PREFIX TOTALS	345,375.00	263,197.84	194,266.09		171,245.56	171,247.97		2.41CR
510-1012 1 BRS -A409-003 APPR-118	598,166.00	747,854.73	747,464.56	80.00	597,971.65	597,971.65		
510-1022 1 RS -A409-006 APPR-075	148,489.00	160,349.38	160,343.33	88.15	141,342.65	141,342.65		
510-1024 1 RS -A409-005 APPR-075	314,394.00	332,995.06	333,058.57	88.15	293,591.13	293,591.13		
510-1025 1 RS -A390-001 APPR-075	486,117.00	549,587.62	549,490.29	88.15	484,375.69	484,375.69		
513-1065 18 BRS -A475-001 APPR-114	71,650.16	92,136.81	89,562.70	80.00	71,650.16	71,650.16		

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                                                                                   JULY 1984           PAGE  341
ACCOUNT SUMMARY - EXPENDITURES & LEDGERS                                              FISCAL         GRAND TOTAL    ACTIVE YRS
                                                                                                                      BEG    END
                                   PREFIX  FUNCTION SUB F.  OR  CURRENT MONTH      YEAR TO DATE      TO DATE
      DESCRIPTION
                                                                                                                     STATE
BLIND SLOUGH(BARENDSE RD)    CONT NO 9364 & FA PROJ NOS RS  8736001 100                             25,676.00        82     82
                              [illegible] 1037    201     00 P [illegible]                                22.47         82     82
                              [illegible] 1037  [illegible] 00 N 9     906.70          906.70          27,537.26CR       82     84
                              [illegible] 1037  [illegible] 00 N 9                                      1,500.00         82     82
                              [illegible] 1037  [illegible] 00 N 9     906.70CR        906.70CR        26,037.28        82     84
                              [illegible] 1037  [illegible] 00 P 1   1,027.10CR      1,027.10CR         1,529.57        81     84
                              504   1037    900     00 P 1   1,003.43        1,003.43         1,060.94        81     84
                              [illegible] 1037    900     00 N 1                                        15.77         81     82
                              [illegible] 1037    920     00 P 1                                  [illegible].50 3 Feb.11   82     82
                              [illegible] 1037    942 2   00 P 1                                  [illegible]         82     82
                              [illegible] 1037    943 3   00 P 1                                  [illegible]         81     82
                              [illegible] 1037  [illegible] 00 P 1                                  213.[illegible]     81     82
                              [illegible] 1037  [illegible] 00 P 1                                     131.72         81     83
                              504   1037  [illegible] 00 P 1                                  1,5[illegible].2[illegible]   81     83
                                            TOT     P1      1,027.10CR      1,027.10CR        29,527.40
                                            TOT     N1      1,003.43        1,003.43          1,082.41
                                         ** JOB TOTALS **          23.67CR**       23.67CR**   30,609.81 **

                                                                                                                     STATE
WESTPORT FERRY SLIP          CONT NO 9410 & FA PROJ NOS RS  8737002.100                            278,103.42        82     83
                              [illegible] 1038    201     00 P 1                                        41.50         83     83
                              [illegible] 1038  [illegible] 00 N 1                                 1,[illegible]      84     84
                              [illegible] 1038  [illegible] 01 P 1                                289,36[illegible]CR   82     [illegible]
                              [illegible] 1038  [illegible] 00 N 9                                 16,660.00         82     82
                              [illegible] 1038  [illegible] 00 N 9                                272,718.[illegible]   82     [illegible]
                              [illegible] 1038    257     00 N 9                                 16,025.77         82     83
                              [illegible] 1038  [illegible] 00 P 1                                      95.57         82     83
                              [illegible] 1038    900     00 N 1                                   20.[illegible]      84     [illegible]
                              [illegible] 1038    915     00 P 1                                   91.[illegible]      82     [illegible]
                              [illegible] 1038    920     00 P 1                                      18.75         82     82
                              [illegible] 1038    921     00 P 1                                  5,10[illegible]    82     82
                              [illegible] 1038    940     00 P 1                                   27[illegible]      [illegible]  83
                              [illegible] 1038  [illegible] 00 P 1                                     463.22         82     82
                              [illegible] 1038    942     00 P 1                                  5,717.47         82     [illegible]
                              [illegible] 1038  [illegible] 00 P 1                                     631.[illegible]5   82     83
                              [illegible] 1038  [illegible] 00 P 1                                     429.32         82     83
                              504   1038    946     00 P 1                                   4[illegible].46       82     84
                              504   1038    948     00 P 1
                                            TOT     P1                                          309,27[illegible]
                                            TOT     N1                                              137.07
                                         ** JOB TOTALS **                **              **    309,412.25 **

                                                                                                                     STATE
CLATSKANIE R(CLATSKANIE)B    CONT NO 9507 & FA PROJ NOS BHS 8752002 100                            140,238.05        82     83
                              [illegible] 1004    201     00 P 1                                        14.17         83     83
                              [illegible] 1004  [illegible] 00 N 1                                  37,803.14         82     83
                              [illegible] 1004  [illegible] 00 N 9                                 167,090.85CR       82     83
                              [illegible] 1004  [illegible] 00 N 9
                              505   1004    296     00 N 9
```

9364

STATE OF OREGON
HIGHWAY ACCOUNTING
CONTRACT ACCTG. UNIT — DEPT
5034 — TELEPHONE

INTEROFFICE MEMO

TO: ENGINEERING(DESIGN) ______
CONSTRUCTION ______
STRUCTURES ______
REGION 2 ENGINEER ______
UTILITY AUDITOR ______

DATE. 5/6/82

REGION 2 ENGINEER
RECEIVED
MAY 10 1982
☐ RLE ☐ RBE
☐ RE ☐ RCE ☐ RME ☐ RTE ☐ ROE
☐ ULE ☐ GEO ☐ PSO ☐ ENV ☐ RFE

FROM: R. J. HACEK
ASSISTANT CONTROLLER

SUBJECT: PREFIX 504-1037 CANCELLATION
PROJECT Blind Slough (Barendse Rd) Bridge
CONTRACT NO. 9364
FAP NO. RS-A736(1)

THIS PROJECT HAS BEEN FINALED WITH THE CONTRACTOR. THE PREFIX WILL BE CANCELLED ON 8/1/82 UNLESS NOTIFIED BY YOU THAT ADDITIONAL WORK OR CLAIMS REQUIRE THE PROJECT TO REMAIN OPEN.

cc: C. Anderson
Bah 5-14

PLEASE REPORT BELOW:

5/12/82 Anticipate no further charges to prefix
C Anderson

cc: Contract Accounting
Bah 5-13

REGION 2 ENGINEER
RECEI
13 1982
RE RME PSO ENV

cc Dick Hacek - Please keep this prefix open for continued monitoring for 2 years
A Wimer

cc Walt Hart
C T Kenney
Chet Anderson
Hal Reynoldson

NOTE: THE REGION OFFICE IS RESPONSIBLE FOR NOTIFYING THE RESIDENT ENGINEER AND APPLICABLE MAINTENANCE FORCES THAT NO FURTHER CHARGES SHOULD BE MADE AGAINST THIS PREFIX AFTER THE ABOVE DATE.

9364

File

REPORT OF ACTION UNDER DELEGATED AUTHORITY BY CONSTRUCTION ENGINEER

4-8-82

On behalf of the Commission and under authority delegated to me to accept contracts completed according to specifications, I accepted the following:

Contractor and Contract No.	Section & County	Acceptance Date
R. L. Coats No. 9293	Lake-Harney Co. Line Harney County	March 4, 1982
Eugene Sand & Gravel, Inc. No. 9237	Poodle Creek Road Lane County	March 5, 1982
Horton Bros., Inc. No. 9285	S.Bank Chetco River Rd. U'Xing. Curry County	March 9, 1982
Tice Electric Co. No. 9269	Arterial St. Light Conversion Proj. (Portland) Multnomah County	March 16, 1982
Mid-Columbia Paving Co. No. 9316	Sherman Ave.-Eugene St. (Hood River) Hood River County	March 18, 1982
Hertz Electric,Inc. No. 9244	Central Ore. Hwy. & Arnold Mkt. Rd. Deschutes County	March 18, 1982
Baker Redi-Mix, Inc. No. 9323	Auburn Ave.-Broadway St. & Dewey Ave.-Broadway St. Baker County	March 18, 1982
L.W. Hembree Co. No. 9195	Tualatin Valley Hwy. @ SW 247th Ave. (Hillsboro) Washington County	March 19, 1982
R. L. Coats No. 9333	U.S. Hwy. 97 - U.S. Hwy. 26 Jefferson County	March 19, 1982
Slayden & Holm, Inc. No. 9267	Dairy Creek (Susbauer Rd.) Bridge Washington County	March 22, 1982
Babler Bros., Inc. No. 9224	Polallie Cr.-M.P. 84.94 Hood River County	March 30, 1982

Contractor and Contract No.	Section & County	Acceptance Date
Hamilton Electric,Inc. No. 9270	Mt. Hood Hwy.@ Welches Rd. Clackamas County	March 31, 1982
L. W. Hembree Co. No. 9194	Mt. Hood Hwy. @ SE Hogan Rd. & Burnside Rd. (Gresham) Multnomah County	March 31, 1982
Mill Plain Electric No. 9330	Sunnyside Rd. @ SE 97th Ave. & Kaiser Hosp.Access Clackamas County	April 1, 1982
Jim Hall Contracting No. 9313	362nd Dr. @ Skogan Road Clackamas County	April 1, 1982
Coral Construction Co. No. 9334	Lane Co. Pavement Marking Project No. 4 Lane County	April 1, 1982
Columbia Pacific Construction Co. No. 9364	Blind Slough (Barendse Rd.) Bridge Clatsop County	April 6, 1982
C.W. McCallen Const.Co. No. 9085	SW Hall Blvd.-SW Oak St. Washington County	April 7, 1982

April 8, 1982

C T Keasey

C. T. Keasey, P.E., P.L.S.
Construction Engineer

9364

April 8, 1982

United Pacific Insurance Company
Fidelity & Surety Department
P. O. Box 1216
Tacoma, WA 98401

CON 5
#9364

Gentlemen or Ladies:

Contract No. 9364 awarded to Columbia Pacific Construction Co., for structure repair on the Blind Slough (Barendse Road) Bridge in Clatsop County was completed on February 12, 1982, and accepted by the State Highway Division on April 6, 1982.

Final payment in the amount of $1,283.80 will be released to the contractor after April 13, 1982. The total contract amount is $25,676. No work was performed under force account.

No claims for labor or material have been filed with us against the performance bond on this contract.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

dmc
cc: Columbia Pacific Construction Co.
P. O. Box 1244
Lake Oswego, OR 97034

bc: C. T. Keasey
Walt Hart
V. E. Skoog Attn: Frank Griffin
C. O. Fredrickson

9364 2,

FORM [illegible]

OREGON STATE HIGHWAY DIVISION

FIELD ENGINEER'S WEEKLY REPORT

FOR CONSTRUCTION PROJECTS ONLY
CONSTRUCTION AND BRIDGE SECTION

SECTION: BLIND SLOUGH (BARENDSE ROAD) BRIDGE
WEEK ENDING: February 20, 1982
SECTION PREFIX: 504-1037
HIGHWAY: FAS A736
COUNTY: CLATSOP
NAME OF JOB: BLIND SLOUGH (BARENDSE ROAD) BRIDGE
KIND OF WORK: STRUCTURE REPAIR
CONTRACTOR: COLUMBIA PACIFIC CONSTRUCTION COMPANY
CONTRACT NUMBER: 9364
FEDERAL AID PROJECT NUMBER: RS-A736(1)
DATE OF CONTRACT: OCTOBER 14, 1981
DATE WORK STARTED: DECEMBER 29, 1981
ESTIMATED COMPLETION DATE: -
SPECIFIED WORK DAYS:
WORK DAYS USED:
AVERAGE FORCE ON PROJECT FOR THE WEEK: MEN: 0 SUPERVISION: 0
SPECIFIED CALENDAR DAYS: 150
CALENDAR DAYS USED: 100
SPECIFIED COMPLETION DATE:
PERCENT OF TIME ELAPSED: 67%
PROJECT AUTHORIZATION: $ 34,063.75
PERCENT OF CONTRACT COMPLETED BASED ON ESTIMATED COST: 100%
EXCLUSIVE OF ENGINEERING: $ 31,088.75
ENGINEERING AUTHORIZATION: $ 2,975.00
PERCENT OF CONTRACT COMPLETED BASED ON TOTAL AUTHORIZATION: 84%
ESTIMATED COST OF COMPLETED PROJECT, EXCLUSIVE OF ENGINEERING: $ 25,700.00
ENGINEERING COST TO DATE: $ 2,975.00
DATE PROJECT WAS COMPLETED: February 2, 1982
ESTIMATED PERCENT ~~XXXXXXX~~ UNDERRUN: 16 %
PERCENT OF AUTHORIZATION: 100 %

Semi-final submitted: February 19, 1982

ESTIMATED PERCENT COMPLETE (ROADWORK)

CLEARING	DRAINAGE	GRADING	BASE	OIL AND/OR PAVE.	MAT'L. PROD.		

	GRADING	SURFACING	MAINTENANCE MATERIALS	OIL & BITUMINOUS MACADAM	PAVING
MILES IN PROJECT					
MILES PARTIALLY COMPLETED					
MILES COMPLETED					
TOTAL ESTIMATED QUANTITIES (CONTRACT)	0	0	0	0	0
TOTAL QUANTITIES CORRECTED TO DATE					
ESTIMATED QUANTITIES MOVED OR PLACED TO DATE					
AVERAGE DAILY QUANTITIES					
AVERAGE DAILY QUANTITIES NECESSARY TO COMPLETE PROJECT ON TIME					
NUMBER OF SHIFTS PER DAY					
HOURS PER SHIFT					

EQUIPMENT USED DURING THE WEEK:

None.

ESTIMATED PERCENT COMPLETE (STRUCTURES)

BRIDGE NO.	11138B							
PERCENT	100							

		WEATHER	WORK DAYS CHARGED	HOURS DELAY	CAUSE OF DELAY
SUNDAY	14	Rain	100		
MONDAY	15	Rain	"		
TUESDAY	16	Rain	"		
WEDNESDAY	17	Cloudy	"		
THURSDAY	18	Rain	"		
FRIDAY	19	Rain	"		
SATURDAY	20		"		

RECEIVED
FEB 22 1982
CONSTRUCTION BRANCH
ASHE K
CAE
FCE
QCE
SCS
EEO
OIL
CA
LE
TC
FE
CP

GENERAL DESCRIPTION OF ACTIVITIES FOR THE WEEK

SUNDAY 14	No work activity.
MONDAY 15	"
TUESDAY 16	"
WEDNESDAY 17	"
THURSDAY 18	"
FRIDAY 19	"
SATURDAY 20	"

REMARKS

No work activity.
All contract work complete.
Third notification issued effective 2-12-82.
Semi-final data submitted 2-19-82.

Since Third notification and Semi-final data have been submitted, this will be the last weekly report for this project.

SIGNED C Anderson
Chet Anderson
LOCATION Astoria

PRIME RESIDENT SUBMIT 2 COPIES WHEN BRIDGES AND GRADING BOTH ARE INVOLVED. SUBMIT 3 COPIES.

SP·F216

9364

e

CON 5

DATE: January 7, 1982

TO: Dale E. Wilken, Division Administrator
Federal Highway Administration

FROM: C. T. Keasey, P.E., P.L.S.
Ass't. State Highway Engineer

SUBJECT: Notification Contract Work Started
Federal-aid Project Number
RS-A736(1)

Contract 9364, Work Started December 29, 1981

Project Blind Slough (Barendse Rd.) Bridge

Highway FAS A736

County Clatsop

RDC:mk

cc: R. D. Church

9364

TO BE COMPLETED BY FHWA 12-3	U.S. DEPARTMENT OF TRANSPORTATIO FEDERAL HIGHWAY ADMINISTRATION FEDERAL-AID PROJECT AGREEMENT 11-30-81	STATE Oregon COUNTY Clatsop PROJECT NO. RS-A736(1)

The State, through its Highway Agency, having complied, or hereby agreeing to comply, with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) the Regulations issued pursuant thereto and, (3) the policies and procedures promulgated by the Federal Highway Administrator relative to the above designated project, and the Federal Highway Administration having authorized certain work to proceed as evidenced by the date entered opposite the specific item of work, Federal funds are obligated for the project not to exceed the amount shown herein, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends only to project costs incurred by the State after the Federal Highway Administration authorization to proceed with the project involving such costs.

PROJECT TERMINI

Blind Slough (Barendse Road) Bridge

PROJECT CLASSIFICATION OR PHASE OF WORK	EFFECTIVE DATE OF AUTHORIZATION	APPROXIMATE LENGTH *(Miles)*
HIGHWAY PLANNING AND RESEARCH (HP & R)		
PRELIMINARY ENGINEERING		
RIGHTS-OF-WAY		
CONSTRUCTION	9-2-81	0.054

OTHER *(Specify)*

FUNDS PRO RATA 88.18%

ESTIMATED TOTAL COST OF PROJECT $ 34,063.00	FEDERAL FUNDS $ 30,035.00

The State further stipulates that as a condition to payment of the Federal funds obligated, it accepts and will comply with the applicable provisions set forth on the reverse hereof.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Operation Programming Engineer
(Title)

XXXBy For: H.S. Coulter

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Date executed by Division Administrator 11-30-81

FORM PR-2 (REV. 10-75) PREVIOUS EDITIONS ARE OBSOLETE

AGREEMENT PROVISIONS

1. RESPONSIBILITY FOR WORK

a. Except for projects constructed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in compliance with the approved plans and specifications or project proposal which, by reference, are made a part hereof.

b. With regard to projects performed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in accordance with the terms of its approved Certification, or exceptions thereto as may have been approved by the Federal Highway Administration.

2. HIGHWAY PLANNING AND RESEARCH (HP&R) PROJECT. The State highway agency will (a) conduct or cause to be conducted, under its direct control, engineering and economic investigations of projects for future construction, together with highway research necessary in connection therewith, pursuant to the work program approved by the Federal Highway Administration and (b) prepare reports suitable for publication of the result of such investigations and research, but no report will be published without the prior approval of the Federal Highway Administration.

3. PROJECT FOR ADVANCE ACQUISITION OF RIGHTS-OF-WAY. In the event that actual construction of a road on this right-of-way is not undertaken by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

4. PRELIMINARY ENGINEERING PROJECT FOR PREPARATION OF RIGHT-OF-WAY PLANS OR FOR PREPARATION OF CONSTRUCTION PLANS, SPECIFICATIONS AND ESTIMATES. In the event that right-of-way acquisition for, or actual construction of the road for which this preliminary engineering is undertaken is not started by the close of the fifth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

5. INTERSTATE SYSTEM PROJECT. (a) The State highway agency will not add or permit to be added, without the prior approval of the Federal Highway Administration any points of access to, or exit from, the project in addition to those approved in the plans and specifications for the project. (b) The State highway agency will not permit automotive service stations, or other commercial establishments for serving motor vehicle users, to be constructed or located on the right-of-way of the interstate system. (c) The State highway agency will not after June 30, 1968, permit the construction of any portion of the Interstate Route on which this project is located, including spurs and loops, as a toll road without the written concurrence of the Secretary of Transportation or his officially designated representative. The term 'toll road' does not include toll bridges or toll tunnels.

6. PROJECT FOR CONSTRUCTION IN ADVANCE OF APPORTIONMENT. (a) This project authorized pursuant to 23 U.S.C. 115 as amended, will be subject to all procedures and requirements, and conform to the standards applicable to projects on the system on which located, financed with the aid of Federal funds. (b) No obligation of previously apportioned Federal funds is created by this agreement, its purpose and intent being to provide that, upon application by the State highway agency, and approval thereof by the Federal Highway Administration, any Federal-aid funds of the class designated by the project number prefix, apportioned to the State under 23 U.S.C. 104 subsequent to the date of this agreement, may be used to reimburse the State for the Federal share of the cost of work done on the project.

7. STAGE CONSTRUCTION. The State highway agency agrees that all stages of construction necessary to provide the initially planned complete facility, within the limits of this project, will conform to at least the minimum values set by approved AASHTO design standards applicable to this class of highways, even though such additional work is financed without Federal-aid participation..

8. BOND ISSUE PROJECT. Construction, inspection and maintenance of the project will be accomplished in the same manner as for regular Federal-aid projects. No present or immediate obligation is created by this Agreement against Federal funds, its purpose and intent being to provide aid to the State, as authorized by 23 U.S.C. 122, for retiring maturities of the principal indebtedness of the bonds referred to below. When the State requests Federal reimbursement to aid in the retirement of such bonds, the request will be supported by the appropriate certification required by 23 CFR Part 140, Subpart F, and Volume 1, Chapter 4, Section 8 of the Federal-Aid Highway Program Manual or the alternative State procedure set forth in the State's Certificate, and payment of the authorized Federal share will be made from appropriate funds available. If in any year there is no unobligated balance of any apportioned Federal funds available from which payments hereunder may be made, there will be no obligation on the part of the Federal Government on account of bond maturities for that year. Funds available to the highway agency for this project are the proceeds of bonds issued by the governmental unit indicated on the attached tabulation, pursuant to the authority and in the amounts by date of issue and beginning date of maturities set forth therein.

9. SPECIAL HIGHWAY PLANNING AND RESEARCH PROJECT. The State Highway agency hereby authorizes the Federal Highway Administration to charge the State's pro rata share of costs incurred against funds apportioned to the State under 23 U.S.C. 307 (c), as amended. In the event a project is financed with both Federal-aid funds and State matching funds, the State agrees to advance to The Federal Highway Administration the State matching funds for its share of the estimated cost. For a National Pooled Fund study, the State hereby assigns its responsibility for the work to the Federal Highway Administration. For an Intra-Regional Cooperative Study, the State hereby assigns its responsibility for the work to the lead State for the study.

10. PARKING REGULATION AND TRAFFIC CONTROL. The State highway agency will not permit any changes to be made in the provisions for parking regulations and traffic control as contained in the agreement between the State and the local unit of Government referred to in the paragraph on "Additional Provisions," without the prior approval of the Federal Highway Administration, unless the State determines, and the Division Administrator concurs, that the local unit of Government has a functioning traffic engineering unit with the demonstrated ability to apply and maintain sound traffic operations and control.

Gen. File

Oregon State Highway Division
Salem, Oregon October 28, 1981

Federal Aid Project
No. RS-A 736(1)

Blind Slough (Barendse Road) Bridge Section
Barendse Road (County Road)
Clatsop County

PROJECT AGREEMENT ESTIMATE

Type Code X080
Structure Br. No. 11138B (Sta. 4+09 to Sta. 8+55)

Mobilization		All Required	$ 2,000.00
Temporary Protection and Direction of Traffic		All Required	2,300.00
Temporary Signs	74 Sq. Ft.	5.00	370.00
Temporary Barricades	2 Each	150.00	300.00
Flagmen	250 Hour	25.00	6,250.00
Grouting Work		All Required	2,380.00
Furnish and Install Tie Rods		All Required	16,150.00
		SUBTOTAL	$29,750.00
		Engineering	4,313.00
		TOTAL	$34,063.00

Length of Project ---------- 0.084 mile

Federal Funds (88.18%)------------	$30,035.00
State Funds -----------------------	2,014.00
County Funds ---------------------	2,014.00
TOTAL FUNDS	$34,063.00

Group 1	100%
Contract No.	9364
Prefix:	204-1444 (PE) 504-1037 (Constr.)

9364

September 24, 1981

ACC

Clatsop County Board
of Commissioners
Courthouse
749 Commercial Street
Astoria, Oregon 97103

Attn: Mr. John Dooley
County Roadmaster

Gentlemen:

On September 24, 1981 the Highway Division received a satisfactory bid from Columbia Pacific Construction Co., P.O. Box 1244, Lake Oswego, Oregon 97034 for the repair of the Blind Slough Bridge Section on FAS-A736. This is an FAS-C Project No. RS-A736(1). Based upon the contractor's bid the county's advance deposit will be:

Bid	$29,750.00
4 1/2% Contingencies	$ 1,338.75
10% Engineering	2,975.00
TOTAL CONSTRUCTION COST	$34,063.75

County's share of project cost (6% of $34,063.75) = $2,043.82

By rounding the County's advance deposit will be $2,000.00

Rec'd
10-14-81
Informed
[illegible]
Phil [illegible]

We will award the contract when we receive your advance deposit, which should be in this office no later than October 16, 1981.

The attached sheet describes the three options for making your advance deposit. Please select the option you desire and submit your advance deposit according to the instructions.

Very truly yours,

D. E. Swan
Operation Programming Engineer

HR:pf
Attachment
bcc w/AD # 956: Phil Stearns, Region 2 Federal Aid Engineer
Vern Skoog - Please return completed AD # 956 when advance deposit is received.

9364

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U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

9-2-81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. RS-A736(1)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Clatsop

3. FROM
Dale E. Wilken, Administrator
FHWA - Oregon Division
Salem, Oregon

4. PROGRAM NO.

5. ITEM NO. 10159

6. TO
Mr. H. S. Coulter
State Highway Engineer
Oregon State Highway Division
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 9-2-81

8. FEDERAL ROUTE NUMBER Secondary A376

9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION:
Blind Slough (Barendse Road) Bridge Section

11. GENERAL DESCRIPTION OF WORK
Structure

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☒ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

As requested in Mr. Swan's letters of July 16, 1981 and August 31, 1981 you are now authorized to proceed with actions necessary to advance to completion the physical construction provided for by the above project at a total estimated cost of $41,000, Federal funds $36,150 in accordance with the approved Certification Acceptance Plan. If you subsequently find that exceptions to the procedure will be needed or that your proposed design standards are lower than the minimum design as approved, this office should be notified of such proposed exceptions and reasons thereof.

I accept the certification of Mr. Rod Henry dated July 30, 1981 that provisions of FHPM 7-5-1 have been complied with.

(This is a 20% limitation Project)

Orig 9-4-81

STATE HWY ENGR
SEP 4 '81
REFER TO Maenning

14. DATE 9-2-81

15. SIGNATURE OF APPROVING OFFICIAL G K

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

7364

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
DES 23
11138B

July 21, 1981

John Dooley
Clatsop County Roadmaster
P. O. Box 179
Astoria, OR 97103

Blind Slough (Barendse Road) Bridge
BR 11138B
Clatsop County

Enclosed are two sets of prints of Drawings 35680 and 36102 which show repair details for the Blind Slough Bridge.

Since we submitted the original report, we have made additional measurements of joint openings and deck and pavement elevations. These have generally confirmed our original conclusions and have given us more confidence in predicting the potential for further movement.

Because the Federal Highway Administration will be providing the majority of the funds for this project, we felt it would be good to ask for a review by their regional geotechnical engineer. He studied our report and the measurements made since the report was written. He also visited the bridge site. A copy of his recommendations is enclosed. ✓

The plan which we are recommending is similar to that presented in our report. It differs from the report in that the tie rods extend from Bent 8 to Bent 16 instead of from Bent 2 to Bent 15. Mr. Chassie of the Federal Highway Administration would only have tied Bents 8 and 9, but we feel that since the cause of the movement is at the northerly end of the bridge all of the northerly portion of the bridge should be tied together. ✓

Form 734-3122

The plan we are proposing leaves the possibility of opening up of joints at or south of Bent 8. We and the Federal Highway Administration recognize this, and the Federal Highway Administration has assured us that they will keep this project open in case further repair work appears necessary. Mr. Chassie's report includes a recommendation that the bridge continue to be inspected for movement. The repair details which we are proposing could be extended to the southerly half of the bridge at any time that it appears necessary.

Our present estimate of the cost for this project is $34,000. An application for FAS-C funding for this project has been made and approved.

In order to proceed with this project, we need to have the appropriate approval stamped on one of the enclosed sets of plans and returned to us.

Walter J. Hart
Bridge Engineer

ORIGINAL SIGNED
L. L. WALLACE

L. L. Wallace
Assistant Bridge Engineer

Enclosures

cc w/enclosures: C. O. Fredrickson
D. N. Harwell
Chester Anderson

PROJECT MANAGEMENT BRANCH
ASHE ☐ STE ☐
PLE ☐ RE ☐ [✓ PRE ☐]
JUL 22 1981
REFERRED TO ______
FOR ______
FILE: PM FA LG.

Form FHWA 121 (1/80)

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

UNITED STATES GOVERNMENT

memorandum

Subject: Blind Slough Bridge

Date: June 5, 1981

From: Regional Geotechnical Engineer
Region 10

Reply to
Attn. of: HDE-010.4

To: Mr. Dale Wilken
Division Administrator
Salem, Oregon

Attn: Herb Schell
Division Bridge Engineer

In reply to your request and the request of the State, I have analyzed the movement problem occurring with the Blind Slough Bridge. My analysis has relied heavily on the information presented in the excellent and comprehensive report prepared by Ted Blachly of the ODOT bridge section titled "Proposed Repair of Blind Slough Bridge", dated May 1980. This report includes soils data from borings made at the structure site and horizontal and vertical movement survey data compiled by ODOT.

I concur with the conclusions presented in Blachly's report concerning the cause of the problem. The main thing I have done in my analysis, to supplement the ODOT report, is to analyze the bridge movement data and make an estimate of the additional movement the bridge will be subjected to, since this is the key factor influencing the decision on the extent of remedial action to be taken.

My review also included a field inspection of the bridge on April 28, 1981, in the company of Herb Schell and Messers. Ted Blachly and Ted Thompson (ODOT Bridge Section), Jerry Weimer and Bill Fretwell (ODOT Region 2), and Chet Anderson (ODOT Resident Engineer).

The following is a summary of my analysis, conclusions and recommendations.

Description of Bridge

The Blind Slough Bridge is a 15 span timber trestle bridge which was constructed in the winter of 1972-73. The concrete slab deck spans are 28 feet long except for the middle span (span 8) which is a 50 foot long lift-out span. All spans except the middle lift-out span are supported on single row timber pile bents. Bents 8 and 9 which support the middle 50 foot lift-out span are double row pile bents. Photographs of the bridge are contained in the May 1980 ODOT report. Reproduced copies of these photographs are attached (see Attachment A-Photographs 1 to 24).

Description of Problem

The major problem of concern with the bridge is that some of the transverse deck joints over pile bents near the center spans of the bridge have increased in width since the bridge was constructed in 1973, due to horizontal movement of some of the pile bents (see Attachment B). Most of the movement has

Dmt/

been limited to 5 of the 16 bents (bents 8, 9, 10, 11, and 12). Approximately 50 percent of the horizontal joint movement has occurred at bent 9. The increasing joint openings pose a maintenance problem and have caused concern about the integrity of the bridge at bent 9.

Settlement of the approach fills and of both ends of the bridge and tilting of piles in the northerly bents have also occurred (see Attachment C and photograph 22).

Cause of Problem

Based on my analysis of the soils boring data, it is obvious that the bridge movement problems are being caused by settlement of the soft foundation soils underlying the north approach fill.

Borings made during the 1972 bridge foundation investigation show up to 90 feet of very soft dark gray silty clay and clayey silts on the north approach. SPT blow counts in these soft soils were very low, only ranging from 0 to 4. A further indication of how soft and weak these soils are is the fact that the hollow stem auger drill rod used to drill a hole in which a slope indicator was placed at the north end of the bridge, went down by its own weight from 9' to 80'.

The north approach fill height varied from 7 feet at the end of the bridge to a maximum of 17 feet at 50 feet from the end of the bridge. The 17 foot fill height occurred where an overflow structure was removed and the overflow stream channel was filled in. The load imposed by the new approach fill has caused the soft compressible foundation soils to settle. Total vertical settlement of the north abutment has been 3.5 feet to date. Review of the pile driving records show that the pile tips were "hung up" in the soft soils, therefore the abutments and northerly pile bents have settled along with the foundation soil and approach fill. This settlement has been uniform and has simply introduced a gradual vertical curve into the north end of the bridge (see photographs 18-20).

As the foundation soil settles vertically, it is also squeezed laterally as soil grains that are pushed downward tend to push other soil grains to the side. It is this accompanying lateral soil movement that is causing the increased joint openings in the bridge. As the foundation soils are squeezed laterally toward the river, they take the piles with them. This subsurface lateral soil movement pushes the bottom of the piles toward the river and causes the upper part of the pile bent to rotate back toward the approach fill. This pile movement has caused the three northerly pile bents (bents 13,14,15) to now be out of plumb (see photograph 22). As the pile caps rotate toward the approach fill, some of the deck slabs have slipped on some of the pile caps, causing the joints over these pile caps to open wider.

Monitoring of Bridge Movement

The Blind Slough Bridge was completed in the spring of 1973. In September, 1976, the Clatsop County Drainage District notified the County road department that there appeared to be a problem with the joints on the bridge. In October, 1976, the county set reference points on each side of the joints so that future movement could be measured. In December, 1979, ODOT resident engineer Chet Anderson began measuring joint widths and deck elevations.

My analysis of the movement data follows.

Analysis of Vertical Settlement Data

The following is a compilation of vertical settlement measurements made by The State at the north and south bridge abutments during the period from 12-16-79 to 4-29-81 (17 months). The settlement amount shown is the difference between the existing elevation and the original plan elevation of the abutments.

Date of Measurement	Settlement (Feet)	
	North Abutment	South Abutment
12-6-79	3.29	.59
7-2-80	3.34	.61
1-9-81	3.43	.63
4-29-81	3.47	.64

You will note that there has been about 5 times as much settlement at the north abutment as there has been at the south abutment (3.47 feet compared to 0.64 feet). This much greater vertical settlement at the north end of the bridge, with accompanying lateral soil movement, accounts for the joint opening problem being confined to the north half of the bridge. The reason much less settlement has occurred at the south abutment is due to a combination of better foundation soil (shown by the borings) and much less approach fill placed at the south end compared to the north end.

A plot of settlement versus time for the north and south abutments is shown on Attachment D. The significance of the time-settlement plot is that it clearly shows that "primary consolidation" (squeezing of water out of the foundation soil voids) of the foundation soil is complete and the settlement that is now occurring is "secondary consolidation" (settlement due to continued readjustment of soil particles under the load imposed by the approach fill). It appears that the majority of the vertical settlement occurred during the first couple of years following construction of the bridge. The continuing secondary settlement is due primarily to the presence of organics in the foundation soil. The boring logs indicate pieces of wood were encountered in the borings and that the foundation soils are dark gray in color. This is indicative of a significant amount of organic material. The presence of these organics is the main reason that vertical settlement and accompanying lateral movement of the foundation soils are continuing to occur, even 8 years after the fills were placed. It is significant to remember, however, that secondary settlement occurs at a much slower rate than does primary settlement.

Estimate of Future Vertical Settlement

Secondary settlemnt measurements will typically plot as a straight line on a "settlement versus log time plot." Therefore, if settlement measurements are made over a long enough period of time to establish the slope of this secondary settlement line on a semi-log plot, then the projection of this line can be used to provide an estimate of the additional secondary settlement that will occur in the future.

The State has obtained settlement measurements over a long enough period (17 months) at the Blind Slough Bridge to allow this to be done. A plot of the vertical settlement data versus log time for the north abutment of the Blind Slough Bridge is shown on Attachment E.

Based on this data, I estimate that 6 inches of additional vertical settlement will occur at the north abutment during the next 20 years.

Secondary settlement occurs at a continually decreasing rate. Therefore, from a practical stnadpoint, the additional settlement that will occur beyond 20 more years will not be significant.

Analysis of Joint Opening Data

As mentioned previously, Clatsop County first became aware that the bridge joints were increasing in width in 1976 (bridge completed in 1973) and set reference points across the deck joints to measure future movement. The State began making measurements in December 1979. Following is a tabulation of the measured total increase in joint openings for bents 2 to 15 for the period from 10-27-76 to 4-29-81:

Date of Measurement	Total Increase in Joint Widths (feet)
From 10-27-76 to 10-27-78	.08
to 4-19-79	.13
to 11-7-79	.17
to 2-29-80	.23
to 1-9-81	.25
to 4-29-81	.23

The measurement data indicates that the bridge joints have opened approximately 0.25 feet (3 inches) between October 1976 and April 1981, or 3 inches in the last 4½ years. Obviously, no actual measurements of the increase in joint widths were made between the time the bridge was constructed in 1973 and October, 1976, however a reasonable indication of the increase in joint openings that occurred during that time can be obtained by comparing the plan joint widths to the present joint widths. The May, 1980 ODOT report notes that the total plan joint width for the bridge was 0.67 feet. The joint widths measured at present total 1.63 feet. Thus, the joints have opened a total of about 1 foot.

Note that the joint measurements made since October, 1976 show that about 3 inches (0.25 feet) occurred during the last 4½ years. Therefore, the majority of the joint opening, or 9 inches (0.75 feet), occurred during the first 3½ years following completion of the bridge. Therefore, as with the vertical settlement, the joint opening data indicates that most of the horizontal bridge movement occurred during the time the bridge was built and in the first couple of years following construction of the bridge. This is as one would expect, since the horizontal movement is a direct result of the vertical settlement.

Estimate of Future Joint Opening

The horizontal movement that the bridge has undergone and is continuing to undergo is causing the major concern for integrity of the bridge. An estimate of the additional joint opening that may occur is the key factor to be considered in making a decision on remedial action to be taken on the bridge.

I have used two approaches to make an estimate of the additional joint opening that may occur. Since the horizontal bridge movement is a direct result of the vertical settlement of the foundation soils, the first approach used was to compare the total bridge joint opening that has occurred to the total settlement of the north abutment. The north abutment has settled 3.5 feet and about 1 foot of extra joint opening has occurred. Thus, the total extra joint opening has been about 28 percent of the total vertical settlement. Also, during the past 17 months during which the State has been making survey measurements on the bridge, .18 feet of vertical settlement has been measured at the north abutment compared to .06 feet of additional joint opening, or the extra joint opening has been about 33 percent of the vertical settlement, during the past 17 months. From a practical standpoint, therefore, the extra joint opening occurring on the bridge has been about 30 percent of the north abutment settlement. Referring back to Attachment D, the estimated additional vertical settlement that will occur at the north abutment over the next 20 years is 6 inches. Therefore, using this first approach, the estimated total increase in joint openings that may occur over the next 20 years is 2 inches (30 percent of 6 inches).

The second approach used to estimate the additional joint opening that will occur was to plot the actual measured joint movement during the past 17 months versus log of time, similar to what was done for the vertical settlement. This is shown on Attachment F. This second approach gives an estimate of 6 inches of additional joint opening occurring over the next 20 years. This second approach is considered conservative and gives an upper limit of the estimated movement, since the slope of the line is based on the measured movement since monitoring began on 12-27-76, and it should be noted from previously tabulated joint opening data that practically no increase in joint opening occurred during the last year.

To summarize, it is estimated that the bridge may be subjected to an additional 2 to 6 inches of additional joint opening, with the 6 inches considered a conservative upper limit.

Conclusions

Based on my analysis of the soils and movement data, field inspection of the bridge site, and discussion with State personnel, I have drawn the following conclusions:

1. The north bridge abutment has settled 3.5 feet compared to the original plan elevation and the joints between deck slabs on the north half of the bridge have opened an additional 12 inches since the bridge was constructed in 1973.

2. The bridge has accepted the vertical and horizontal movements very well and is not in danger of structural collapse.

3. Movement data shows that primary consolidation of the compressible foundation soils underlying the bridge approach fills is complete and secondary consolidation is now occurring.

4. Based on movement measurements made to date, it is estimated that the joints on the north half of the bridge may open an additional 2 to 6 inches over the next 20 years, with 6 inches considered a conservative upper limit. After 20 more years, the movement will be stopped or reduced to a negligible amount.

Discussion and Recommendations

The present main concern with the bridge is the problem that the joint opening has created at the ends of the center lift-span (span 8). More than half of the total extra joint opening has occurred over bents 8 and 9, which support the lift-out span (see photographs 1 to 11, Attachment A). The movement over bent 9 has reached the point where the bearing area on the grout pad under the end of the deck slab has been seriously reduced (see photograph 3). The high bearing pressure on the small area has caused crushing of the grout pad and spalling of the ends of the slab (photograph 11).

Three alternatives for remedial action are presently being considered. The first alternative, presented in May 1980 ODOT report, is to tie all the bridge bents together using longitudinal tie rods the full length of the sturcture (except for the end spans). Estimated cost is $40,000.

The second alternative, discussed during the field inspection, is to drive batter piles next to the existing north abutment, and extend the existing abutment pile cap to encompass the new batter piles. The purpose of the batter piles would be to provide resistance to further horizontal movement. Estimated cost for this alternative is $50,000.

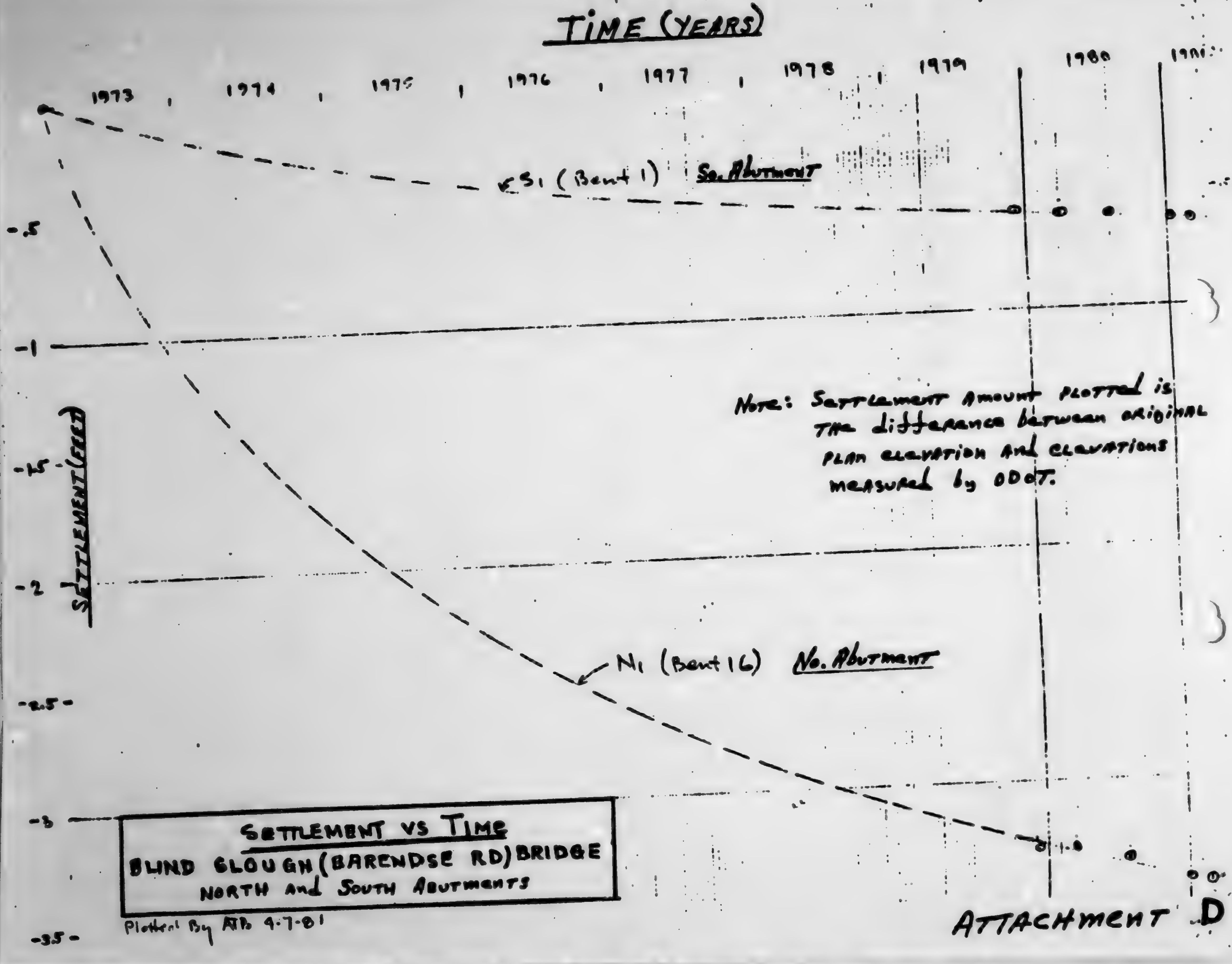
The third alternative, also discussed during the field inspection, would be to simply let the additional movement occur. The feasibility of this alternative is of course dependent on the amount of additional joint opening that will occur. As previously discussed, I estimate that an additional 2 to 6 inches of joint opening may occur, with 6 inches being a conservative upper limit. The bridge has already tolerated 12 inches of additional joint opening. In other words, the majority of the movement the bridge will be subjected to has already occurred. The bridge can easily tolerate the additional 2 to 6 inches of movement. There is plenty of additional room for the joints to open without danger of the deck slabs falling off any of the pile caps (refer to photographs). Substantial additional movement can even be tolerated at bents 8 and 9, as long as the existing grout pads are extended. As an extra precaution, bents 8 and 9 only could be tied together with tie rods to keep the joints over these bents from opening wider. Including other minor recommended repair work, such as removing spalled concrete from the existing open joints, coating exposed reinforcing steel with epoxy, and filling open joints with premolded expansion joint filler and concrete grout, this third alternative would probably cost less than $15,000. In my opinion, this last alternative is the most prudent cost-effective approach to take and I recommend that this alternative be chosen.

Please advise if you or the State have any questions or if I can be of further assistance.

Ron Chassie

Ronald G. Chassie

cc: Gary Kasza

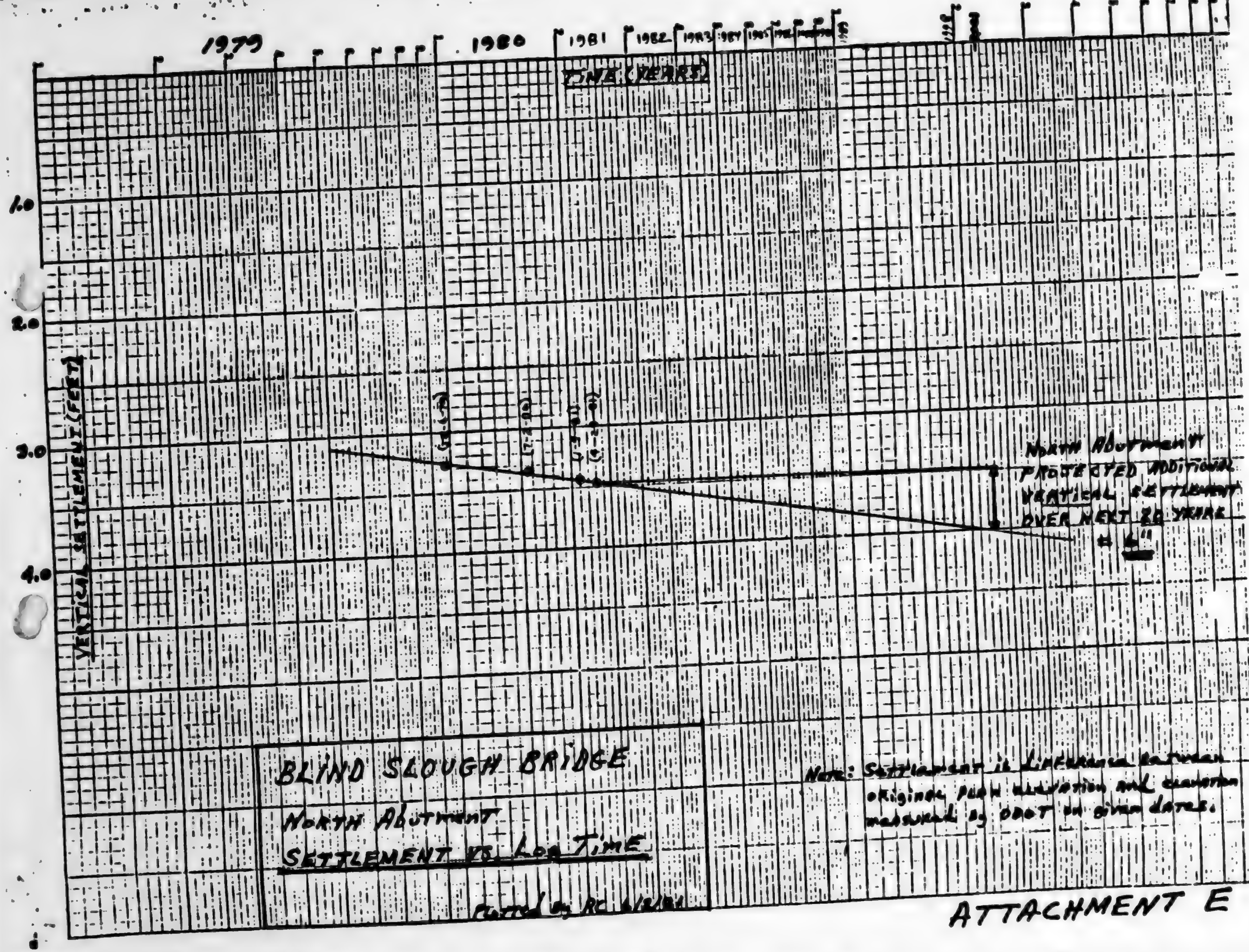


Note: Settlement amount plotted is the difference between original plan elevation and elevations measured by ODOT.

SETTLEMENT VS TIME
BLIND SLOUGH (BARENDSE RD) BRIDGE
NORTH and SOUTH ABUTMENTS

Plotted By ATB 4-7-81

ATTACHMENT D


BLIND SLOUGH BRIDGE

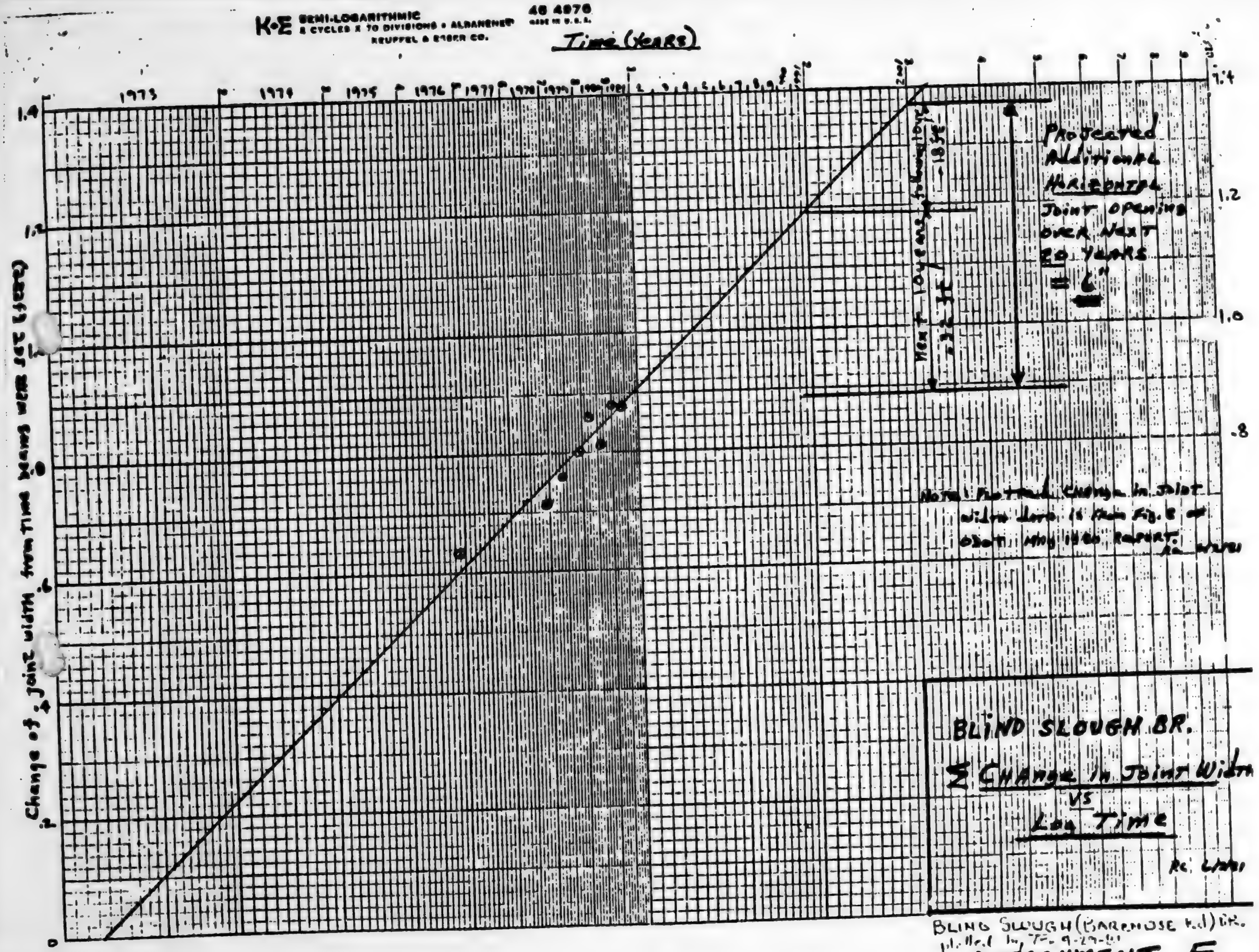
NORTH ABUTMENT

SETTLEMENT VS. LOG TIME

Plotted by RC 6/12/81

Note: Settlement is difference between original plan elevation and elevation measured by ODOT on given dates.

ATTACHMENT E



Projected Additional Horizontal Joint Opening over Next 20 Years = 6"

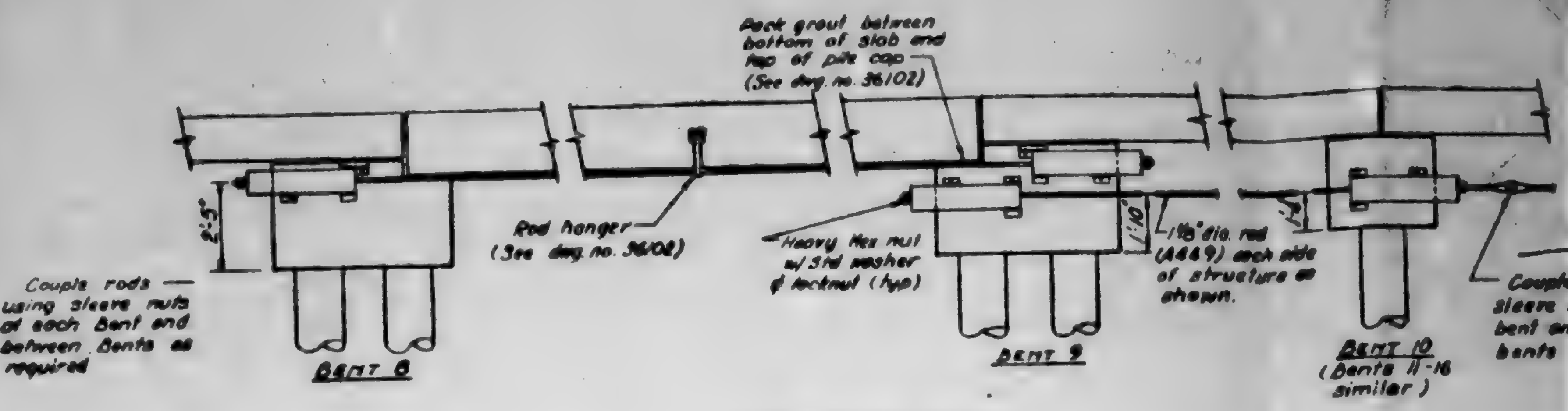
Note: Plotted change in joint width data is from Fig. 8 of ODOT May 1980 report.

BLIND SLOUGH BR.

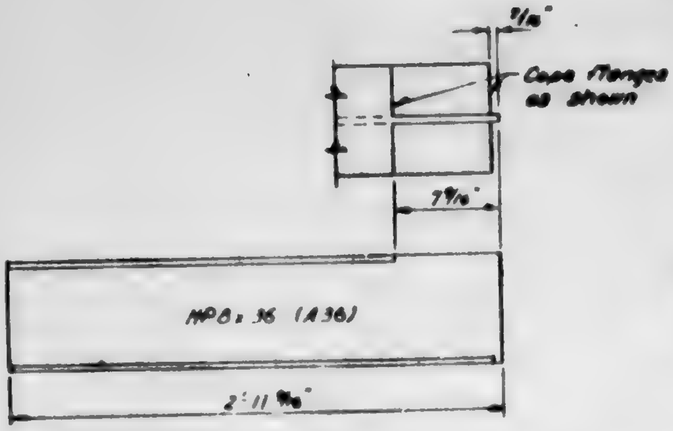
Σ Change in Joint Width
vs
Log Time

BLIND SLOUGH (BARENOSE Rd) BR.
plotted by TF 9-29-81

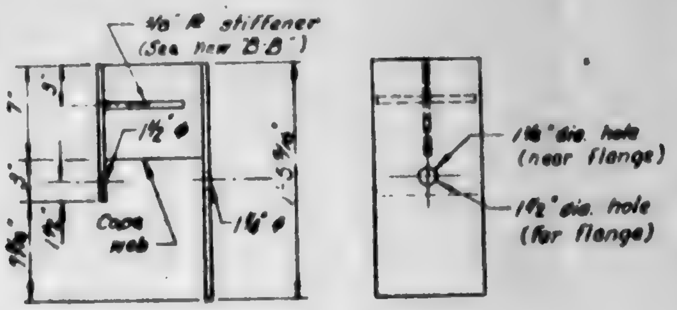
ATTACHMENT F


Pack grout between bottom of slab and top of pile cap (See dwg. no. 36102)
2'-5"
Couple rods using sleeve nuts at each Bent and between Bents as required
Rod hanger (See dwg. no. 36102)
Heavy Hex nut w/ Std washer & locknut (typ)
1:10
1⅛" dia. rod (A449) each side of structure as shown.
Couple
sleeve n
bent and
bents a
BENT 8
BENT 9
BENT 10 (Bents 11-16 similar)

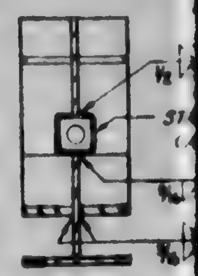
ELEVATION
Scale: 1/8" = 1'-0"


1/16"
Cope flanges as shown
7 9/16"
HP8 x 36 (A36)
2'-11 9/16"

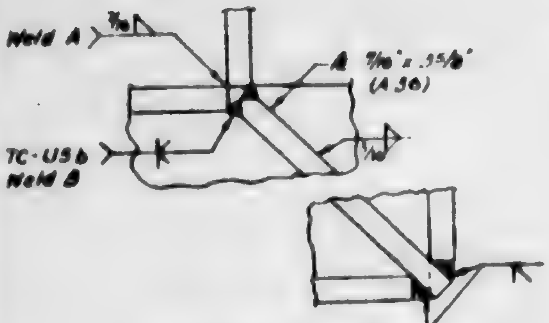
PART B


1/2" ℞ stiffener (See view "B-B")
7"
3"
1½" ⌀
3"
1½"
1⅛"
Cope web
1¼" ⌀
5⅝"
1⅛" dia. hole (near flange)
1½" dia. hole (for flange)

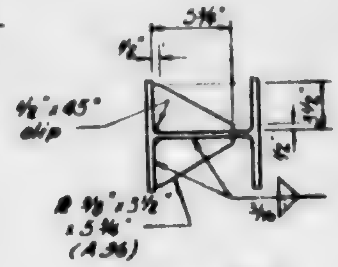
PART A



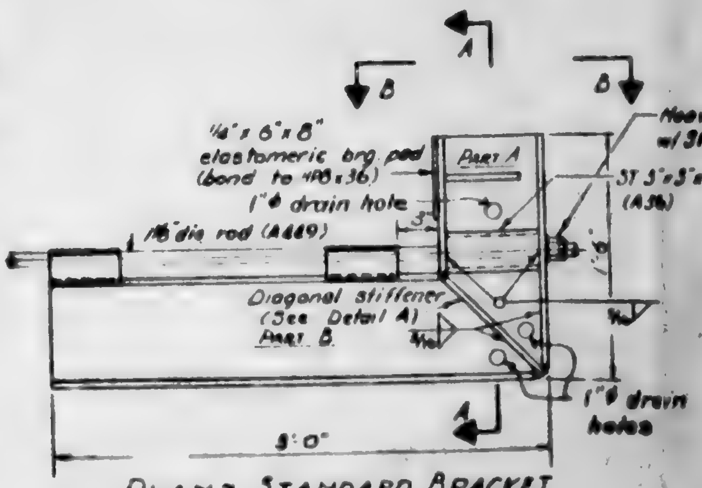
SECTION "A"
Scale: 1½" = 1'-0


Weld A
5/16
℞ 9/16" x 3⅝"
(A36)
TC-U5b
Weld B
5/16

DETAIL "A"
Scale: Half Size

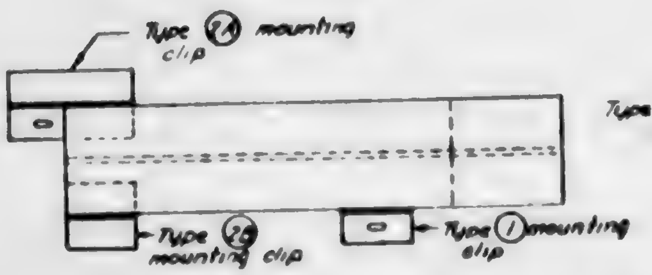

5⅛"
½"
½" x 45° clip
1½"
2"
℞ ½" x 3½" x 5¾" (A36)
5/16

VIEW "B-B"
Scale: 1½" = 1'-0"


A
B
B
¼" x 6" x 8" elastomeric brg. pad (bond to HP8 x 36)
Part A
1" ⌀ drain hole
3"
1⅛" dia rod (A449)
Heavy Hex nut w/ Std. washer & lock
ST 5" x 5" x .3125" (A36)
1'-6"
Diagonal stiffener (See Detail A) Part B.
5/16
5/16
1" ⌀ drain holes
A
3'-0"

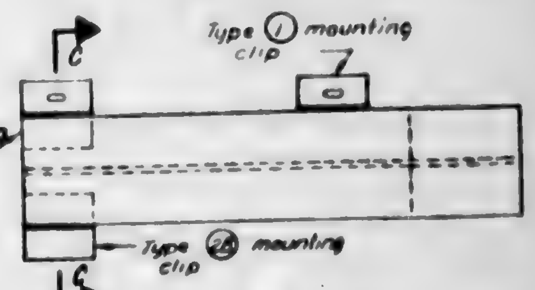
PLAN - STANDARD BRACKET
Scale: 1½" = 1'-0"

5/16
2¼
Inner flang
of HP8 x 36
⅜" x 5" bar (A36)
½"
2½"
2½"
1⅛"
5"


Type 2A mounting clip
Type 2B mounting clip
Type 1 mounting clip

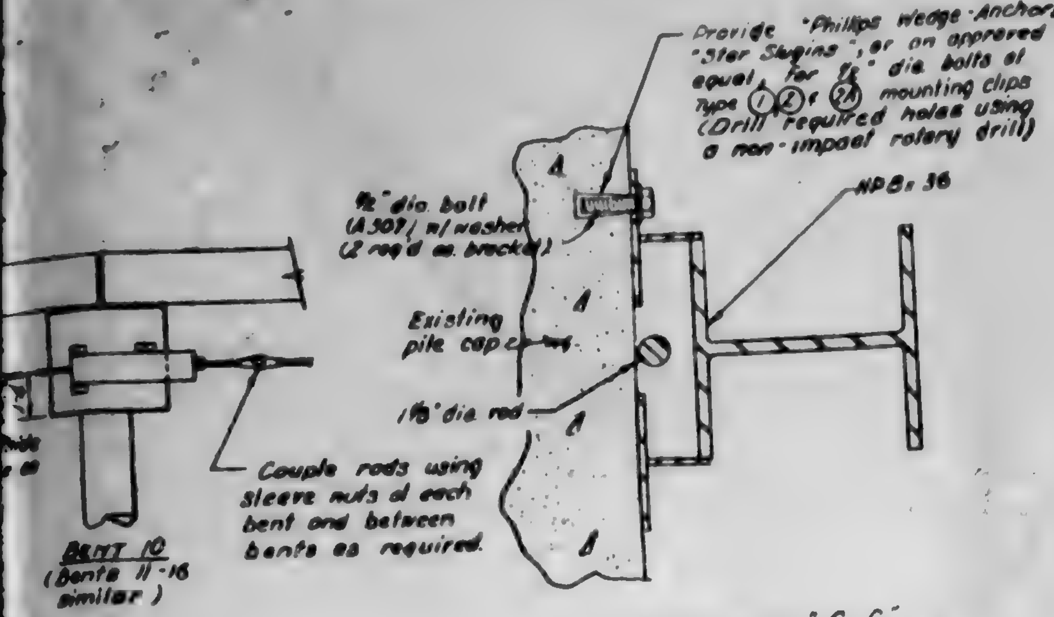
ELEVATION - UPPER BRACKET AT BENTS 8 & 9
Scale: 1½" = 1'-0"
2 req'd as shown
2 req'd opposite hand

Note:
See detail "B" for mounting clip details.


C
Type 1 mounting clip
Type 2 mounting clip
Type 2B mounting clip
C

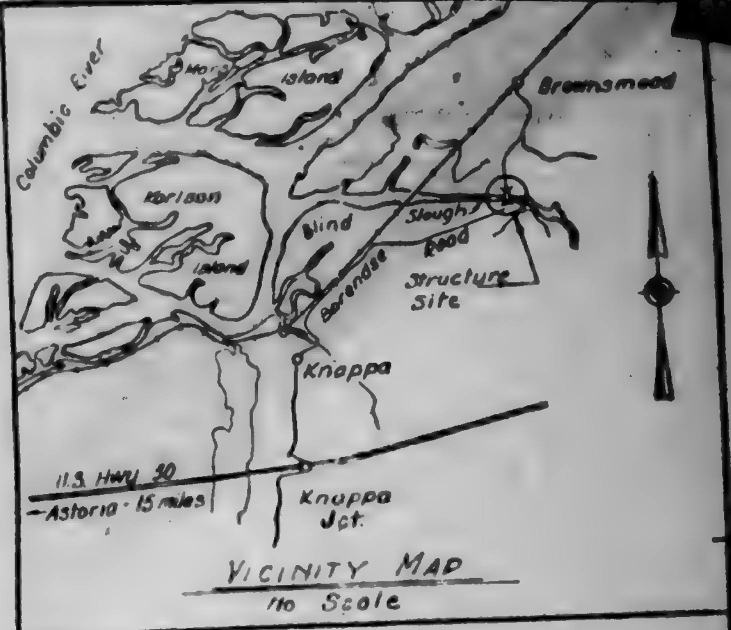
ELEVATION - STANDARD BRACKET
Scale: 1½" = 1'-0"
8 req'd. as shown
8 req'd opposite hand

Marwell


Provide "Phillips Wedge-Anchors", "Star Stubins", or an approved equal, for ½" dia bolts at Type ① ② & ②A mounting clips (Drill required holes using a non-impact rotary drill)
½" dia bolt (A307) w/ washer (2 req'd ea. bracket)
HP8 x 36
Existing pile cap
1⅛" dia rod
Couple rods using sleeve nuts at each bent and between bents as required.

BENT 10
(Bents 11-16 similar)

SECTION "C-C"
Scale 3" 1'-0"


Columbia River
Horse Island
Karlson Island
Blind Slough
Barendse Road
Structure Site
Brownsmead
Knappa
U.S. Hwy 30
Astoria - 15 miles
Knappa Jct.

VICINITY MAP
No Scale

CONSTRUCTION SEQUENCE:

1) Pack grout between tops of Bent 8 & 9 pile caps and bottom of Span 8 slabs and grout deck joints.

2) Install brackets on pile caps.

3.) When grout has attained a compressive strength of at least 1500 psi, but not less than 3 days after placing, install tie rods in Span 8 (Bent 8 to Bent 9).

4.) Tighten nuts on tie rod to snug position and measure projection of rod beyond nuts at both ends. Tighten nut(s) to produce an elongation in the rod of ½ inch.

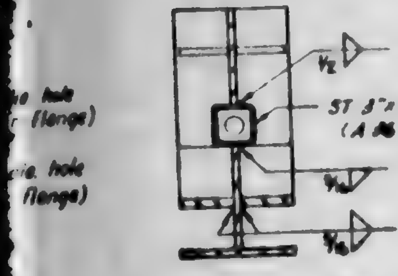
5.) Install rods in Span 9. Proceed as in Step 4 except elongation should be ¼ inch.

6.) Couple Span 10 rod to Span 9 rod and tighten to ¼ inch elongation.

7.) Continue in like manner with Spans 11, 12, 13, 14 & 15 with ⅜" elongation in Span 13, ¼" in Span 14 and ⅛" in Span 15.

FABRICATION SEQUENCE:

Cut PARTS A & B from HP 8 x 36
Weld web stiffeners to PART A (View "B-B")
Weld web of PART B to flange of PART A.
Make weld A (Detail A)
Position diagonal stiffeners and weld to web of PART B.
Make welds between exterior flanges and diagonal stiffeners
Make weld B (Detail A)
Weld structural tube (ST 3"x3"x.3125") in place.
Weld mounting clips (Detail B) to PART B whenever convenient.


…e hole
…r flange)
…ic hole
…flange)
½
ST 3"x3"x.3125" (A36)
5/16
5/16

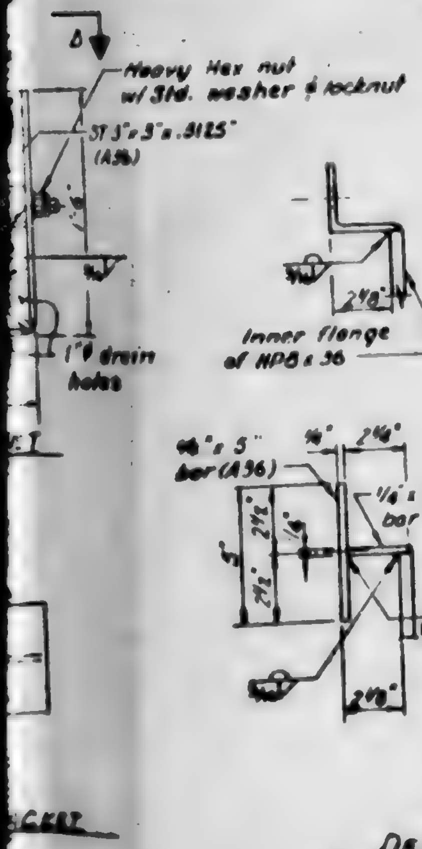
SECTION "A-A"
Scale: 1½" 1'-0"

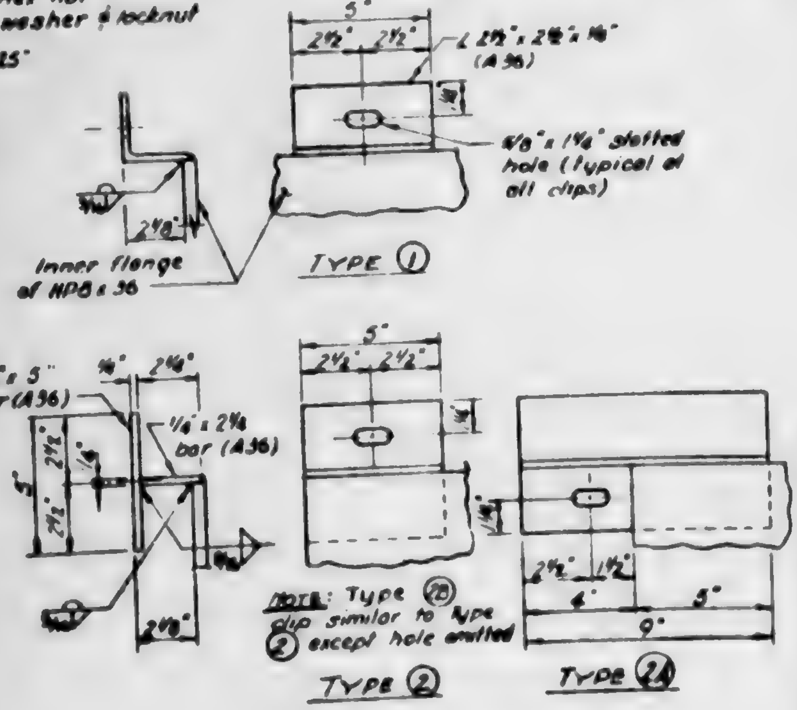
GENERAL NOTES:

All material and workmanship shall conform to the Standard Specifications for Highway Construction of the Oregon State Highway Division.

All steel in brackets shall conform to ASTM. Spec. A36. Steel in tie rods shall conform to ASTM Specification A449. All steel shall be hot dip galvanized after fabrication.

Tie rods shall not be fabricated until lengths have been established in the field.


B
Heavy Hex nut w/ Std. washer & locknut
ST 3"x3"x.3125" (A36)
5/16
1"Φ drain holes
…ET
…CKET

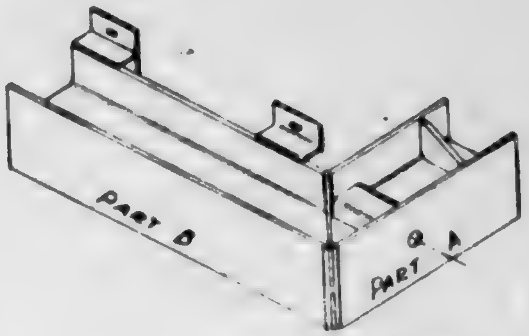

5"
2½"
2½"
∠ 2½" x 2½" x 5/16" (A36)
⅝" x 1¼" slotted hole (typical at all clips)
2½"
Inner flange of HP8 x 36
5/16" x 5" bar (A36)
5/16"
2½"
¼" x 2½" bar (A36)
2½"
5"
4"
9"
1½"
NOTE: Type ②B clip similar to type ② except hole omitted

TYPE ①

TYPE ②

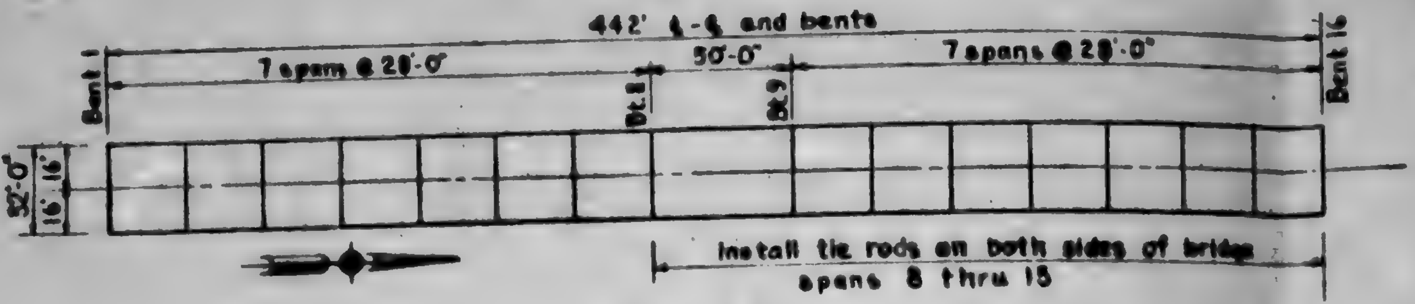
TYPE ②A

DETAIL "B" · MOUNTING CLIPS
Scale: 3" · 1'-0"

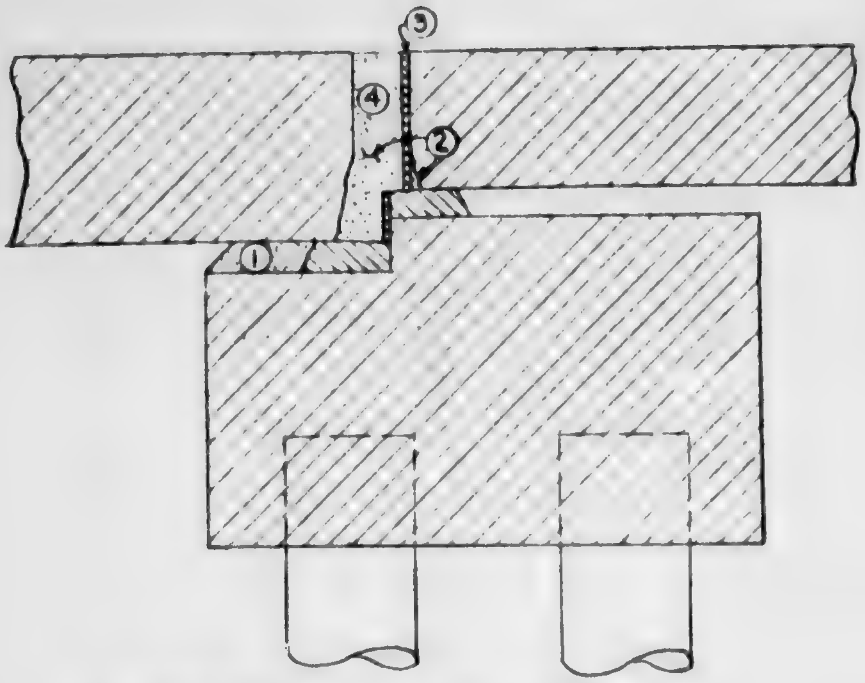

PART B
PART A
Q

TYPICAL BRACKET

APPROVED: P.E. STRUCTURAL DESIGN ENGINEER	OREGON DEPARTMENT OF TRANSPORTATION STRUCTURAL DESIGN SECTION
P.E. TECHNICAL SERVICES ENGINEER	BLIND SLOUGH BRIDGE BLIND SLOUGH (BARENDSE RD.) BRIDGE SECT. BARENDSE ROAD - CLATSOP COUNTY
DESIGNED ST Blachly DRAWN MC Young CHECKED G.D. Abernathy REVIEWED TGT 2-2-81 REVIEWED CALC BOOK 1762	GENERAL DETAILS
DATE / REVISION	ACCOMPANIED BY DWGS. 23836, 36102 28332 thru 28335 (for information only)
	DATE Oct. 30, 1980 BRIDGE NO. 11138 B
	SHEET 1 of 3 DRAWING NO. 35680

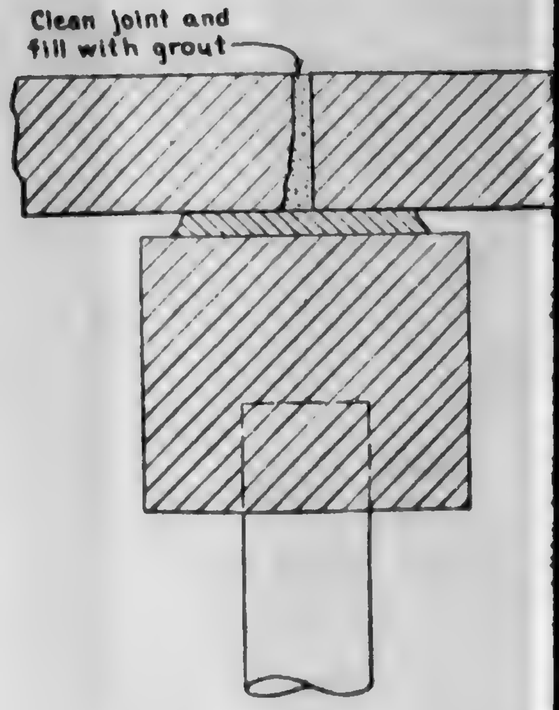

442' ℄-℄ and bents
7 spans @ 28'-0"
30'-0"
7 spans @ 28'-0"
Bent 1
Bt. 8
Bt. 9
Bent 16
32'-0"
16' 16'
Install tie rods on both sides of bridge
spans 8 thru 15

BRIDGE PLAN
Scale 1"= 40'



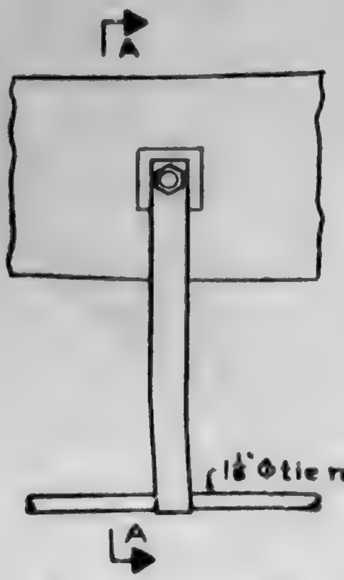
① Pack grout between slabs and pile cap.
② Clean joint and patch ends of 15" slabs.
③ Place ¾" premolded expansion joint filler.
④ Fill joint with grout.

BENTS 8 AND 9


Clean joint and
fill with grout

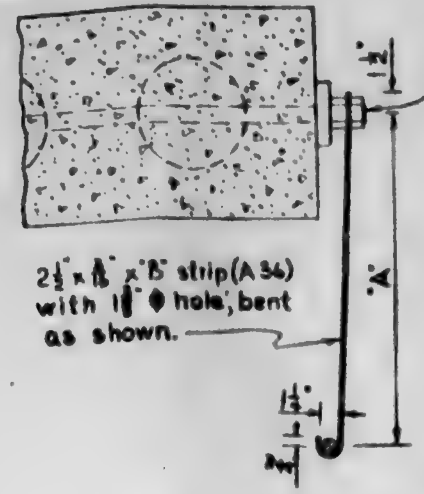
BENTS 10 AND 11

JOINT REPAIR DETAILS
Scale 1"= 1'-0"



ROD HANGER DETAIL

Scale 1½" = 1'-0"



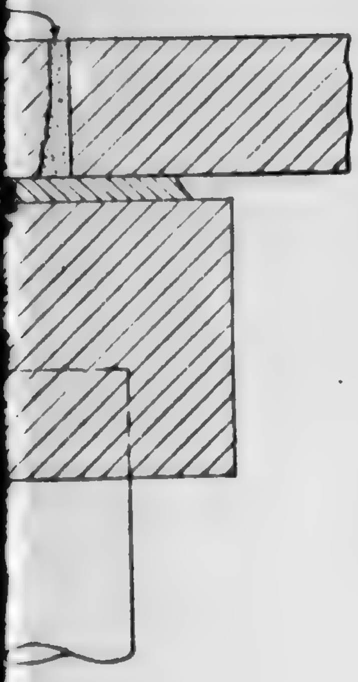
Existing slab tie rod. One tie rod in Span 8 and the tie rod in Span 14 will need to have the existing nuts loosened on one end and tightened on the other to equalize the projecting portion. Provide jam nuts to hold rod hangers in place.

2½" x ⅝" x "B" strip (A36) with 1⅛" ϕ hole, bent as shown.

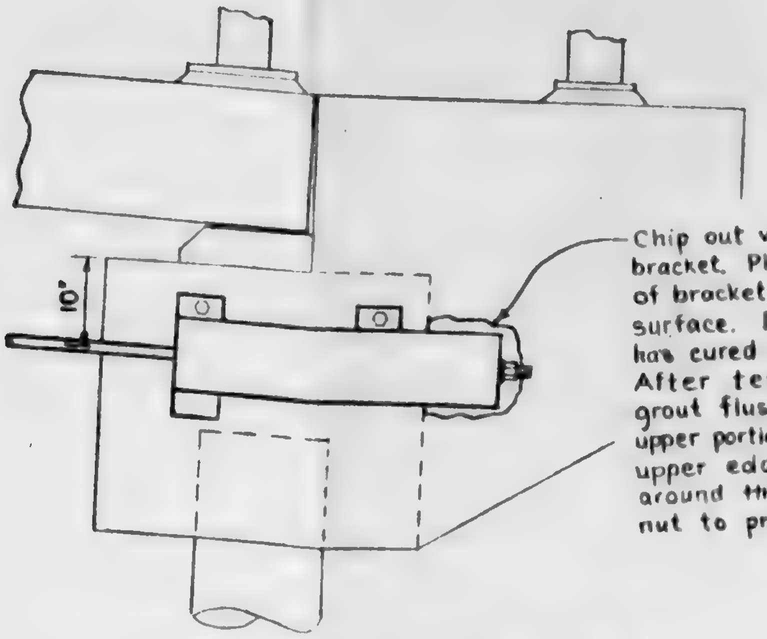
Span	"A"	"B"	No. req.
8	1'-3"	1'-7½"	4
9 - 14	2'-0"	2'-4½"	12
15	1'-10"	2'-2½"	2

SECTION A-A

Scale 1½" = 1'-0"



TS 10 AND 11



Chip out wing wall as required to install bracket. Place grout under bearing face of bracket to provide a uniform bearing surface. Do not tension rod until grout has cured at least 3 days.

After tensioning rod, pack void with grout flush with original surface. Fill upper portion of bracket with grout to upper edge of flange. Place grout around the end of the tie rod and nut to provide a minimum 2" cover.

BRACKET DETAIL AT BENT 16

Scale 1" = 1'-0"

APPROVED. ________ P.E.
STRUCTURAL DESIGN ENGINEER
DESIGNED RB
DRAWN RB
CHECKED G. Abernathy
REVIEWED TCT 7-2-81
REVIEWED
CALC. BOOK

DATE	REVISION

OREGON DEPARTMENT OF TRANSPORTATION
STRUCTURAL DESIGN SECTION

BLIND SLOUGH BRIDGE

GENERAL DETAILS

DATE June 23, 1981
BRIDGE NO. 11138B
SHEET 2 OF 3
DRAWING NO. 36102

Section 1364 Blind Sl. (Barendse Rd.) Bridge
Programming Estimate $
Highway Co. RD
Project Length
County Clatsop 7-16-81
Completion Time
Kind of Work Structure Repair
Est. Comp. Date
Prefix 204-1444
Letting Date
Project No. RS-A736(1)

ESTIMATED CONSTRUCTION AUTHORIZATION

Estimated Contract Amount . . . . $ 35,794

Anticipated Additional Items:

Royalty Payment
Permit Fees
Slide Correction
Railroad Protective Costs
Other Railroad Costs
Permanent Signing
Permanent Pavement Striping
Temporary Pavement Striping
Remove Pavement Striping (Exist. & Temp.)
Temporary Erosion Control
State Furnished
Roadside Seeding & Mulching
Asphalt Cement Adjustment
On the Job Trainees
State Responsibility for Damages
Signal Controller Testing (Engineering)
"OPTICOM" Testing (Engineering)
Bikeway Signs

$ —

Adjust Utilities:

35,794 —

Subtotal $

Contingencies (4-1/2%) 1,610.73

Engineering (~~[illegible]~~, ~~[illegible]~~, 10%) 3579.40

~~Subtotal~~ $

~~Credit for~~

Estimated Net Authorization, Construction $ 40,984.13

APPROVED

COPY TO STEARNS
7/16/81

Road Design Engineer

Rev. 3/81

OREGON STATE HIGHWAY DIVISION

SUMM--BID SCHEDULE--[✓ COST ESTIMATE]

Sheet ______ of ______

Date ______

Section *Blind Sl. (Barendse Rd) Bridge*

County ______

Kind Of Work ______

Length ______

Name *Day*

COST ANALYSIS UNIT *7-16-81 Bu*
THIS ENGINEERING ESTIMATE IS PRICED FOR
BID LETTING *Sept 3, 1981*

No	Item	Code	Unit	Quantity	Unit	
	Mobilization		All	All	(10%)	3000
	Temporary Protection and Direction of Traffic		All	All	—	1500
	Temporary Signs		Sq.Ft.	74	6 -	444
	Temporary Barricades		Each	2	100 -	200
	Flagmen		Hr.	250	23^{50}	5750
	Grouting Work		All	All	—	8,300
	Furnish and Install Tie Rods		All	All	—	16,600
						35,794

9364

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to File No.: PRO 6-2

July 16, 1981

TO: Dale E. Wilken
Division Administrator
Federal Highway Administration

FROM: D. E. Swan
Operation Programming Engineer

Original Signed By D. E. Swan

SUBJECT: Project Data Submission
Item No. 10159
Project No. RS-A736 (1)
Blind Slough (Barendse Rd.) Br. Sec.
Clatsop County

Attached support data consists of PR-1 forms and sketch maps for the subject project.

I request authorization to proceed with actions necessary to advance the physical construction provided for by the project at an estimated total cost of $ 41,000 with an obligation of $ 36,150 in Federal funds in accordance with Oregon's Certification Acceptance Plan.

This project is expected to be funded from the 20% of the FY'81 limitation withheld from distribution until after August 1.

JLG/lms
Attachments

cc: C.O. Fredrickson (Region 2)
H. Reynoldson w/att
General Files

Form 734-3122

Budget Bureau No. 41-R2067;
U.S.

FORM PR-1 (REV. 4-61)

FEDERAL - AID PROGRAM DATA

(PPM 21-1)

MONTHLY TRANSACTION NO.

DATE SUBMITTED TO W.O. 7-16-81

CARD 2	REPORT NUMBER (19) (20)	PROJECT LOCATION (45 typewriter spaces) 21 Co. Rd., 3.5 mi. N.E. of Knappa 65	ADT PRESENT 330 (66)	FUTURE --- (70)	YEAR --- (71) (72)	REGION 10	STATE NAME Oregon

CARD 3	CHARACTER OF PROPOSED WORK (35 typewriter spaces) 28 One Bridge 62	NATL. FOREST (63) (65)	FH ROUTE NO. (66) (68)	SUPV AGCY (69)	DA CLASSIF. (70)	DA AREA (71) (72)	EMERG. YR. (73)	PL. AUTH YR (74) (75)	PROJECT NUMBER PREFIX LETTER(S) 14 RS- 23	NUMBER 7 A736

CARD 4	CLASS OF FEDERAL FUNDS Rural Secondary	COUNTY NAME Clatsop
	NAME OF URBAN AREA - - -	ROUTE NO. S; FEDERAL-AID A736 (32); STATE Co. Rd. (36) (37); U.S. - -

17-31

ESTIMATED PROJECT COST BY PHASES

CARD	LINE NO.	CHANGE CODE	PROJECT CODE	CLASS	WORK TYPE	WORK STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS 88.18%	STATE FUNDS	OTHER FUNDS
1	(14-15)	(16)	41	42	43 46	53		(54) (58)	(59) (66)	(67) (76)		
5					PE							
5					ROW							
5					CONST (CODE) X080		"Blind Slough (Barendse Rd.) Br. Sec.	0.084	41,000	36,150	2,425	2,425
CARD 1	CODE 1	PREPARED BY JLG					PROJECT TOTALS	0.084 (18)	41,000 (23)	(24) 36,150 (33)	2,425	2,425
1	14	PROGRAM APPROVAL DATES										

REMARKS

Additional Data: Item N
No. S-

2041444

Budget Bureau No. 41-R2067; Approval Expires February 28, 1966

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

FORM PR-1
(REV. 4-61)

FEDERAL-AID PROGRAM DATA

(PPM 21-1)

7-16-81

LOCATION (45 typewriter spaces)	ADT	PRESENT	FUTURE	YEAR	REGION	STATE NAME	STATE CODE	APPN CODE	ITEM NO.
Rd., 3.5 mi. N.E. of Knappa		330	---	---	10	Oregon	41	075	10159

K (35 typewriter	NATL. FOREST	FH ROUTE NO.	IMPV AGCY	DA CLASSIF.	DA AREA	EMERG. YR.	PL. AUTH YR	PROJECT NUMBER PREFIX LETTER(S)	NUMBER	SEQ. NO.	I. Projects Only POST MI.	DESIG.
								RS-	A736	(1)		

Rural Secondary

- - -

COUNTY NAME	CODE
Clatsop	007

ROUTE NO.	FEDERAL-AID	STATE	U.S.
S	A736	Co. Rd.	- - -

PROGRAM STAGE ☐ 1 OR ☐ 2

ESTIMATED PROJECT COST BY PHASES

K TYPE	STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS 88.18%	STATE FUNDS	OTHER FUNDS	CHARACTER OF PROPOSED WORK (Full description)
W								
NST E) 30		"Blind Slough (Barendse Rd.) Br. Sec.	0.084	41,000	36,150	2,425	2,425	ROW-65' min.; Access Control-none; Parking Restrictions-none.
	JLG	PROJECT TOTALS	0.084	41,000	36,150	2,425	2,425	

AL DATES

REMARKS

Additional Data: Item No. S-1098; Project No. S-398 (3)

-over-

USCOMM DUSCOMM-DC 48905-P61

BLIND SLOUGH (BARENDSE RD.) BR. SEC.
PROJECT NO. RS-A736 (1)

Existing Facility: Blind Slough Br.; Br. No. 11138A; Hwy. over waterway, Prestressed concrete slab span; L 442'; HC 29'-9"; Loading HS 20-44; Constructed under project S-398 (3).

Adjacent Facilities: 24 foot bit. surf. roadway with 2 foot shoulders.

Project Data: Construction to correct design deficiency to stop longitudinal movement of pile bents which are causing openings in the bridge deck and incidental work common to this type of project. (This work changes bridge number to 11138B)

Exception to Minimum Standards: None

Right-of-Way: No additional required.

System Action, Airports, Railroads, Water Developments, Historical and Recreational Areas: None involved.

FHPM 7-7-2 Requirements: Statewide categorical exclusion concurred in by FHWA on February 25, 1980.

FHPM 4-1-4 Requirements: A-95 review exempt under working agreements.

FHPM 7-7-5 Requirements:
- a) Public Hearings - - Not required under Oregon Action Plan.
- b) Location/Design - - Not a factor in the development of this project.

Accomodation of Utilities: A State-County agreement to comply with paragraph 6d (1) of PPM 30-4.1 was executed September 17, 1980.

Maintenance: A State-County agreement to comply with Section 116, Title 23 U.S.C. was executed September 17, 1980.

NOTE: This project is in Congressional District No. 1.

93604

L.

U.S. Department
of Transportation
**Federal Highway
Administration**

Memorandum

THE OREGON DIVISION - SALEM

Subject: Oregon Project FAS-757
Blind Slough Bridge 1138A
Clatsop County

Date: June 8, 1981

From: Division Administrator

Reply to Attn. of: HBR-OR

NOTED
H. S. COULTER

To: Mr. H. S. Coulter, State Highway Engineer, ODOT
ATTN: Mr. W. J. Hart, Bridge Engineer, OSHD

Attached is Mr. Chassie's report of June 5, 1981 on the Blind Slough bridge settlement and deck joint separation. Mr. Chassie feels the structure is in secondary settlement stage and that additional movement will continue over the next 20 years but be limited from 2-6 inches.

During our trip to the site April 28, one suggestion that came out of the meeting was to tie the lift span to the adjacent spans and allow the settlement and movement to take its natural course. It would be necessary to periodically observe the bridge reaction and if the response were not as expected, the solution could be reevaluated.

Please consider Mr. Chassie's report in your deliberations.

For Dale E. Wilken

Attachment

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JUN 9'81
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FOR

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					X	

Form FHWA 121 (1/80)

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

UNITED STATES GOVERNMENT

memorandum

Subject: Blind Slough Bridge

Date: June 5, 1981

From: Regional Geotechnical Engineer
Region 10

Reply to
Attn. of: HDE-010.4

To: Mr. Dale Wilken
Division Administrator
Salem, Oregon

Attn: Herb Schell
Division Bridge Engineer

In reply to your request and the request of the State, I have analyzed the movement problem occurring with the Blind Slough Bridge. My analysis has relied heavily on the information presented in the excellent and comprehensive report prepared by Ted Blachly of the ODOT bridge section titled "Proposed Repair of Blind Slough Bridge", dated May 1980. This report includes soils data from borings made at the structure site and horizontal and vertical movement survey data compiled by ODOT.

I concur with the conclusions presented in Blachly's report concerning the cause of the problem. The main thing I have done in my analysis, to supplement the ODOT report, is to analyze the bridge movement data and make an estimate of the additional movement the bridge will be subjected to, since this is the key factor influencing the decision on the extent of remedial action to be taken.

My review also included a field inspection of the bridge on April 28, 1981, in the company of Herb Schell and Messers. Ted Blachly and Ted Thompson (ODOT Bridge Section), Jerry Weimer and Bill Fretwell (ODOT Region 2), and Chet Anderson (ODOT Resident Engineer).

The following is a summary of my analysis, conclusions and recommendations.

Description of Bridge

The Blind Slough Bridge is a 15 span timber trestle bridge which was constructed in the winter of 1972-73. The concrete slab deck spans are 28 feet long except for the middle span (span 8) which is a 50 foot long lift-out span. All spans except the middle lift-out span are supported on single row timber pile bents. Bents 8 and 9 which support the middle 50 foot lift-out span are double row pile bents. Photographs of the bridge are contained in the May 1980 ODOT report. Reproduced copies of these photographs are attached (see Attachment A-Photographs 1 to 24).

Description of Problem

The major problem of concern with the bridge is that some of the transverse deck joints over pile bents near the center spans of the bridge have increased in width since the bridge was constructed in 1973, due to horizontal movement of some of the pile bents (see Attachment B). Most of the movement has been limited to 5 of the 16 bents (bents 8, 9, 10, 11, and 12). Approximately 50 percent of the horizontal joint movement has occurred at bent 9. The increasing joint openings pose a maintenance problem and have caused concern about the integrity of the bridge at bent 9.

Settlement of the approach fills and of both ends of the bridge and tilting of piles in the northerly bents have also occurred (see Attachment C and photograph 22).

Cause of Problem

Based on my analysis of the soils boring data, it is obvious that the bridge movement problems are being caused by settlement of the soft foundation soils underlying the north approach fill.

Borings made during the 1972 bridge foundation investigation show up to 90 feet of very soft dark gray silty clay and clayey silts on the north approach. SPT blow counts in these soft soils were very low, only ranging from 0 to 4. A further indication of how soft and weak these soils are is the fact that the hollow stem auger drill rod used to drill a hole in which a slope indicator was placed at the north end of the bridge, went down by its own weight from 9' to 80'.

The north approach fill height varied from 7 feet at the end of the bridge to a maximum of 17 feet at 50 feet from the end of the bridge. The 17 foot fill height occurred where an overflow structure was removed and the overflow stream channel was filled in. The load imposed by the new approach fill has caused the soft compressible foundation soils to settle. Total vertical settlement of the north abutment has been 3.5 feet to date. Review of the pile driving records show that the pile tips were "hung up" in the soft soils, therefore the abutments and northerly pile bents have settled along with the foundation soil and approach fill. This settlement has been uniform and has simply introduced a gradual vertical curve into the north end of the bridge (see photographs 18-20).

As the foundation soil settles vertically, it is also squeezed laterally as soil grains that are pushed downward tend to push other soil grains to the side. It is this accompanying lateral soil movement that is causing the increased joint openings in the bridge. As the foundation soils are squeezed laterally toward the river, they take the piles with them. This subsurface lateral soil movement pushes the bottom of the piles toward the river and causes the upper part of the pile bent to rotate back toward the approach fill. This pile movement has caused the three northerly pile bents (bents 13,14,15) to now be out of plumb (see photograph 22). As the pile caps rotate toward the approach fill, some of the deck slabs have slipped on some of the pile caps, causing the joints over these pile caps to open wider.

Monitoring of Bridge Movement

The Blind Slough Bridge was completed in the spring of 1973. In September, 1976, the Clatsop County Drainage District notified the County road department that there appeared to be a problem with the joints on the bridge. In October, 1976, the county set reference points on each side of the joints so that future movement could be measured. In December, 1979, ODOT resident engineer Chet Anderson began measuring joint widths and deck elevations.

My analysis of the movement data follows.

Analysis of Vertical Settlement Data

The following is a compilation of vertical settlement measurements made by The State at the north and south bridge abutments during the period from 12-16-79 to 4-29-81 (17 months). The settlement amount shown is the difference between the existing elevation and the original plan elevation of the abutments.

Date of Measurement	Settlement (Feet)			
	North Abutment		South Abutment	
12-6-79	3.29	0.18'	.59	0.05'
7-2-80	3.34		.61	
1-9-81	3.43		.63	
4-29-81	3.47		.64	

You will note that there has been about 5 times as much settlement at the north abutment as there has been at the south abutment (3.47 feet compared to 0.64 feet). This much greater vertical settlement at the north end of the bridge, with accompanying lateral soil movement, accounts for the joint opening problem being confined to the north half of the bridge. The reason much less settlement has occurred at the south abutment is due to a combination of better foundation soil (shown by the borings) and much less approach fill placed at the south end compared to the north end.

A plot of settlement versus time for the north and south abutments is shown on Attachment D. The significance of the time-settlement plot is that it clearly shows that "primary consolidation" (squeezing of water out of the foundation soil voids) of the foundation soil is complete and the settlement that is now occurring is "secondary consolidation" (settlement due to continued readjustment of soil particles under the load imposed by the approach fill). It appears that the majority of the vertical settlement occurred during the first couple of years following construction of the bridge. The continuing secondary settlement is due primarily to the presence of organics in the foundation soil. The boring logs indicate pieces of wood were encountered in the borings and that the foundation soils are dark gray in color. This is indicative of a significant amount of organic material. The presence of these organics is the main reason that vertical settlement and accompanying lateral movement of the foundation soils are continuing to occur, even 8 years after the fills were placed. It is significant to remember, however, that secondary settlement occurs at a much slower rate than does primary settlement.

Estimate of Future Vertical Settlement

Secondary settlemnt measurements will typically plot as a straight line on a "settlement versus log time plot." Therefore, if settlement measurements are made over a long enough period of time to establish the slope of this secondary settlement line on a semi-log plot, then the projection of this line can be used to provide an estimate of the additional secondary settlement that will occur in the future.

The State has obtained settlement measurements over a long enough period (17 months) at the Blind Slough Bridge to allow this to be done. A plot of the vertical settlement data versus log time for the north abutment of the Blind Slough Bridge is shown on Attachment E.

Based on this data, I estimate that 6 inches of additional vertical settlement will occur at the north abutment during the next 20 years.

Secondary settlement occurs at a continually decreasing rate. Therefore, from a practical stnadpoint, the additional settlement that will occur beyond 20 more years will not be significant.

Analysis of Joint Opening Data

As mentioned previously, Clatsop County first became aware that the bridge joints were increasing in width in 1976 (bridge completed in 1973) and set reference points across the deck joints to measure future movement. The State began making measurements in December 1979. Following is a tabulation of the measured total increase in joint openings for bents 2 to 15 for the period from 10-27-76 to 4-29-81:

Date of Measurement	Total Increase in Joint Widths (feet).
From 10-27-76 to 10-27-78	.08
to 4-19-79	.13
to 11-7-79	.17
to 2-29-80	.23
to 1-9-81	.25
to 4-29-81	.23

The measurement data indicates that the bridge joints have opened approximately 0.25 feet (3 inches) between October 1976 and April 1981, or 3 inches in the last 4½ years. Obviously, no actual measurements of the increase in joint widths were made between the time the bridge was constructed in 1973 and October, 1976, however a reasonable indication of the increase in joint openings that occurred during that time can be obtained by comparing the plan joint widths to the present joint widths. The May, 1980 ODOT report notes that the total plan joint width for the bridge was 0.67 feet. The joint widths measured at present total 1.63 feet. Thus, the joints have opened a total of about 1 foot.

Note that the joint measurements made since October, 1976 show that about 3 inches (0.25 feet) occurred during the last 4½ years. Therefore, the majority of the joint opening, or 9 inches (0.75 feet), occurred during the first 3½ years following completion of the bridge. Therefore, as with the vertical settlement, the joint opening data indicates that most of the horizontal bridge movement occurred during the time the bridge was built and in the first couple of years following construction of the bridge. This is as one would expect, since the horizontal movement is a direct result of the vertical settlement.

Estimate of Future Joint Opening

The horizontal movement that the bridge has undergone and is continuing to undergo is causing the major concern for integrity of the bridge. An estimate of the additional joint opening that may occur is the key factor to be considered in making a decision on remedial action to be taken on the bridge.

I have used two approaches to make an estimate of the additional joint opening that may occur. Since the horizontal bridge movement is a direct result of the vertical settlement of the foundation soils, the first approach used was to compare the total bridge joint opening that has occurred to the total settlement of the north abutment. The north abutment has settled 3.5 feet and about 1 foot of extra joint opening has occurred. Thus, the total extra joint opening has been about 28 percent of the total vertical settlement. Also, during the past 17 months during which the State has been making survey measurements on the bridge, .18 feet of vertical settlement has been measured at the north abutment compared to .06 feet of additional joint opening, or the extra joint opening has been about 33 percent of the vertical settlement, during the past 17 months. From a practical standpoint, therefore, the extra joint opening occurring on the bridge has been about 30 percent of the north abutment settlement. Referring back to Attachment D, the estimated additional vertical settlement that will occur at the north abutment over the next 20 years is 6 inches. Therefore, using this first approach, the estimated total increase in joint openings that may occur over the next 20 years is 2 inches (30 percent of 6 inches).

The second approach used to estimate the additional joint opening that will occur was to plot the actual measured joint movement during the past 17 months versus log of time, similar to what was done for the vertical settlement. This is shown on Attachment F. This second approach gives an estimate of 6 inches of additional joint opening occurring over the next 20 years. This second approach is considered conservative and gives an upper limit of the estimated movement, since the slope of the line is based on the measured movement since monitoring began on 12-27-76, and it should be noted from previously tabulated joint opening data that practically no increase in joint opening occurred during the last year.

To summarize, it is estimated that the bridge may be subjected to an additional 2 to 6 inches of additional joint opening, with the 6 inches considered a conservative upper limit.

Conclusions

Based on my analysis of the soils and movement data, field inspection of the bridge site, and discussion with State personnel, I have drawn the following conclusions:

1. The north bridge abutment has settled 3.5 feet compared to the original plan elevation and the joints between deck slabs on the north half of the bridge have opened an additional 12 inches since the bridge was constructed in 1973.

2. The bridge has accepted the vertical and horizontal movements very well and is not in danger of structural collapse.

3. Movement data shows that primary consolidation of the compressible foundation soils underlying the bridge approach fills is complete and secondary consolidation is now occurring.

4. Based on movement measurements made to date, it is estimated that the joints on the north half of the bridge may open an additional 2 to 6 inches over the next 20 years, with 6 inches considered a conservative upper limit. After 20 more years, the movement will be stopped or reduced to a negligible amount.

Discussion and Recommendations

The present main concern with the bridge is the problem that the joint opening has created at the ends of the center lift-span (span 8). More than half of the total extra joint opening has occurred over bents 8 and 9, which support the lift-out span (see photographs 1 to 11, Attachment A). The movement over bent 9 has reached the point where the bearing area on the grout pad under the end of the deck slab has been seriously reduced (see photograph 3). The high bearing pressure on the small area has caused crushing of the grout pad and spalling of the ends of the slab (photograph 11).

Three alternatives for remedial action are presently being considered. The first alternative, presented in May 1980 ODOT report, is to tie all the bridge bents together using longitudinal tie rods the full length of the sturcture (except for the end spans). Estimated cost is $40,000.

The second alternative, discussed during the field inspection, is to drive batter piles next to the existing north abutment, and extend the existing abutment pile cap to encompass the new batter piles. The purpose of the batter piles would be to provide resistance to further horizontal movement. Estimated cost for this alternative is $50,000.

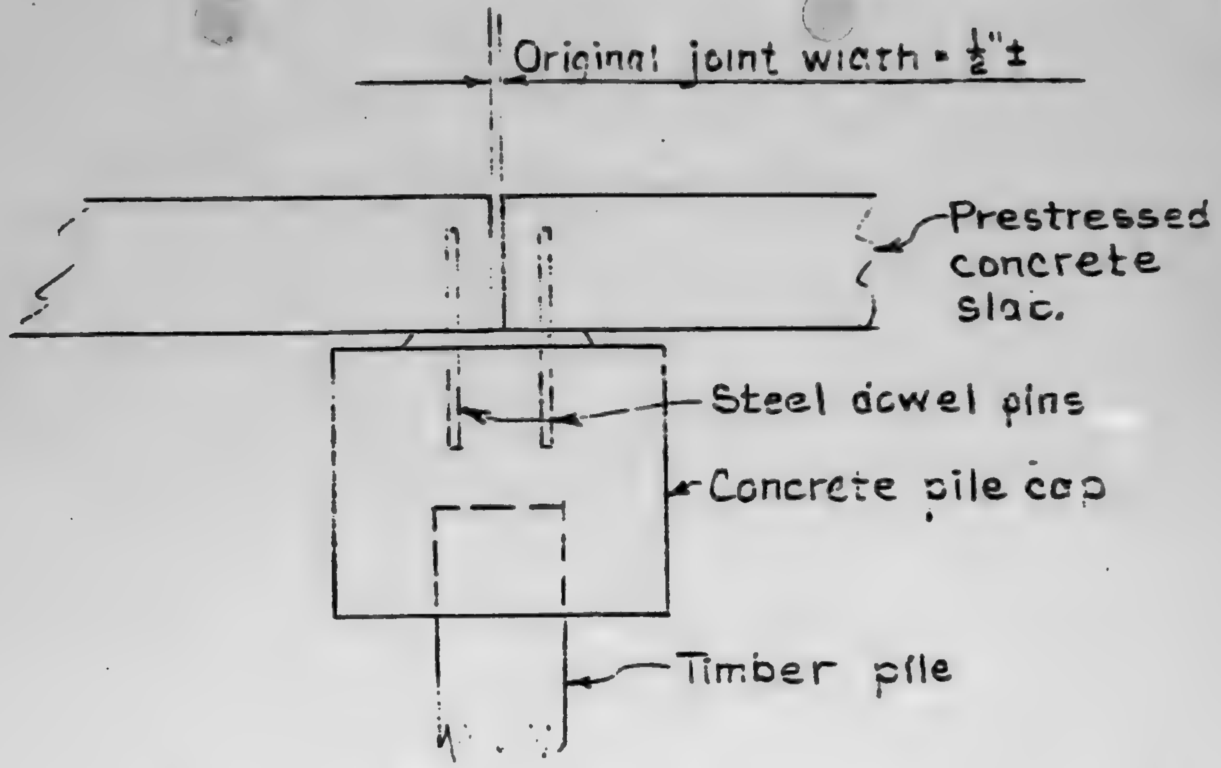
The third alternative, also discussed during the field inspection, would be to simply let the additional movement occur. The feasibility of this alternative is of course dependent on the amount of additional joint opening that will occur. As previously discussed, I estimate that an additional 2 to 6 inches of joint opening may occur, with 6 inches being a conservative upper limit. The bridge has already tolerated 12 inches of additional joint opening. In other words, the majority of the movement the bridge will be subjected to has already occurred. The bridge can easily tolerate the additional 2 to 6 inches of movement. There is plenty of additional room for the joints to open without danger of the deck slabs falling off any of the pile caps (refer to photographs). Substantial additional movement can even be tolerated at bents 8 and 9, as long as the existing grout pads are extended. As an extra precaution, bents 8 and 9 only could be tied together with tie rods to keep the joints over these bents from opening wider. Including other minor recommended repair work, such as removing spalled concrete from the existing open joints, coating exposed reinforcing steel with epoxy, and filling open joints with premolded expansion joint filler and concrete grout, this third alternative would probably cost less than $15,000. In my opinion, this last alternative is the most prudent cost-effective approach to take and I recommend that this alternative be chosen.

Please advise if you or the State have any questions or if I can be of further assistance.

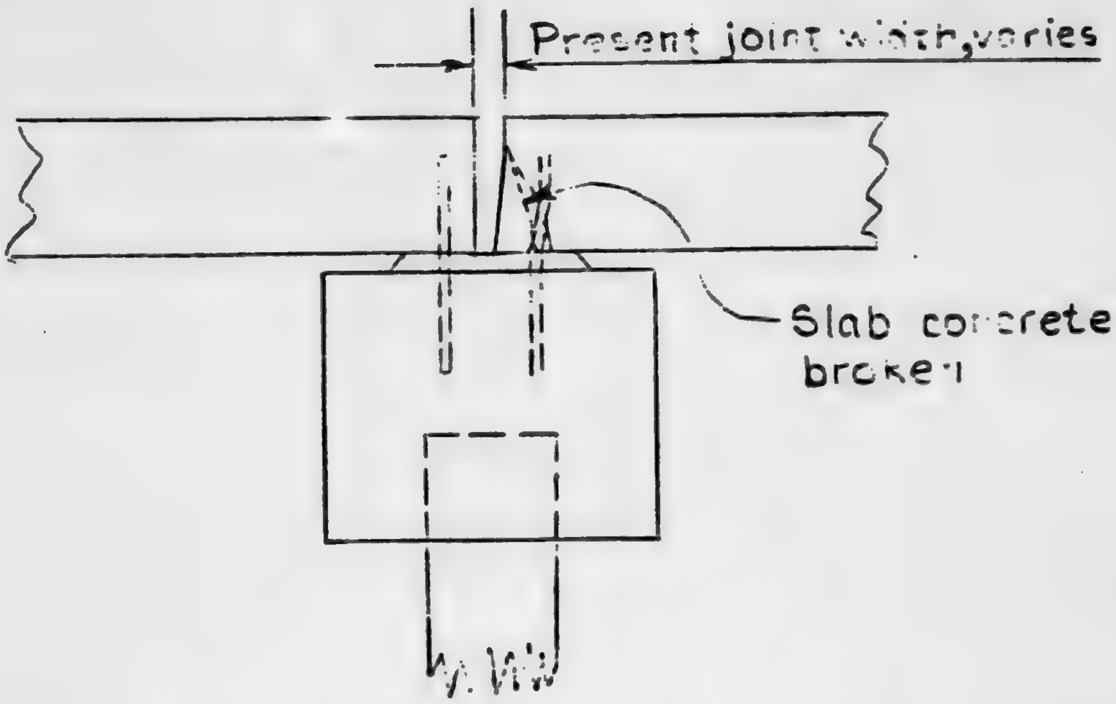
Ron Chassie

Ronald G. Chassie

cc: Gary Kasza


Original joint width = ½"±
Prestressed concrete slab.
Steel dowel pins
Concrete pile cap
Timber pile

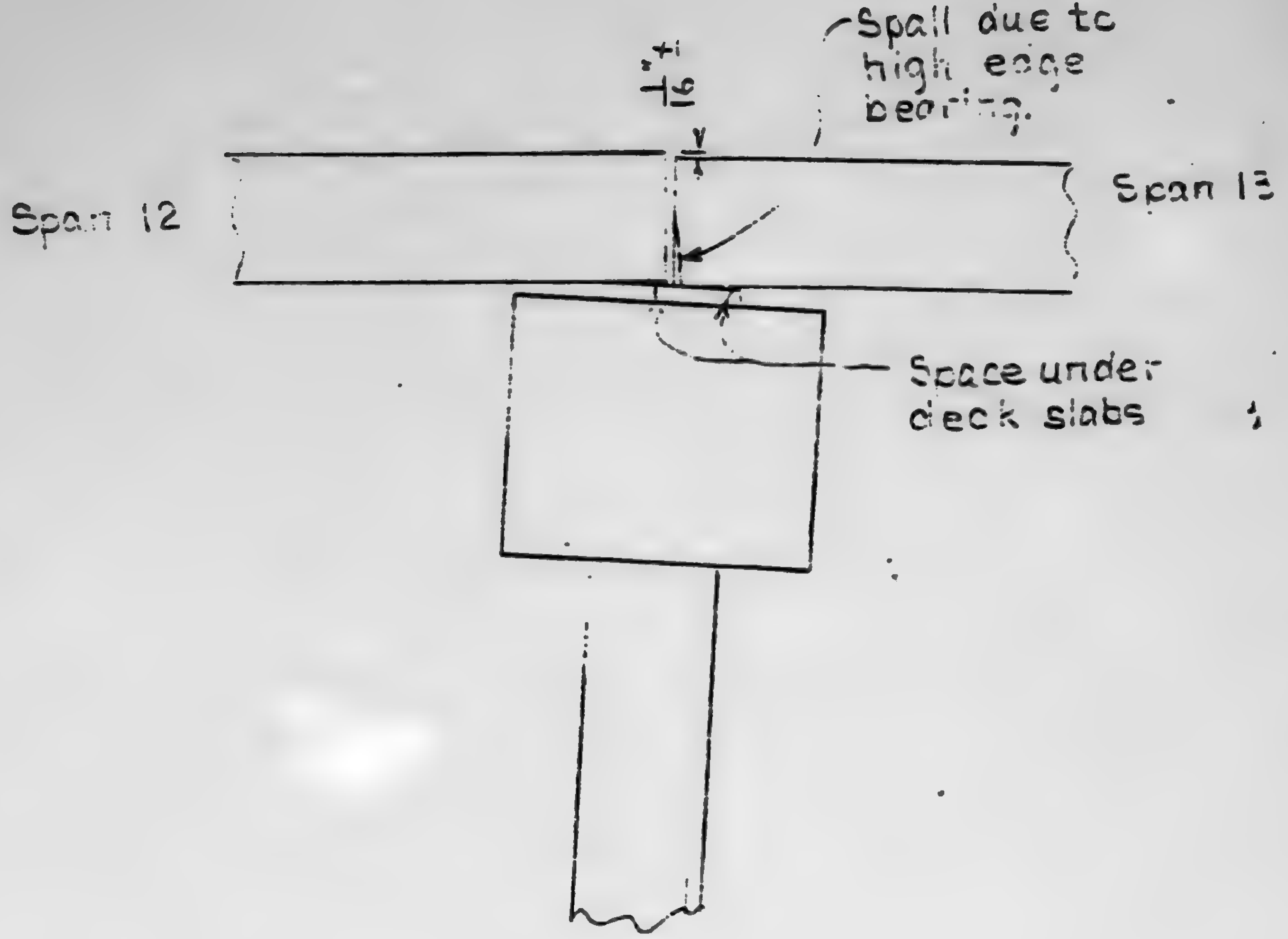
SECTION AT PILE CAP
AS CONSTRUCTED


Present joint width, varies
Slab concrete broken

SECTION AT PILE CAP
AT PRESENT

Fig. 6
(FROM ODOT REPORT)

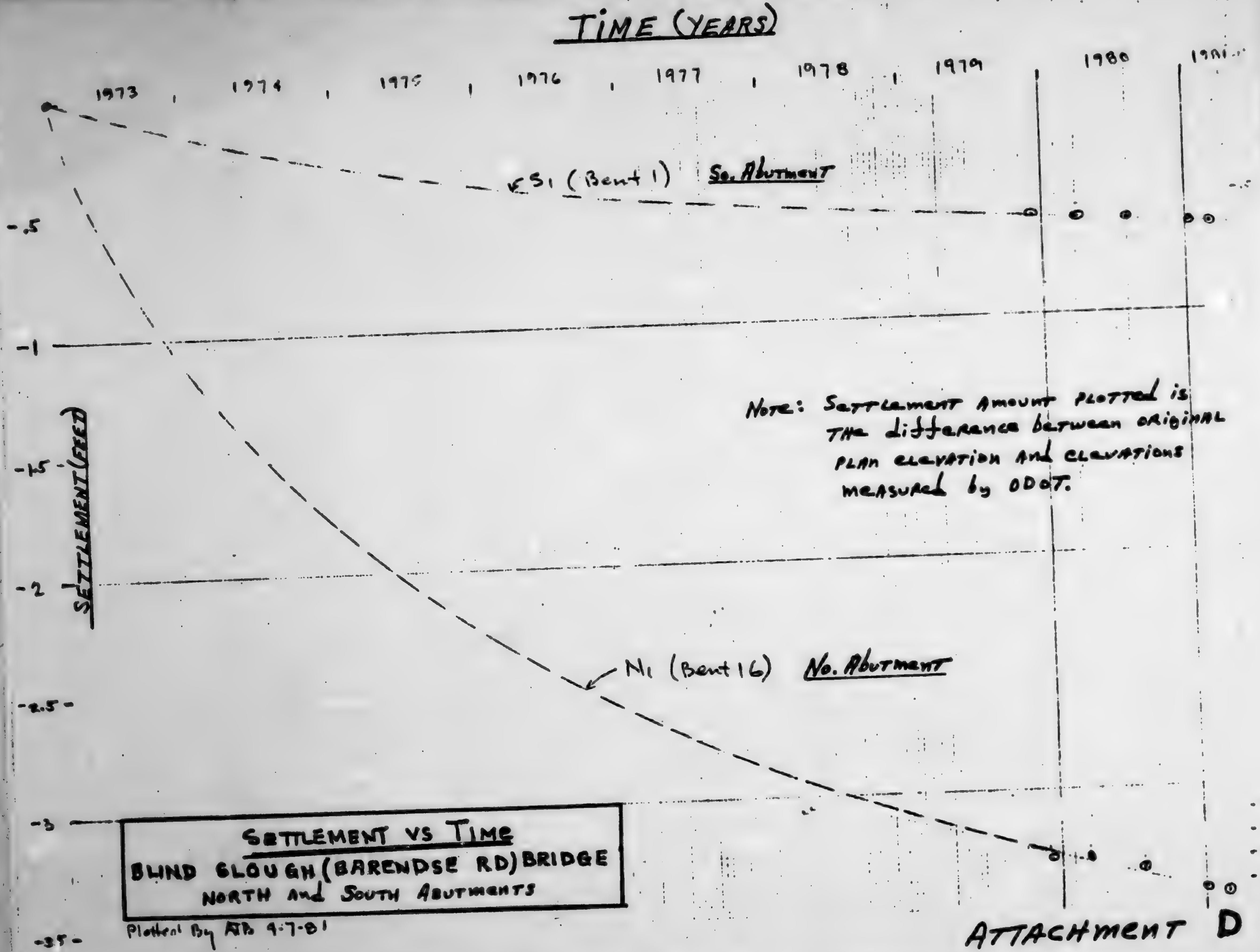
ATTACHMENT B


1/16"±
Spall due to high edge bearing.
Span 12
Span 13
Space under deck slabs

EAST END OF BENT 12

Fig. 19

ATTACHMENT C

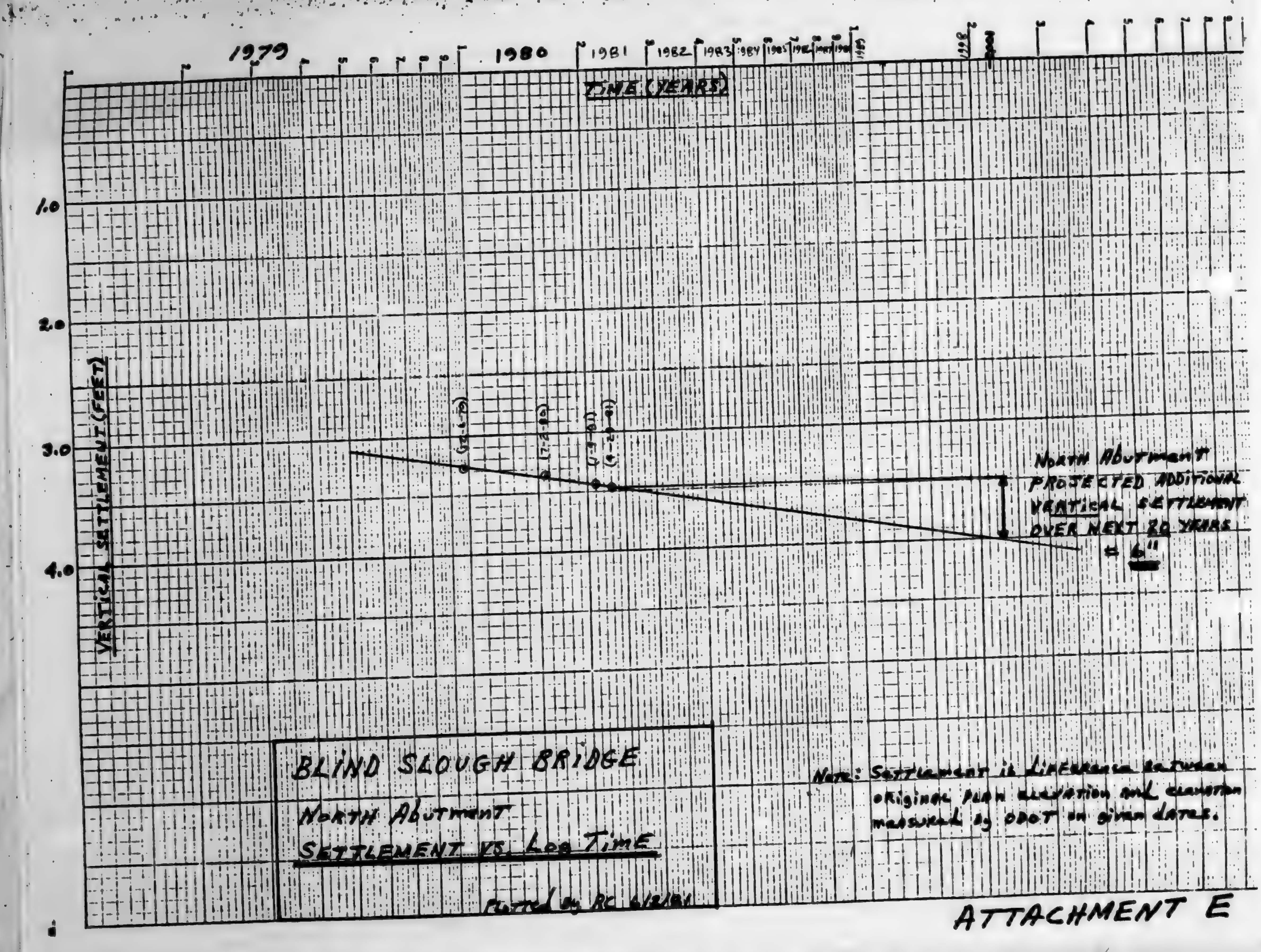


Note: Settlement amount plotted is the difference between original plan elevation and elevations measured by ODOT.

SETTLEMENT VS TIME
BLIND SLOUGH (BARENDSE RD) BRIDGE
NORTH and SOUTH ABUTMENTS

Plotted By AB 4-7-81

ATTACHMENT D



BLIND SLOUGH BRIDGE

NORTH ABUTMENT

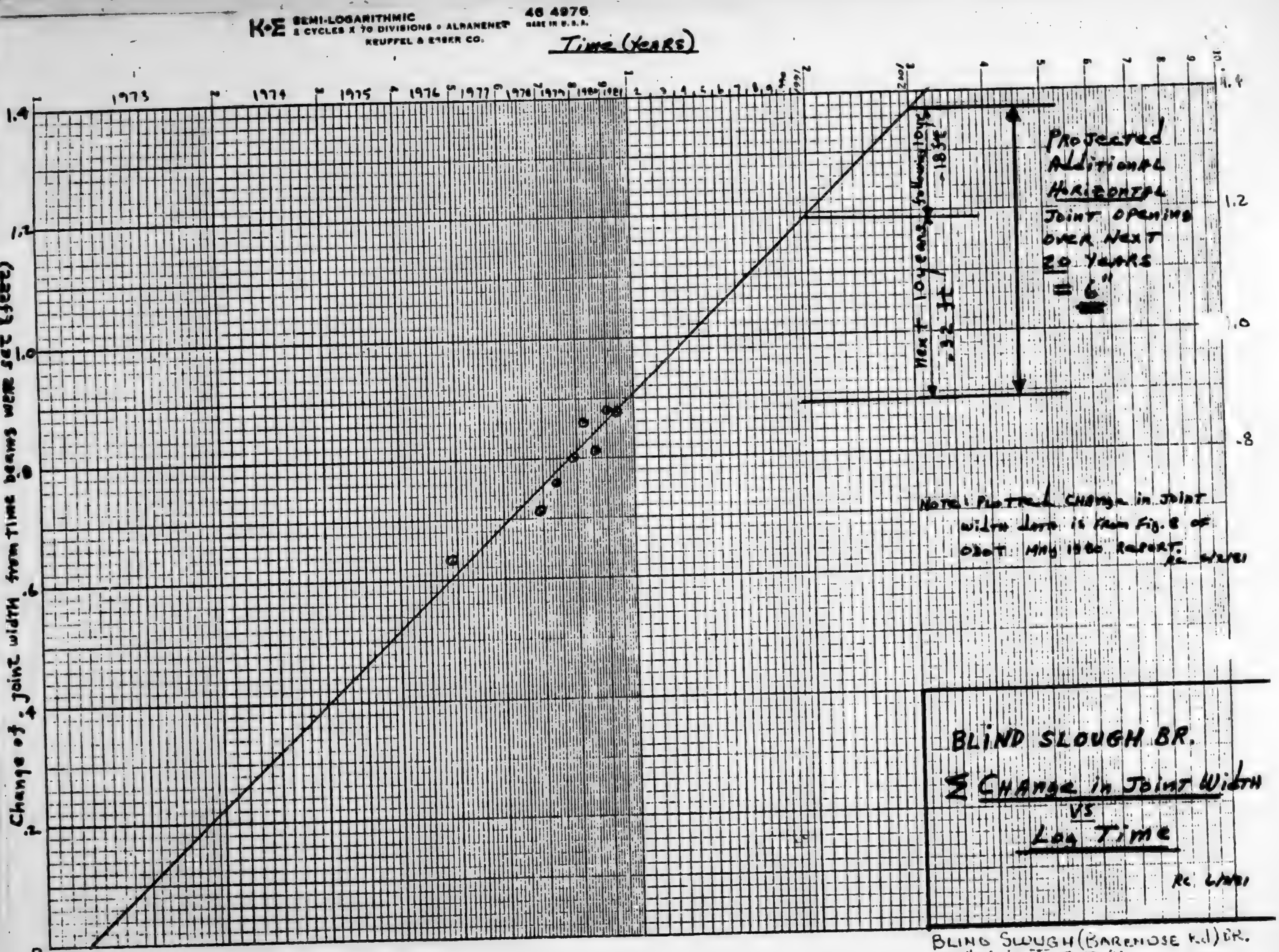
SETTLEMENT VS. LOG TIME

Plotted by RC 6/2/81

NORTH ABUTMENT
PROJECTED ADDITIONAL
VERTICAL SETTLEMENT
OVER NEXT 20 YEARS
= 6"

Note: Settlement is difference between original plan elevation and elevation measured by ODOT on given dates.

ATTACHMENT E



NOTE: Plotted change in joint width data is from Fig. 8 of ODOT May 1980 Report. RC 6/29/81

BLIND SLOUGH BR.

Σ Change in Joint Width
VS
Log Time

RC 6/29/81

BLIND SLOUGH (BARENDSE Rd) BR.
plotted by TF 9-29-81

ATTACHMENT F

9364

STATE OF OREGON

INTEROFFICE MEMO

Clatsop Co.

TO: D. H. Moehring, Assistant
State Highway Engineer

DATE: May 28, 1981

Rod Henry

FROM: Rod Henry, Assistant
Right of Way Manager

SUBJECT: Right of Way Certification
F. A. Projects
Bid Opening June 25, 1981

Federal-aid Project No. RS-A 736(1) Highway No. 504 County

Federal-aid Project Name Blind Slough Bridge

I certify that to the best of my knowledge the following statements, as checked, are correct with regard to the right of way and relocation for this project. This report does not include the status of Railroad & Utilities' files that may be in the area of this contract, but are reported separately by our Utility Section.

[x] No additional right of way was acquired. Construction can be accomplished within the existing right of way.

[ ] Right of way was acquired in accordance with current FHWA directives covering acquisition of real property and with the relocation provisions of FHPM 7-5. The State has legal and physical possession or has a right to occupy and use all right of way. Occupants have vacated all residential, commercial and farm buildings.

* * * * * *

[ ] There are no individuals or families to be displaced from residential improvements.

[ ] All individuals and families have been relocated to decent, safe, and sanitary housing, or the State has made available to relocatees adequate replacement housing in accordance with the provisions of current FHWA directives.

FCL: jr

cc: J. H. Versteeg
Duane Ridings
F. C. Lowe

1 Versteeg ✓
Anderson
3 Christensen W
Olson
2 Sullivan JWS
Terpin
Trout
Wakerlig

RECEIVED
MAY 28 1981
ROAD DESIGN SECTION

Do Not File ☐
Return To
Bring Up / /
Action

Contains Recycled Material

9364

L.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
DES 23
11138A

April 8, 1981

Herb Schell, Division Bridge Engineer
Federal Highway Administration
The Equitable Center, Suite 100
530 Center Street
Salem, OR 97301

NOTED
E. S. HUNTER

Blind Slough (Barendse Road) Bridge Repair
Clatsop County
BR 11138A

Enclosed are a "Record of Elevation Readings" for several points along Barendse Road on and near the bridge, a plot of "Settlement versus Time" for the end bents, and a copy of Fig. 11 from the report with the location of some of the check points added.

The field data were gathered rather in bits and pieces, the first run being on the bridge only, and later runs on the approaches. No consistent benchmark was used, so that it is a matter of conjecture as to exactly what changes have taken place. We have assumed that the elevation at Bent 10 has remained constant and adjusted the other figures to fit that assumption. We might as reasonably have chosen Bent 7, except that would imply that Bent 10 had risen .05 ft. instead of Bent 7 settling .05 ft. More likely this difference represents a variation from plan elevation in the original construction. Despite the uncertainty of the data in the hundredths of a foot, the trend of continuing settlement at a decreasing rate seems quite clear.

We have plotted the settlement versus time at the end bents both because these are the only points which were measured in all of the surveys and because they are the most important for the proposed repair.

Walter J. Hart
Bridge Engineer

ORIGINAL SIGNED
L. L. WALLACE

L. L. Wallace
Assistant Bridge Engineer

RECEIVED
TECHNICAL SERVICES
APR 9 '81
REFER TO
FOR
Info | Inves | R/D | D/R | Sign | Act | File

Enclosure

cc: E. S. Hunter
D. H. Moehring
C. O. Fredrickson

orm 734-3122

9364 Division

Salem, Oregon

2-4-81

504

Prefix 204-1444

Attention: Right-of-Way Section

Subject: Federal Aid Project No.
Project Name Blind Slough Bridge Section
Barendse Road

Regarding the above referred to federal aid project, we hereby certify that to the best of our knowledge and belief:

A. Existing Right-of-Way

☒ 1. All construction can be accomplished completely within the existing right-of-way. This existing right-of-way was acquired prior to January 2, 1971.

B. New Right-of-Way

☐ 1. This project required additional right-of-way purchased after January 2, 1971. Right-of-way, easements, or rights-of-entry required for this project have been secured in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, and all incidental charges related to the transfer of property will be paid by the county in accordance with said Act.

☐ a. There has been no displacement of persons from residences, farms or businesses.

OR

☐ b. There has been displacement of persons from either residences, farms or businesses and in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, displaced persons, businesses, or farm operations have been provided relocation payments, if eligible, and relocation assistance. Displaced individuals or families have been relocated to decent, safe and sanitary housing or have been offered decent, safe, sanitary and fair housing immediately available on the open market.

C. Utilities

☒ 1. The occupancy and/or adjustment of existing utilities within the right-of-way of the above referred to federal aid project have been authorized by permit, franchise, or other approved procedure.

Signed at Astoria, Oregon, this 4 day of Feb, 1981

County of Clatsop

County Judge/Chairman

Commissioner

Roger A. Berg
Commissioner

Certified By:

Regional Right-of-Way Supervisor
Date 2-6-81

RIGHT OF WAY ADMINISTRATION
RECEIVED
FEB 09 1981
M AM ADM RBR CA RS
PMS AS CE OS TA RUE
0 1 2 3 4 F

Instructions: Complete A or B and C.
R/W File No.
Rev. 1/76

9364

2.

October 14, 1980

Clatsop County Board of Commissioners
P. O. Box 178
Astoria, OR 97103

[illegible] 4-2

Attention: Norma Hunsinger
County Clerk

MISC. CONTRACTS and
AGREEMENTS No. 7377

Gentlemen:

Attached for your files is a fully executed copy of an agreement concerning repair to the Blind Slough (Barendse Road) Bridge in Clatsop County.

We have retained a fully executed copy of this agreement for the Transportation Commission's files.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

kkr

Attachment

bc: Don Harwell (agreement attached)

PRO 6

STATE OF OREGON

INTEROFFICE MEMO

TO: H. S. Coulter
State Highway Engineer

DATE: August 25, 1980

FROM: D. E. Swan D E Swan
Operation Programming Engineer

SUBJECT: FAS-C Bridge Repair
Clatsop County
FAS-A736 (formerly 757)

Clatsop County has requested the repair of the Blind Slough Bridge on Barendse Road. The State Highway Division awarded the contract, No. 7816, for this structure on September 25, 1972, and it was completed on May 15, 1973. No additional Right-of-Way. Engineering by State.

Jurisdiction	Section	Total Funds	Federal Funds	State Funds	Local Funds
Clatsop Co.	Blind Slough (Barendse Road) Bridge, FAS-A736 - Bridge Repair	$42,000	$36,960	$2,520	$2,520

The Region and this office have considered this request and concur in the matter. I recommend your approval of this project and request your authorization under delegated authority.

APPROVED BY:

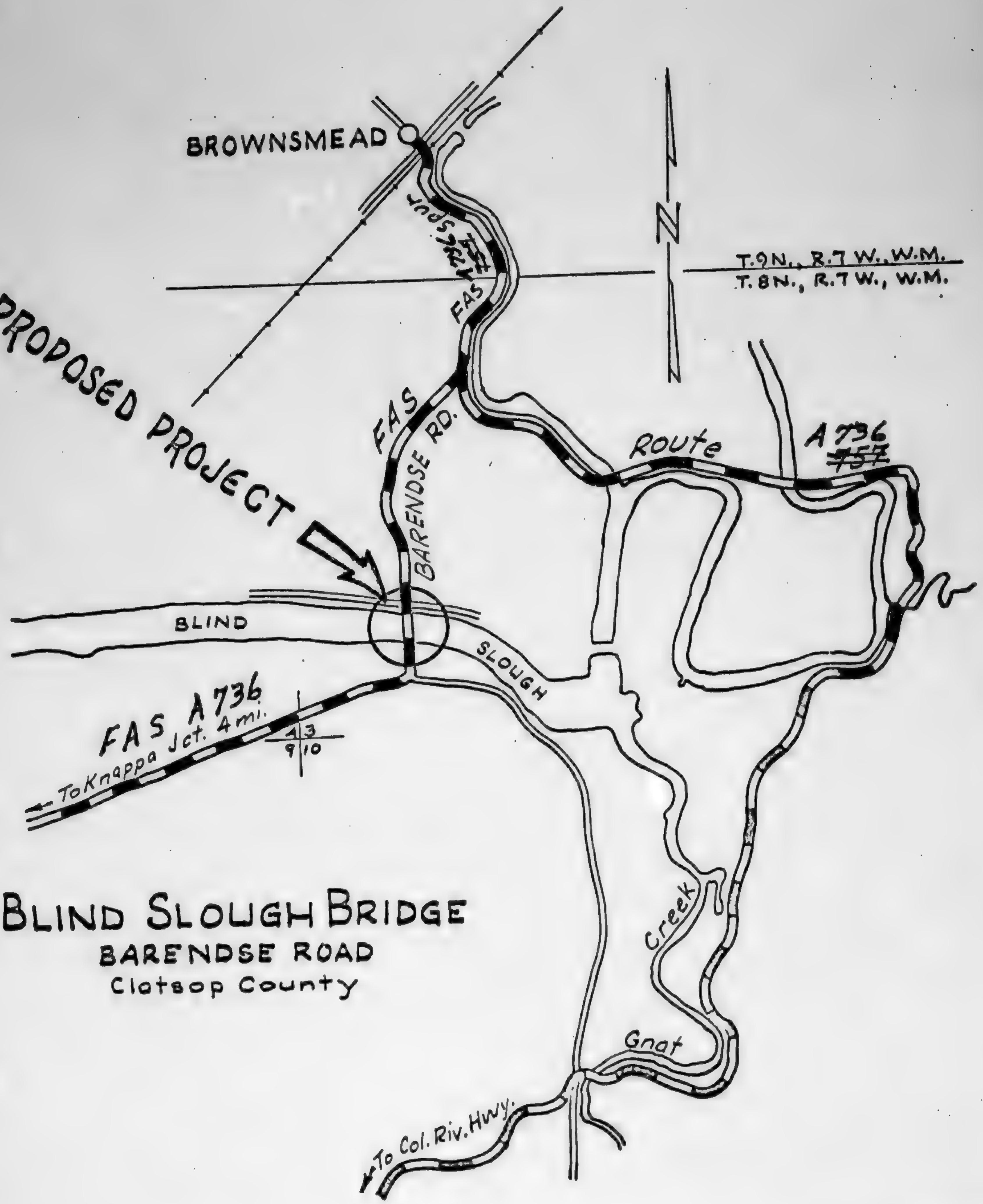
H. S. Coulter
State Highway Engineer

Date 8/26/80

HR:pf
Attachment

8/26/80 to Bonnie
orig Day Mailing File

Contains
Recycled
Materials
81-125-1387


BROWNSMEAD
Spur
FAS
N
T.9N., R.7W. W.M.
T.8N., R.7W., W.M.
PROPOSED PROJECT
FAS
BARENDSE RD.
Route
A736
~~757~~
BLIND
SLOUGH
FAS A736
To Knappa Jct. 4 mi.
4 3
9 10
Creek
Gnat
To Col. Riv. Hwy.

BLIND SLOUGH BRIDGE
BARENDSE ROAD
Clatsop County

9364

ENGINEER
RECEIVED
SEP 19 1980
RLE
RE
RCE
RME
ULE GEO HSO ENV

CLATSOP COUNTY
Courthouse . . . . Astoria, Oregon 97103

September 17, 1980

Mr. Phillip O. Stearns
Region Federal Aid Engineer
Department of Transportation,
Highway Division
2960 E. State Street
Salem, Oregon 97310

Dear Mr. Stearns:

The Board of County Commissioners for Clatsop County have approved and signed the preliminary engineering and construction - finance agreement for the Blind Slough (Barendse Road) Bridge with the modification to section 2 on page 3 which we discussed over the telephone. After they have been fully executed it is my understanding that you will provide the County with one copy of the agreement. Please forward that copy to this office for processing.

Thank you for your cooperation in this matter.

Very truly yours,

Jeri Cohen

Jeri Cohen
County Counsel

JC:mu

cc: John Dooley, Roadmaster

PROJECT MANAGEMENT BRANCH
SHE ☐ STE ☐
PLE ☐ RE ☐ [✓ PRE ☐]
SEP 22 1980
REFERRED TO ____________
FOR ____________
FILE: PM FA LG.

9364

9-3-8

L.

REPORT OF ACTION UNDER DELEGATED AUTHORITY

BY STATE HIGHWAY ENGINEER

On behalf of the Commission and under authority delegated to me to approve and execute the necessary agreements covering Local Government Project (FAS-C, FAUS, SOS and FAIX), I approved the following:

Section & Jurisdiction	Estimated Total Cost	Federal Funds	State Share	Local Govt. Funds	Approval Date
FAS-C PROJECTS					
Blind Slough (Barendse Road) Bridge, FAS-A736 Bridge Repair Clatsop County	$ 42,000	$ 36,960	$ 2,520	$ 2,520	8-26-80
Willow Creek (Twin, Goldon Eagle Mine, Bronson and Brogan Canyon) Bridges, Malheur Co. (Ironside Road District No. 5)	446,300	392,740	26,780	26,780	8-29-80
FAI-X PROJECT					
Arterial Street Overlay Program No. 2 Portland	1,450,000	1,232,500	130,500	87,000	8-14-80
SOS PROJECTS					
Bonnie Lure Park Br. SOS-0300(7) Clackamas Co.	CANCELLATION				8-13-80
Jct. Skogan Rd. at 362nd Drive SOS-0300(8) Clackamas Co.	(INCREASE AUTHORIZATION)				8-13-80

September 3, 1980

H. S. Coulter
State Highway Engineer

9364

Form 81-734-3030

OREGON STATE HIGHWAY DIVISION

AUTHORITY FOR SURVEY

Section Blind Slough Bridge

Highway Barendse Road - Rd #A-736

County Clatsop

Date 7/8, 1980

Authorization No. 1

Survey Prefix (Assigned by Salem office)

Description of termini, route, length, etc.:

Bridge No. 1138-A on Barendse Road in Clatsop County. The length of project is 442 feet.

Purpose of survey:

Prepare plans, specifications and estimate of cost to effect bridge repairs to halt longitudinal movement of pile bents and deck openings.

Estimate of cost:

INSTRUCTIONS

Submit four copies to Salem. After approval by the Assistant State Highway Engineer, one copy will be sent to the Regional Engineer and one copy to the Resident Engineer.

This form does not constitute authority for making survey until approved and returned.

Submit separate order for each survey.

Total estimated cost of survey	$
Previous authorization	
Additional authorization requested	
Additional authorization approved (Salem)	
Total all authorizations approved (Salem)	

Requests made by:

Field Engineer

Recommended for Approval:

Philip D. [illegible] for Regional Engineer

Recommended for Approval:

Location Engineer

Approved:

Assistant State Highway Engineer

SP*19760-734

9364

NOTE: SHADED AREAS TO BE COMPLETED IN SALEM OFFICE

LOCATION PROSPECTUS
OREGON DEPARTMENT OF TRANSPORTATION
LOCATION UNIT

DATE 7/8/80

PREFIX

1 - IDENTIFICATION

PROJECT NAME Blind Slough Bridge (Repair)

HIGHWAY NAME Barendse Road	HIGHWAY NUMBER A-736

REGION 2	ADMINISTRATIVE DISTRICT 1	COUNTY Clatsop	CITY

LENGTH 442 feet	MILEPOST NUMBER TO	☒ RURAL	☐ URBAN

LOCAL GOVERNMENT PROJECT? ☐ YES ☐ NO	IF YES, UNIT OF GOVERNMENT

TYPE OF FUNDS
☐ FAI ☐ FAP ☐ FAS ☐ STATE ☐ FAUS ☒ OTHER

METHOD OF CONSTRUCTION
☒ CONTRACT ☐ STATE FORCE ☐ OTHER

TYPE OF WORK
☐ GRADING ☐ PAVING ☐ STRUCTURE ☐ SIGN ☐ SIGNAL ☐ ILLUMINATION ☐ ROADSIDE IMPROVEMENT ☒ OTHER Repair

PROJECT DESCRIPTION

Bridge repair to stop longitudinal movement of pile bents which are causing openings in the bridge deck on bridge No. 1138-A.

2 - TRAFFIC DATA

EXISTING AVERAGE DAILY TRAFFIC (YEAR-VOLUME)	PROJECTED AVERAGE DAILY TRAFFIC (YEAR-VOLUME)

		A	B	C	D	E	F
LEVEL OF SERVICE	EXISTING	☐	☐	☐	☐	☐	☐
	PROPOSED	☐	☐	☐	☐	☐	☐

DESIGN SPEED (MPH)	DESIGN STANDARDS	TRAFFIC ANALYSIS ☐ LIGHT ☐ MEDIUM ☐ HEAVY

FORM 734-1730 (12-78) Page 1

3 - FEATURES	EXIS NUMBER AND WIDTH	POSED NUMBER AND WIDTH
TRAVEL LANES		
SHOULDERS	Not applicable	
MEDIANS		
PARKING LANES		
SIDEWALKS		
BIKEWAYS		
INTERCHANGES		
OTHER:		

	YES	NO	MAYBE
Channelization	☐	☒	☐
Frontage Roads	☐	☒	☐
Traffic Signals	☐	☒	☐
Signing	☐	☒	☐
Illumination	☐	☒	☐
Structures	☒	☐	☐
Stage Construction	☒	☐	☐
Pedestrian Crossing	☐	☒	☐
Rest Area	☐	☒	☐
Truck Scale Site	☐	☒	☐
Landscaping	☐	☒	☐
Drainage	☐	☒	☐
River ______	☐	☐	☐
Stream ______	☐	☐	☐
Storm Sewer	☐	☐	☐
Sanitary Sewer	☐	☐	☐
Right of Way	☐	☒	☐
Simple Acquisition	☐	☐	☐
Complex Acquisition	☐	☐	☐
Relocations	☐	☐	☐

	YES	NO	MAYBE
Right of Way (cont.) Improvements	☐	☐	☐
Access Control	☐	☐	☐
Railroad Crossing	☐	☒	☐
At Grade	☐	☐	☐
Separated	☐	☐	☐
Railroad Encroachment	☐	☒	☐
Permits	☐	☐	☒
Conditional Use	☐	☐	☐
Flood Plain	☐	☐	☐
Irrigation District	☐	☐	☐
Water District	☐	☐	☐
Drainage District	☐	☐	☐
Div. of State Lands	☐	☐	☐
Dept. of Geology & Min. Ind.	☐	☐	☐
Corps of Engineers	☐	☐	☐
Coast Guard	☐	☐	☐
DEQ NPS Air Pollution	☐	☐	☐
DEQ NPS Water Pollution	☐	☐	☐
Building	☐	☐	☐
Fish & Wildlife Approval	☐	☐	☐

3 - FEATURES (cont.)

		NO	MAYBE		YES	NO	MAYBE
Agreements (City-County Etc.)	☒	☐	☐	Hydraulics Study	☐	☒	☐
Environmental Assessment	☐	☒	☐	Soils Investigation	☐	☐	☒
Statewide Assessment	☐	☒	☐	Airport Clearance	☐	☒	☐
Negative Declaration	☐	☐	☐	Economic Analysis	☐	☒	☐
Environmental Impact Statement	☐	☐	☐	Requires Field Survey	☒	☐	☐
4-F Statement	☐	☐	☐	Old Survey Available	☒	☐	☐
Citizen Advisory Committee	☐	☒	☐	Requires Vicinity Map	☐	☒	☐
Public Hearing ______	☐	☒	☐	Requires Photogrammetry	☐	☒	☐
Borrow Source	☐	☒	☐	Requires Reconnaissance Survey	☐	☒	☐
Material Source	☐	☒	☐	Reconnaissance Available	☐	☒	☐
Utilities	☐	☒	☐	Design Review	☐	☒	☐

Type ______________________

4 - WORK ITEMS

TO BE PERFORMED BY

	APPLICANT	STATE	CONSULTANT
PRELIMINARY ENGINEERING	☐	☒	☐
RIGHT-OF-WAY	☐	☐	☐
CONSTRUCTION ENGINEERING	☐	☒	☐

5 - DURATION TIMES (MONTHS)

	FLOAT	ACTIVE
RECONNAISSANCE SURVEY	( )	
DRAFT ENVIRONMENTAL IMPACT STATEMENT	( )	
CORRIDOR APPROVAL	( )	
FIELD SURVEY	(4)	1
PRELIMINARY DESIGN	( )	
DESIGN APPROVAL/FINAL EIS	( )	
RIGHT-OF-WAY DESCRIPTIONS	( )	
RIGHT-OF-WAY ACQUISITION	( )	
P.S. & E. DOCUMENTS	( )	

RECOMMENDED CONSTRUCTION DATE	1981 (Region)	(Salem)

6 - SUGGESTED BASE DESIGN

ITEM	NEW WORK	OVER EXISTING
Not applicable		

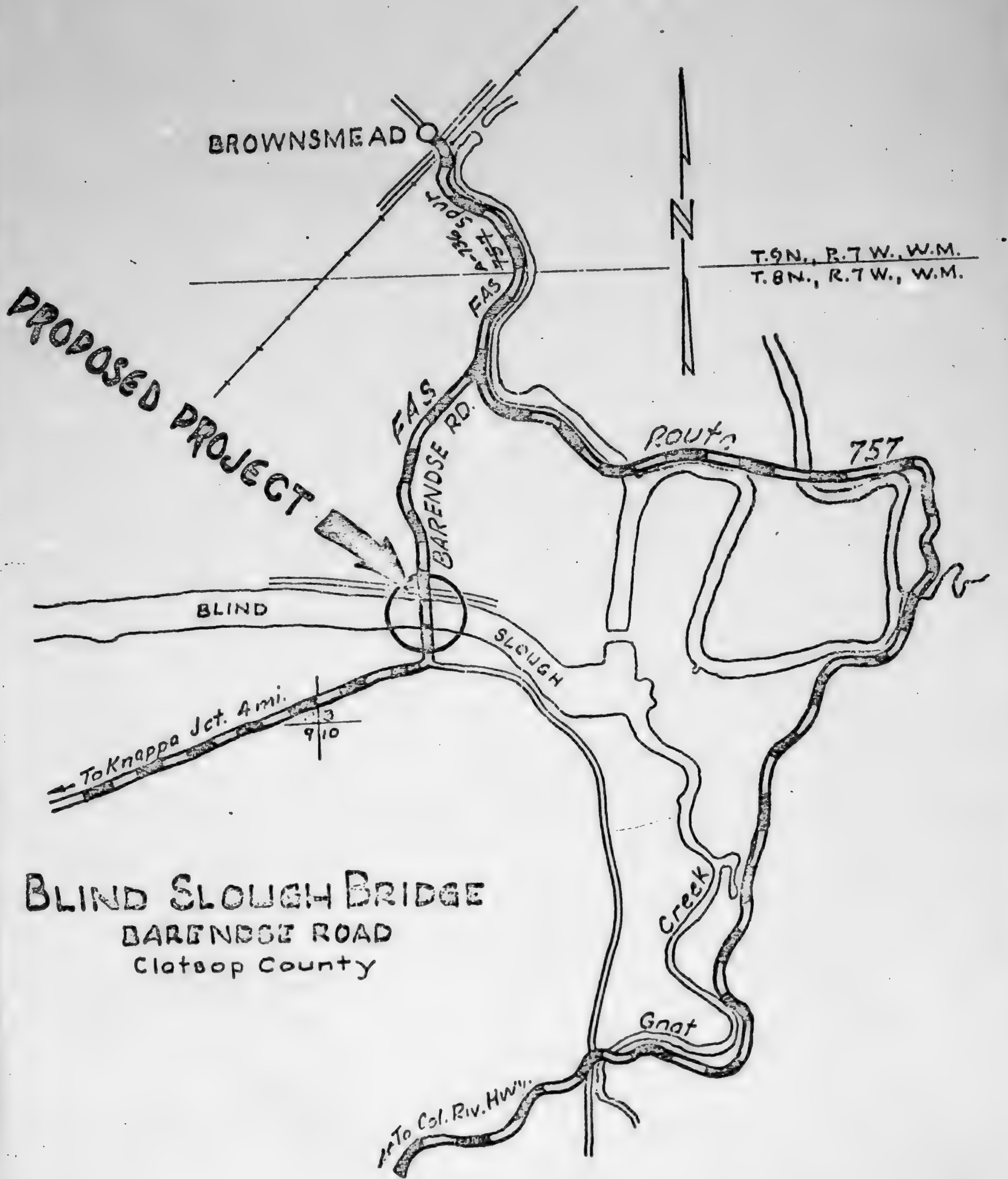
7 - TYPICAL SECTION AND LOCATION

Attach 8½ x 11 inch sheets for general location map and typical section (roadway & structure).

8 - PROJECT COST ESTIMATES

	REGION	SALEM
PRELIMINARY ENGINEERING		
RIGHT OF WAY		
TRAFFIC CONTROL		
ILLUMINATION		
STRUCTURES	40,000	
RAILROAD		
ROADWAY		
OTHER ________________		
ENGINEERING & CONTINGENCIES		
PROJECT TOTAL		

SUBMITTED BY ____________________



BROWNSMEAD
Spur A-736 757-X
FAS
N
T.9N., R.7W., W.M.
T.8N., R.7W., W.M.
PROPOSED PROJECT
FAS
BARENDSE RD.
Route
757
BLIND
SLOUGH
To Knappa Jct. 4 mi.
3
9
10
Creek
Gnat
To Col. Riv. Hwy.

BLIND SLOUGH BRIDGE
BARENDSE ROAD
Clatsop County

9364

FEDERAL AID PROJECT REQUEST

Date July 1, 1980

Applicant Agency Clatsop County

Request for: Off-System ____, FAS-C X , FAUS ____ Project

Federal Aid Route No. ~~757~~ A-736 Route Name Barendse Road

Project Name Blind Slough Bridge (Repair)

Project Length 442 ft. Project Location (Attach sketch map)

Project Description

Repair Bridge #1138A to stop movement of piles and deck

Average Daily Traffic 329 Design Speed 50

Complete Applicable Sections:

I. ROADWAY DATA

1. Existing Roadway: (Attach sketch)

Width 28' Travel Lanes ____ Shoulders ____

Medians ____ Parking ____

Sidewalks ____

Remarks ____

2. Desired Roadway Cross Section: (Attach sketch)

Width ____ Travel Lanes ____ Shoulders ____

Medians ____ Parking ____

Curbed ____ Length Curb Radii ____

Sidewalk/Bikeway ____

Remarks ____

II. RIGHT-OF-WAY DATA

1. Existing Right-of-Way:

General Width ____ Minimum ____ Maximum ____

2. Has right-of-way been acquired for this project subsequent to January 2, 1971?

Yes ____ No ____

3. Will additional right-of-way be needed? Yes ____ No ____

If answer is "yes," will cost of right-of-way be subject to Federal reimbursement? Yes ____ No ____

Remarks ____

III. TRAFFIC CONTROL DATA

1. Existing Signalization and Location:

2. **Proposed Signalization:**

Location

Type
Phases
Type of Suspension
Interconnected
Remarks

3. **Permanent Signing:**

Include in project or by applicant?

4. **Permanent Striping:**

Include in project or by applicant?

IV. ILLUMINATION DATA

1. **Existing Illumination and Location:**

2. **Proposed Illumination:**

Location
Type

Remarks

V. STRUCTURE DATA

1. **Existing Structure:**

Location Section 3, T8N7W,WM Barendse Road 1½ mi so. of Brownsmead
Type ~~Bridge Repair~~ Pre cast slab Bridge No. 1138A
Approach Roadway Width 24' Shoulder Width 4'±
Length 442' Width 32'0-0
To remain in place? Yes. Project consists of repairing structure per OSHD report dated May, 1980.

2. **Proposed Structure:** N/A

Location

Approximate Size: Length Width

Are sidewalk/bikeways desired: ______________________________

Are any utilities to be attached to structure? ______________________________

Are provisions for illumination desired? ______________________________

Are there any unusual or complicating conditions? ______________________________

Remarks ______________________________

VI. RAILROAD DATA

1. Are there any railroad crossings? Yes ________ No ________

   Name of Railroad ______________________________
   Existing Crossing Protection ______________________________

2. Will existing railroad crossing be altered? ______________________________

   Remarks ______________________________

VII. ACTION PLAN REQUIREMENTS

During project development for Category 1, 2, and 3 projects, the city or county shall perform and document responsibilities as found indexed in the Oregon Action Plan, particularly Citizen Involvement and Participation; Environmental Aspects; and Public Hearing Requirements.

The OSHD Region Engineer will provide assistance, liaison and monitoring for these activities.

Responsible local office and party to be contacted for the following activities:

1. Citizen Involvement — Clatsop County Road Dept. John Dooley
   Office
2. Environmental — Clatsop County Road Dept. John Dooley
   Office
3. Public Hearing — Clatsop County Road Dept. John Dooley
   Office

Remarks ______________________________

VIII. GENERAL INFORMATION

1. Project preliminary engineering to be performed by:

   Applicant ________ State X Consultant ________

2. Project construction engineering to be performed by:

Applicant________ State X Consultant________

3. Will applicant perform any work prior to or after award of contract?

Yes X No________

If "yes," describe briefly: temporary traffic control

4. Applicant's estimate of cost for requested project:

Roadway Work	$
Right-of-way costs (if participating)	
Traffic control	
Illumination	
Structures	$40,000.00
Railroad	
Other________	
Preliminary engineering	
PROJECT TOTAL	$

Remarks Costs are set out in the proposed repair study done by the State Highway Department

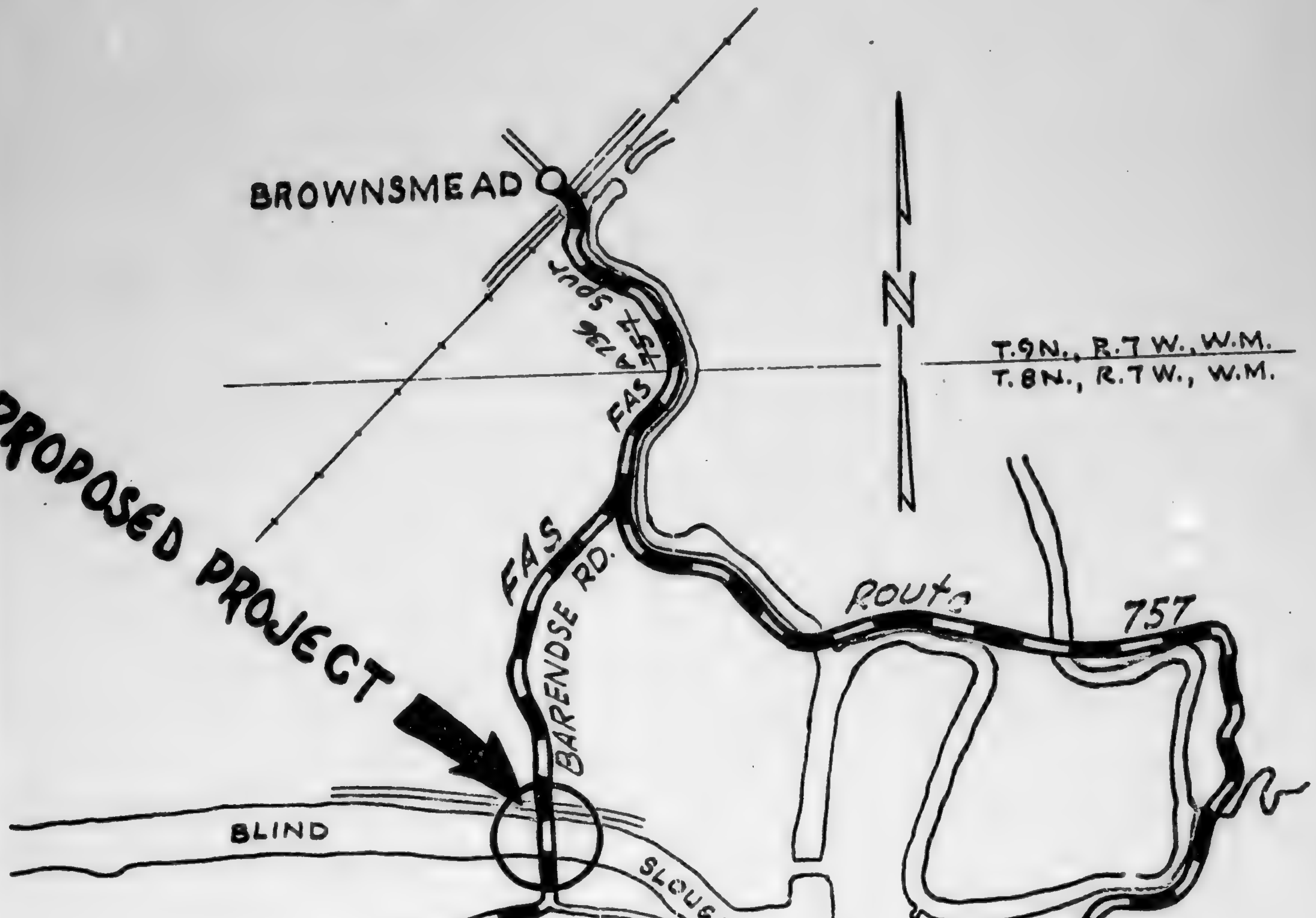
THIS APPLICATION IS AN OFFICIAL REQUEST FROM:

CITY OF ________ and/or CLATSOP COUNTY

By________ By Don O'Corkill

By________ By Bob [illegible]

By________


PROPOSED PROJECT
BROWNSMEAD
FAS
A136
757X
Spur
N
T.9N., R.7W., W.M.
T.8N., R.7W., W.M.
FAS
BARENDSE RD.
Route
757
BLIND
SLOUGH
To Knappa Jct. 4 mi.
3
9
10
Creek
Gnat
To Col. Riv. Hwy.

BLIND SLOUGH BRIDGE

BARENDSE ROAD

Clatsop County

9364

6-25-80

HERB SHELL THINKS IT WOULD BE SIMPLER AND QUICKER TO GO FAS-RRR RATHER THAN HBR. HE ALSO THOUGHT THAT WE SHOULD BE SURE THAT THE NORTH APPROACH FILL IS THROUGH SETTLING BEFORE WE DO ANY CORRECTING WORK. TED BLACHLY WILL TALK TO HERB.

CLATSOP CO.'S FAS-C BAL. = $171,000 = $150,300 FED FUND
COST OF REPAIR = $40,000 = $35,200 "
SHARES - 35,200 FED - $2,400 CO - $2,400 STATE.

CURRENT BALANCE	$171,000
LESS REPAIR	40,000
NEW BALANCE	$131,000
FY 81 ALLOCATION	98,000
10-1-80 BALANCE	$229,000 (TOTAL FUNDS)

6-26-80

GAVE JOHN DOOLEY SOME FAS-C PROJECT FORMS. HE WAS PLEASED WITH THE REPORT AND THE FACT THAT THE REPAIRS COULD BE DONE WITH FAS-C FUNDS. TED BLACHLY SAID HE WAS ASKING CHET ANDERSON TO TAKE SOME REMEASURES OF THE NORTH APPROACH FILL.

9364

STATE OF OREGON

INTEROFFICE MEMO

MAI
11138A

TO: Mr. Don Harwell
County City Coordinator

DATE: June ~~12~~ 25, 1980

FROM: L. L. Wallace
L. L. Wallace
Assistant Bridge Engineer

SUBJECT:

Blind Slough (Barendse Rd.)Br.
Clatsop County

Here are two copies of the report "Proposed Repair of Blind Slough Bridge" which you requested for transmittal to the Federal Highway Administration.

ATB:smd

6/17/80
Vern Cusack - please note the attached letter to John Dooley of Clatsop and the "Report" which is self explanatory - Please review as discussed and let our office know if FAS or HBR or other funds may be available for repair.
DonH.

6-25-80
Called Ted Thompson. He could not place fault in State's design or construction practices. No one could have known what type of action would occur in the soils under the northly fill which caused the piles to leaned out of plumb to the north.

PROJECT MANAGEMENT BRANCH
ASHE ☐ STE ☐
PLE ☐ RE ☐ PRE ☐
JUN 1[illegible] 1980
REFERRED TO ____________
FOR ____________ M
FILE: PM FA LG.

Bp

DonH.

81-125-1387

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

A 736 Spur

In Reply Refer to
File No.:
DES 23
Br 1138A

May 29, 1980

Bob-Hal

John Dooley
Clatsop County Roadmaster
P O Box 179
Astoria OR 97103

Blind Slough (Barendse Road) Bridge
Bridge 1138A
Clatsop County

Here are two copies of our report on the deck joint problems on the Blind Slough (Barendse Road) Bridge. The report deals with the causes of the problem and includes a proposal for stopping the increase of joint widths.

As we see it, the problem will continue to get worse until some positive measures are taken to stop the movement. The situation at Bent 9 under the slabs of the lift-out span is particularly bad. Unless some grout is packed between the slabs and the pile cap in the near future, it is quite possible that the slabs will crush the small amount of grout on which they are now resting and come to rest on the top of the pile cap. This could cause a one inch to two inch bump. It would be very difficult to restore the slabs to their proper position if that happened.

The repair work could be contracted, done by county maintenance personnel, or done by state maintenance personnel and charged to the county at cost.

If the estimated $40,000 cost is more than can be financed with county maintenance funds, FAS-C funds could be used. Our records indicate that Clatsop County has $170,000 of FAS-C funds which could be used for this type of work.

HBR funds are also a possibility. To be eligible for HBR funds the sufficiency rating of the bridge would have to be less than 80. To produce such a rating the superstructure and/or substructure (Items 59 and 60 on the Snructurey Inventory) would have to be rated 4 or less. A rating of 4 is described as "Item marginally adequate to support unrestricted legal loads.... Major rehabilitation needed." The present sufficiency rating is greater than 90, however a reinspection could be made which might give

Don H.

a qualifying rating. Even if the bridge were shown eligible for HBR funds, it would have to wait its turn with other deficient bridges. This would probably mean a delay of many months.

If you so desire, we can prepare plans and specifications for this repair work either for contracting or for the guidance of state or county maintenance forces.

Walter J. Hart
Bridge Engineer

ORIGINAL SIGNED
L. L. WALLACE

L. L. Wallace
Assistant Bridge Engineer

ATB:dh
Enclosures

cc C. O. Fredrickson /w/ encl.
D. N. Harwell /w/ encl.
Chet Anderson /w/ encl.

6/2/80 NOTE!!

I recommend we review and determine if part of failure is due to design or construction engineering error!? If all facts point to that factor we should help correct problem with State construction funds, otherwise we should pursue FASC allocation in consultation with Clatsop County.

Don Harwell

PROJECT MANAGEMENT BRANCH
ASHE ☐ STE ☐
PLE ☐ RE ☐ [✓ PRE ☐]
MAY 30 1980
REFERRED TO
FOR
FILE: PM FA LG.

9364

5-80

PROPOSED REPAIR
OF
BLIND SLOUGH BRIDGE
BARENDSE ROAD

CLATSOP COUNTY

Prepared By

Arthur T. Blachly, P.E.

BRIDGE SECTION
HIGHWAY DIVISION
OREGON DEPARTMENT OF TRANSPORTION

MAY 1980

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7	Plan view of deck joints
8	Joint measurements
9	Joint, slab and deck elevation measurements
10	Plot of deck elevations and pile cut-off elevations
11	Plot of roadway elevations
12 - 13	Original settlement calculation
14 - 15	Foundation exploration for embankment
16 - 17	Recalculation of settlement
18	Bridge Foundation Data
19	East end of Bent 12
20 - 21	Long-term shortening calculations
22	Joint opening due to differential settlement
23	Pile penetration and tip elevation
24	Soil movement at northerly end of bridge
25	Proposed repair details

TABLE OF PHOTOGRAPHS

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1 Bent 9, easterly view along joint.

2 Bent 9, east end of joint.

3 Bent 9, view of east end from boat

4 Bent 9, vertical view at east end of bent.

5 Bent 9, westerly view along joint.

6 Bent 9, close-up of joint.

7 Bent 9, vertical view at west end of bent.

8 Bent 9, view of west end from boat

9 Bent 8, easterly view along joint.

10 Bent 8, westerly view along joint.

11 Bent 9, spalls at ends of Span 8 and Span 9 deck slabs.

12 Bent 15, westerly view along joint.

13 Intact joint.

14 Bad spall at end of deck slab.

15 Northerly view along west side of bridge.

16 Northerly view along east side of bridge.

17 Northwesterly view along east side of bridge.

18 Northerly view along bridge deck.

19 Northerly view along west rail.

20 Northerly view along east rail.

21 Bents 13, 14, and 15 from boat.

22 Bents 14 and 15 showing out-of-plumb of piles.

23 Bent 16, uneven bearing due to settlement and rotation.

24 Easterly view along north dike showing broken power pole.

BLIND SLOUGH (BARENDSE RD.) BRIDGE REPAIR

ABSTRACT

The width of the transverse deck joints at some of the interior bents of the Blind Slough (Barendse Rd.) Bridge has been increasing. This appears to have been going on ever since the bridge was built. The increasing width poses a maintenance problem and has created a concern as to the integrity of the bridge at Bent 9. Settlement of the approach fills and of both ends of the bridge and tilting of piles in the northerly bents have also occurred.

It is proposed that the principal cause of the joint opening lies in a combination of horizontal movement of the approach fills, particularly the fill at the north end, and out-of-plumb piling caused by underwater earth movement. Long-term shortening of the prestressed concrete deck slabs and differential settlement of bents are minor contributing causes to the increased joint openings.

The proposed remedy includes placing additional grout under deck slabs where bearing areas are seriously reduced and installing tie rods to prevent further movement at the interior joints.

BLIND SLOUGH BRIDGE REPAIR

DESCRIPTION OF PROBLEM

The Blind Slough (Barendse Road) Bridge is located approximately 15 miles east of Astoria (Fig. 1). It was constructed in the winter of 1972-1973 using plans prepared by the Oregon State Highway Division and under the supervision of OSHD engineers (Figs. 2-5). Since then, some of the transverse deck joints at pile bents near center spans of the bridge have increased in width (Fig. 6). The movement at Bent 9 is such that some action should be taken in the near future to preserve the integrity of the bridge.

It appears that this movement may have started soon after the bridge was built. In September 1976 the Clatsop County Drainage District notified the county road department that there appeared to be a problem with the joints on the Blind Slough Bridge. County maintenance personnel felt that the problem should be studied. On October 27 of that year they set reference points on each side of each joint so that future movement could be measured (Fig. 8). In December 1979 Oregon State Highway Division Resident Engineer Chet Anderson had his crew measure joint widths, slab lengths, and deck elevations (Fig. 9).

Most of the increase of joint width since construction shown by these investigations has been limited to 5 of the 14 interior joints at pile caps. These are at bents 8, 9, 10, 11, and 12. A considerable portion of the total joint width increase is taking place at the ends of the slabs of Span 8 (Photos 1-10). This has reached the point that the bearing area on the concrete grout pads under the slabs at the north end of the span (Bent 9) has been seriously reduced. The high bearing pressure on this small area has caused crushing of the grout pad and spalling of the end of the slabs (Photo 11). The Span 8 slabs have moved more at the southeast and northwest corners of the span than at the southwest and northeast corners, thus slightly skewing this span. As the joints opened the dowel pins which connect the deck slabs to the pile caps resisted the movement. In many cases the force of the dowel on concrete at the end of a slab has broken off a wedge of concrete. This can be seen in the open joints at Bents 8, 9, 10, and 11 (Photo 14 and Fig. 7). The total of the present joint widths is 1.63 feet compared to a total plan width of .67 feet. The excess joint width is thus about 1 foot.

Another way that the structure now differs from the plans is in the grade line. According to profiles run in December 1979 and February 1980, the southerly end bent is approximately 0.5 feet and the northerly end bent about 3 feet below elevation (Fig. 10). This difference is continued in the approach fills. At the southerly end the difference runs out in about 200 feet. The new fill varied from about 1 1/2 feet at this point to about 5 feet at the southerly end of the bridge. At the northerly approach to the bridge the pavement 50 feet north of the end bent is more than 6 feet below plan elevation.

This reduces to 5 feet and 4 feet at 100 feet and 150 feet north of the bridge, respectively (Fig. 11). The new fill at the north end of the bridge varied from about 7 feet at the end of the bridge to 17 feet 50 feet north of the bridge, 15 feet at 100 feet, 6 feet at 120 feet, then tapering to zero 500 feet north of the bridge. In spite of this apparent settlement, the lines of the bridge do not show any abrupt changes (Photos 15 - 20).

Pile driving records and recollections of the resident engineer and bridge inspector who were on the project indicate that the bridge and approaches were built to plan elevations. The grout pads between the tops of the pile caps and precast slabs are thicker than detailed on the plans. This may indicate that there was some settlement of the pile bents between the time that the pile caps were poured and the time that the slabs were placed. Evidence that the most northerly bent has settled more than the next bent south is given by the fact that the slabs of the end span now bear only on the northerly end of the grout pad on the end bent (Photo 23). This is in spite of the fact that the bent is out of plumb in the direction that would reduce this effect.

Some settlement of the approach fills was anticipated and a surcharge and counterbalance were designed to ensure stability of the fill and to accelerate the settlement (Figs. 12 and 13). The 1.8 foot anticipated settlement was based on a soil exploration which only penetrated to 15 feet below the ground surface (Figs. 14 and 15). Theoretical settlement was recently recalculated (Figs. 16 and 17) based on bridge foundation explorations (Fig. 18) which showed 60 feet of soft, compressible material. (The difference in blow counts between the bridge foundation exploration and the embankment foundation exploration reflects the type of equipment used, not a difference in soil characteristics.) This indicated a total settlement of 7.2 feet (Fig. 17). As this calculation was based only on blow counts and a visual description of the soil, it cannot be very accurate, but it indicates the order of magnitude of settlement that could be expected. By this calculation approximately 3 feet of settlement would have taken place by the time the piles were in place and another 1 1/2 feet by the time the slabs were in place. Since then, somewhat over 2 feet would be expected with an additional 6 to 9 inches in the next 13 years. If the field crew was not aware that settlement was occuring (their temporary bench marks could have been settling, too), the northerly end of the structure could have been low at the time the slabs were set.

A third way that the bridge now differs from the plans is that the piles of the northerly bents are no longer vertical. The piles at the northernmost three bents lean to the north with a slope of approximately 1 inch per foot. The adjacent bents, progressing south, slope lesser amounts until the piles at Bent 9 appear to be vertical (Photos 21 and 22). This movement apparently happened after the deck slabs were placed. At Bent 12 the slabs are bearing on the southerly side of the grout pad and the Span 12 slabs are slightly higher than the Span 13 slabs (Fig.

19). This is probably most conspicuous at Bent 12 because the more southerly bents have rotated less, while the more northerly bents are more affected by settlement, which would reduce the effect of bent rotation.

In the 3 1/2 years since the county started monitoring the joint widths there has been approximately 0.25 foot increase in widths at the interior bents (Fig. 8). Values for the last 3 half-year intervals seem to be increasing. The average change for the 3 1/2 years is 0.076 feet, approximately 1 inch per year. It appears that the joints will continue to open until some positive measure is taken to prevent the movement.

CAUSES OF PROBLEM

The principal cause of the increased joint openings appears to be movement of the ground at the north end of the bridge. The movement, which included both settlement and rotation of a mass of earth, was no doubt produced by the building of the approach fill. Just to the north of the present bridge was a 100 foot long overflow bridge. When the new bridge was built the overflow bridge was replaced with fill. This required approximately 17 feet of fill to be placed on very soft ground behind the northerly dike. The resulting movement shown schematically in figure 24, caused the bottoms of the northerly piles to move south toward the center of the slough. At the same time the upper ends of the most northerly piles moved north. This soil movement is inferred from the present slope of the northerly piles and from the rotation of a power pole next to the north end of the bridge (Photo 24). The power pole broke about half way from the ground to the top and had to be replaced.

Once the northerly piles were put out of plumb by the soil movement, an additional factor leading to opening of the deck joints was produced. A vertical load on a sloping pile produces a horizontal force equal to the slope of the pile times the vertical load. The piles at the north end of the bridge now have a northerly slope of almost one inch per foot. That means nearly a ton of northerly horizontal force for each 12 tons of weight carried by the piles. This force can go two ways. It can go north to the north end bent where it is resisted by the pressure of the soil against the pile cap, or it can go south to other parts of the bridge. In either case the load must be transmitted through the precast concrete deck slabs. If it goes north it tends to push the slabs apart at the joints. No doubt both of these actions are taking place.

The portion of the horizontal reaction going south is what is causing the opening of the deck joints. That force is now transmitted from one span to the next by the combined action of steel dowels and friction between the concrete deck slabs and the pile caps. If there were no resistance to northerly movement at Bent 16 (the northerly end bent) the tension in the superstructure of Span 15 would equal the slope of Bent 16 times the weight on that bent. The tension in Span 14 would equal the tension in Span 15 plus the slope of Bent 15 times the weight on that bent, et cetera. The tension in the spans would increase, moving away from the end bent as long as there were bents out of plumb in the same direction. At bents which are plumb the horizontal force is reduced by the capacity of those bents to resist horizontal movement. The maximum horizontal force in the superstructure would be in Span 10, the first span, working from the north, whose bents are relatively plumb.

The soil movement which caused the out-of-plumb condition has probably reached a very slow rate. The out-of-plumb condition, however, remains and with it the forces tending to open the joints.

Two other factors have probably added to the growing joint openings. Assuming that the structure was built to plan elevations and the ends have settled as indicated by their present elevations, this differential settlement could cause some opening of the joints. Calculation of this effect, however, yields only 0.08 foot (Fig. 22). Shortening of the deck slabs due to the effects of shrinkage and creep is the other factor. Formulas recommended by American Concrete Institute give total shrinkage and creep for the fulll length of the bridge for 7 years from time of placing as .27 foot or .19 foot for age at time of placing equal to 5 days or 30 days, respectively (Figs. 20 and 21). These two factors account for no more than one third of the total joint width increase. By themselves they would probably not have produced any problems.

PROPOSED REPAIR

The proposed repair consists primarily of providing longitudinal ties the full length of the structure (except one span at each end) (Fig. 25). These are designed to prevent further opening of the deck joints and to transmit the horizontal forces produced by the out-of-plumb northerly bents to the southerly bents.

A small but urgently needed part of the repair consists of packing new concrete grout under the north end of the Span 8 deck slabs. ✓

The job would be completed by removing spalled concrete from the open joints, coating exposed reinforcing steel with epoxy and filling the joints with premolded expansion joint filler and concrete grout.

The estimated cost of this repair is $40,000.

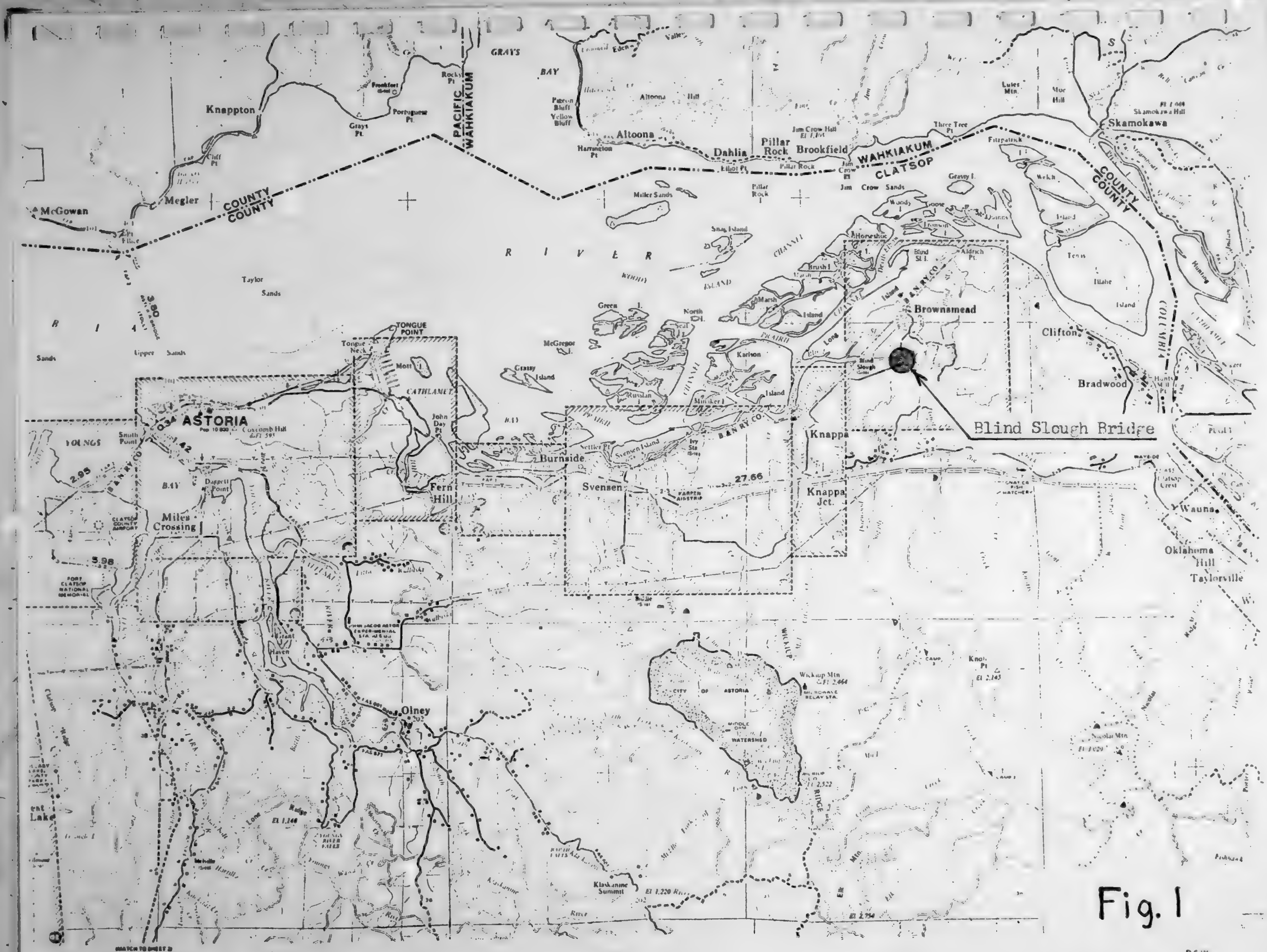
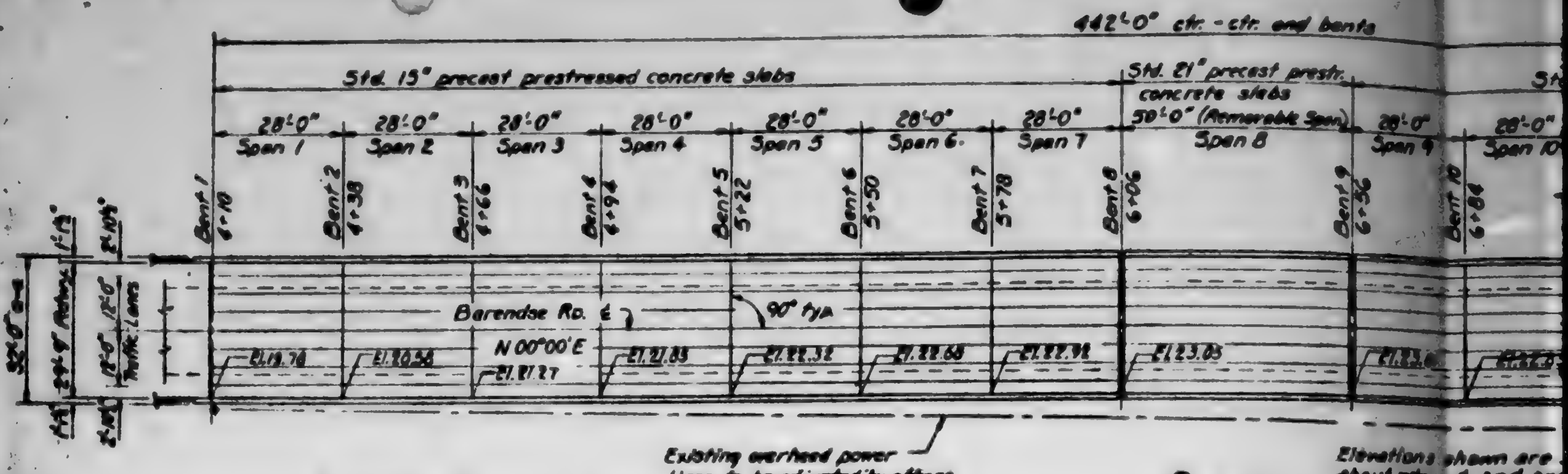

Blind Slough Bridge
ASTORIA
Knappton
Megler
McGowan
PACIFIC
WAHKIAKUM
COUNTY
COUNTY
WAHKIAKUM
CLATSOP
COUNTY
COUNTY
GRAYS
BAY
Altoona
Dahlia
Pillar Rock
Brookfield
Skamokawa
R I V E R
Taylor Sands
Upper Sands
TONGUE POINT
Tongue Neck
Mott I.
CATHLAMET
John Day Pt.
Grassy Island
McGregor I.
Green I.
North Ch.
Karlson
Miniker I.
Russian Island
Snag Island
Horseshoe
Brush I.
Marsh Island
Blind Sl.
Aldrich Pt.
Brownsmead
Knappa
Knappa Jct.
Svensen
Svensen Island
Settler Pt.
Burnside
Fern Hill
27.66
Miles Crossing
Dagget Point
Smith Point
YOUNGS
BAY
2.95
5.98
3.80
1.42
Clifton
Bradwood
COLUMBIA
Wauna
Oklahoma Hill
Taylorville
Tenn
Ilahe
Island
Jim Crow Sands
Jim Crow Hill
Three Tree Pt.
Olney
CITY OF ASTORIA
WATERSHED
Wickiup Mtn
WICKIUP
RIDGE
Knob Pt.
Klaskanine Summit
Nicolai Mtn
Lake
R9W
R8W
R7W
R6W

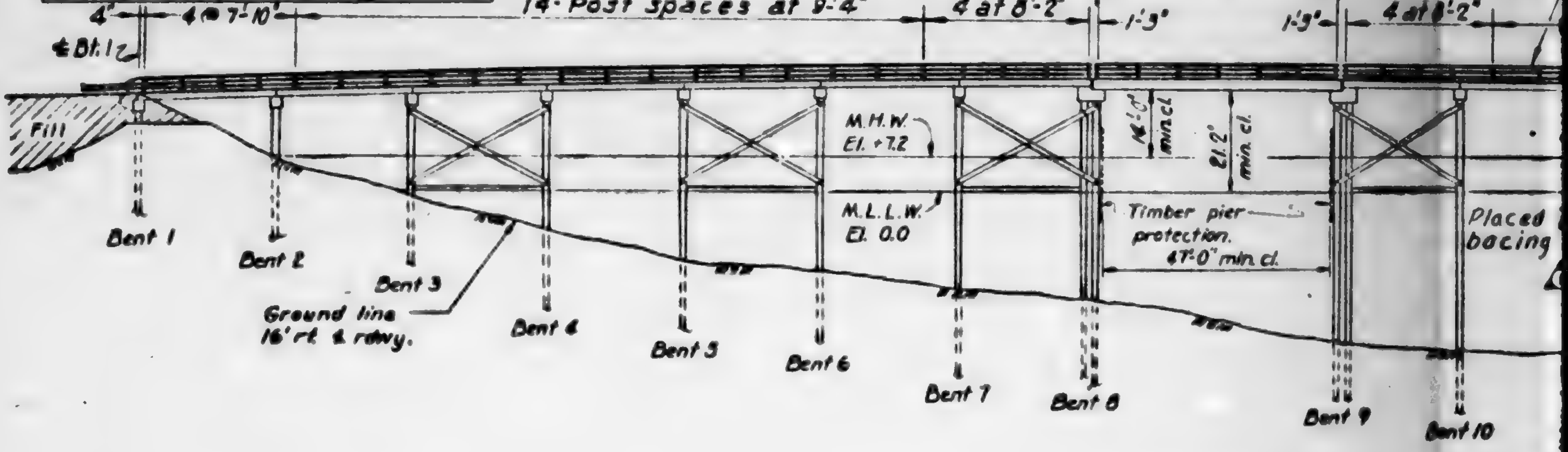
Fig. 1


442'-0" ctr.-ctr. end bents
Std. 15" precast prestressed concrete slabs
Std. 21" precast prestr. concrete slabs 50'-0" (Removable Span)
28'-0" Span 1
28'-0" Span 2
28'-0" Span 3
28'-0" Span 4
28'-0" Span 5
28'-0" Span 6.
28'-0" Span 7
Span 8
28'-0" Span 9
28'-0" Span 10
Bent 1 4+10
Bent 2 4+38
Bent 3 4+66
Bent 4 4+94
Bent 5 5+22
Bent 6 5+50
Bent 7 5+78
Bent 8 6+06
Bent 9 6+56
Bent 10 6+84
32'-0" o-o
Rdwy.
Traffic Lanes
Barendse Rd. ℄
90° typ.
N 00°00' E
El. 19.78
El. 20.56
El. 21.27
El. 21.83
El. 22.32
El. 22.68
El. 22.98
El. 23.05
Existing overhead power lines to be adjusted by others.
Elevations shown are about rdwy. ℄ and are below finish grade

PLAN

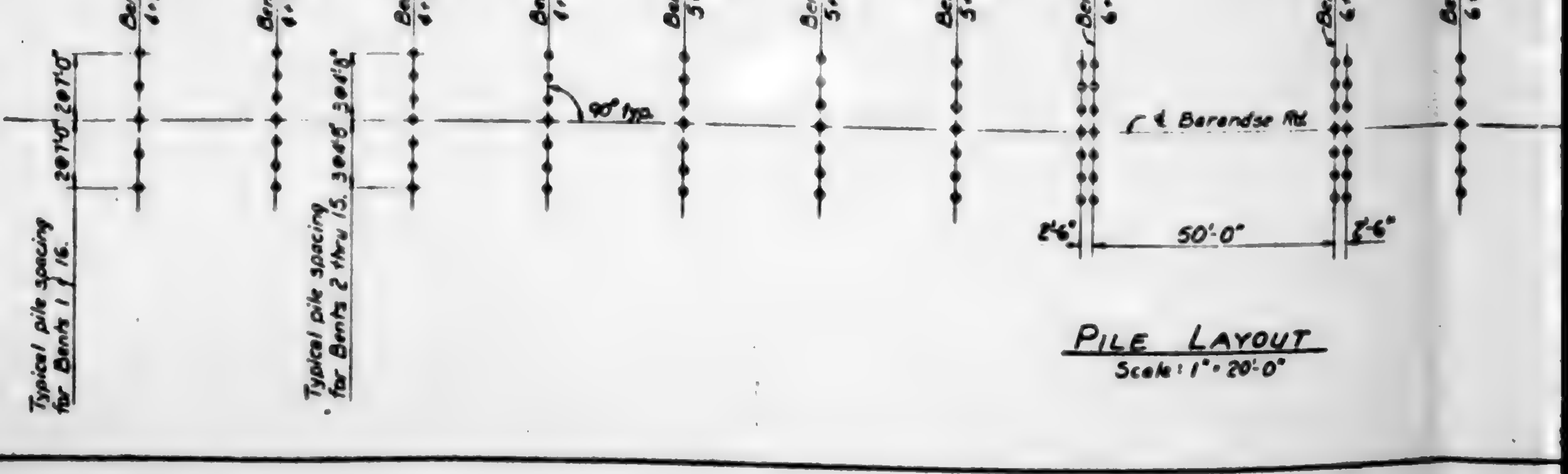
Scale: 1" = 20'-0"

HYDRAULIC DATA	Design Flood	Max. Flood yr. (1967)
Discharge-cfs.	2300	——
Frequency-yrs.	50	——
H.W. Elevation Natural Channel	10±	10± (±)
Velocity - f.p.s.	1 (-)	——


℄ Bt. 1
4' 4 @ 7'-10"
14 Post spaces at 9'-4"
4 at 8'-2"
℄ Bt. 8
50'-0"
℄ Bt. 9
3" 6-spc. at 8'-3" 3"
1'-3"
1'-3"
4 at 8'-2"
Fill
M.H.W. El. +7.2
M.L.L.W. El. 0.0
14'-0" min. cl.
21.2' min. cl.
Timber pier protection.
47'-0" min. cl.
Placed bracing
Ground line 16' rt. ℄ rdwy.
Bent 1
Bent 2
Bent 3
Bent 4
Bent 5
Bent 6
Bent 7
Bent 8
Bent 9
Bent 10

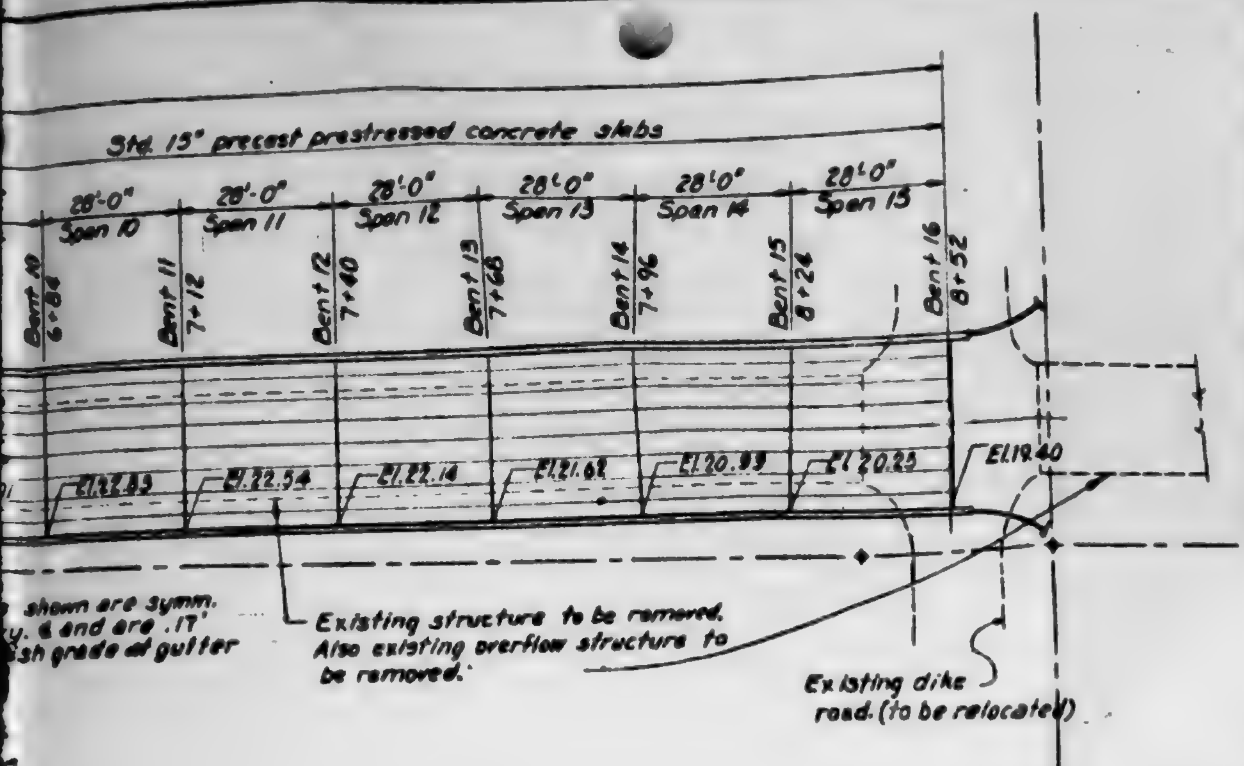
ELEVATION

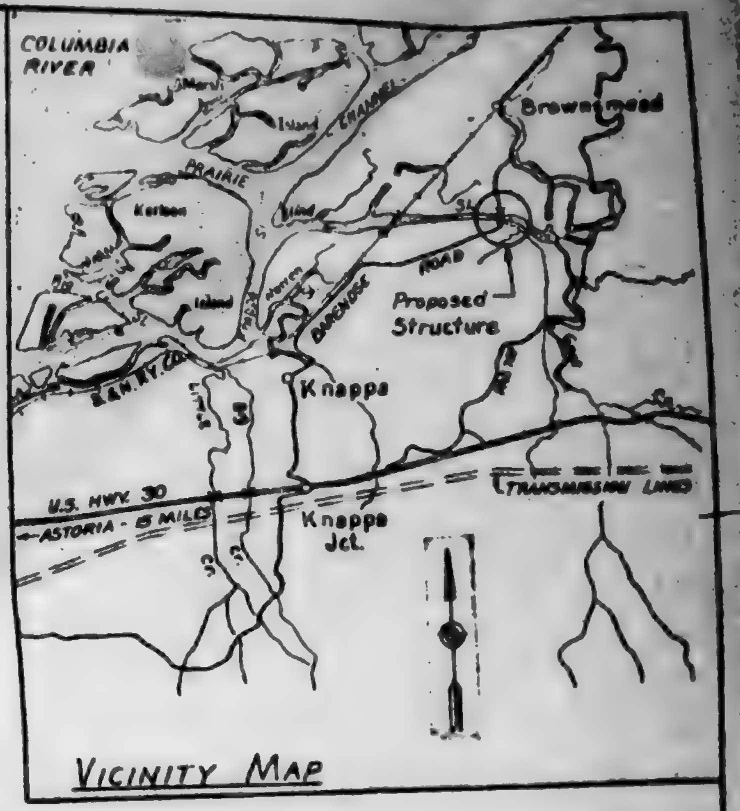
Scale: 1" = 20'-0"


Bent 1 4+10
Bent 2 4+38
Bent 3 4+66
Bent 4 4+94
Bent 5 5+22
Bent 6 5+50
Bent 7 5+78
Bent 8 6+06
Bent 9 6+56
Bent 10 6+84
20'-0" 20'-0" 20'-0"
30'-0" 30'-0" 30'-0"
90° typ.
℄ Barendse Rd.
2'-6"
50'-0"
2'-6"
Typical pile spacing for Bents 1 & 16.
Typical pile spacing for Bents 2 thru 15.

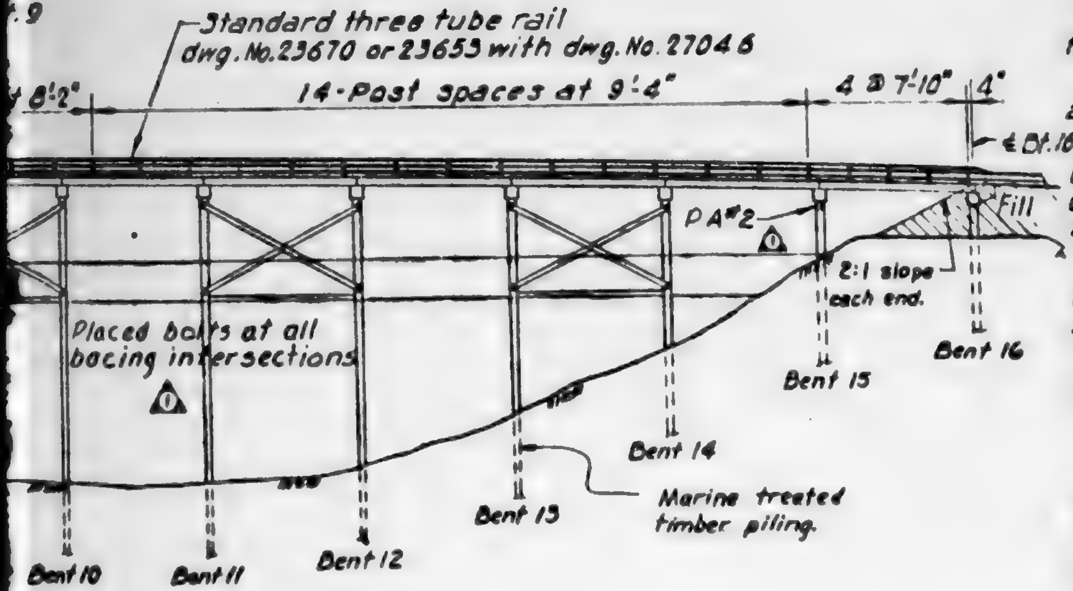
PILE LAYOUT

Scale: 1" = 20'-0"


Std. 15" precast prestressed concrete slabs
28'-0" Span 10
28'-0" Span 11
28'-0" Span 12
28'-0" Span 13
28'-0" Span 14
28'-0" Span 15
Bent 10 6+84
Bent 11 7+12
Bent 12 7+40
Bent 13 7+68
Bent 14 7+96
Bent 15 8+24
Bent 16 8+52
El.22.83
El.22.54
El.22.14
El.21.68
El.20.93
El.20.25
El.19.40
shown are symm.
y. ℄ and are .17'
sh grade at gutter
Existing structure to be removed. Also existing overflow structure to be removed.
Existing dike road. (to be relocated)


COLUMBIA RIVER
Island
CHANNEL
PRAIRIE
Karlson
Island
BARENDSE
ROAD
S.P.&S. RY. CO.
Brownsmead
Proposed Structure
Knappa
U.S. HWY. 30
ASTORIA - 15 MILES
Knappa Jct.
TRANSMISSION LINE

VICINITY MAP


.9
Standard three tube rail dwg. No. 23670 or 23653 with dwg. No. 27046
8'-2"
14-Post spaces at 9'-4"
4 @ 7'-10"
4"
℄ Bt.16
Fill
PA#2
2:1 slope each end.
Placed bolts at all bracing intersections
Bent 15
Bent 16
Bent 14
Marine treated timber piling.
Bent 13
Bent 10
Bent 11
Bent 12

GENERAL NOTES

All material and workmanship shall conform to Standard Specifications for Highway Construction of the Oregon State Highway Commission.

Bridge designed for HS 20-44 loading with an allowance of 25 psf for future wearing surface and 25 psf for present wearing surface.

Prestressing steel for 15" and 21" precast slabs shall shall be in accordance with dwg. No.s 19848 and 19850

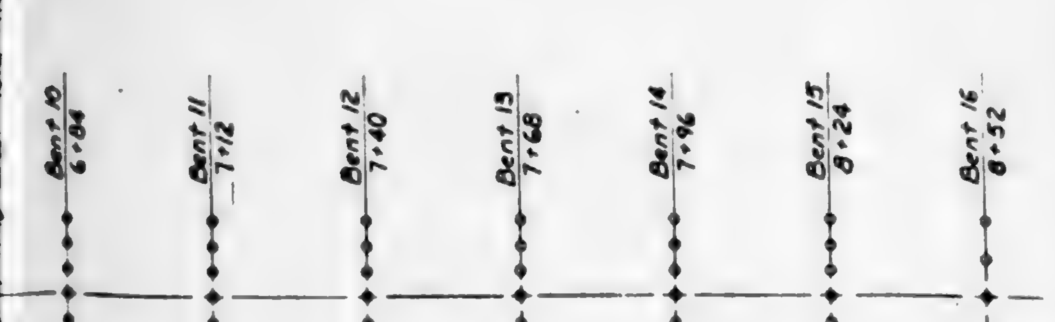
Reinforcing steel bars No. 3 thru No. 11 inclusive shall be lapped 24 diameters or a minimum of 1'-0" at all splices unless noted or shown otherwise. All bars shall be placed 2" clear of nearest face of concrete unless noted or shown otherwise (fs = 20,000 psi)

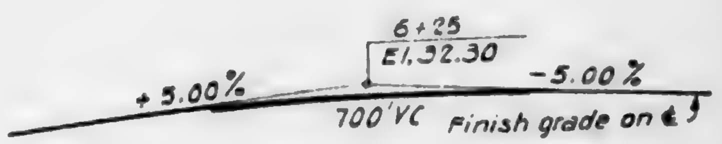
Concrete in precast slabs shall be in accordance with dwg. No.s 19848 and 19850. all other concrete shall be class A with a design strength of 3300 psi in 28 days (fc = 1320 psi)

All piling shall be marine treated in conformance with AWPI standard MP-2 see standard specifications (min. 14" butt & 6" tip)
Piling shall be driven to a minimum bearing of 24 ton per pile. skin friction

All timbers shall be Dense No.1 grade (rough) Douglas fir and shall be marine treated see special provisions.

Rail spaces shown assumes the use of rectangular tubing rail dwg. No. 23670, if alternate oblong tubing rail dwg. No. 23653 is used rail post spaces must be adjusted accordingly. Rails shall be extended 6" beyond ℄ rail post at open joints at Bents 8 and 9.


Bent 10 6+84
Bent 11 7+12
Bent 12 7+40
Bent 13 7+68
Bent 14 7+96
Bent 15 8+24
Bent 16 8+52


6+25
El. 32.30
+5.00%
-5.00%
700' VC
Finish grade on ℄

GRADE LINE - BARENDSE RD.

Fig. 2

As constructed 8-20-73

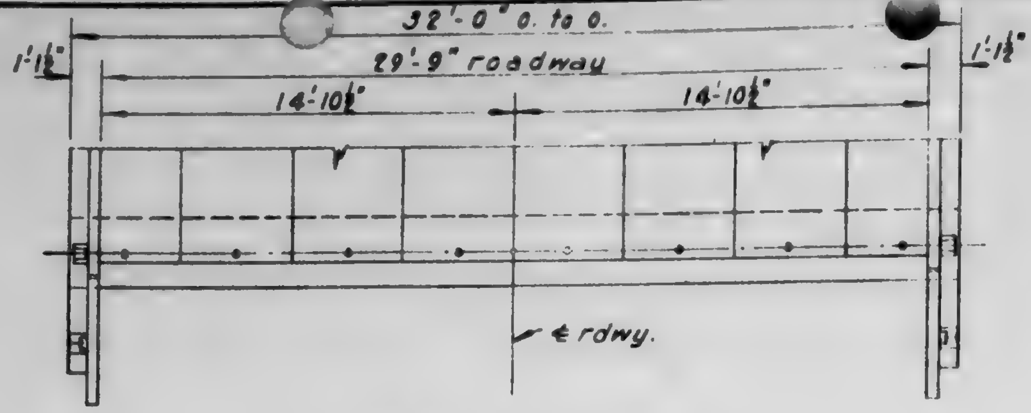
OREGON STATE HIGHWAY DIVISION
BRIDGE SECTION

APPROVED:
Walter J Hart
BRIDGE ENGINEER
ASST. STATE HIGHWAY ENGINEER

BLIND SLOUGH BRIDGE
BLIND SLOUGH (BARENDSE RD.) BRIDGE SECT.
BARENDSE RD. - CLATSOP Co.

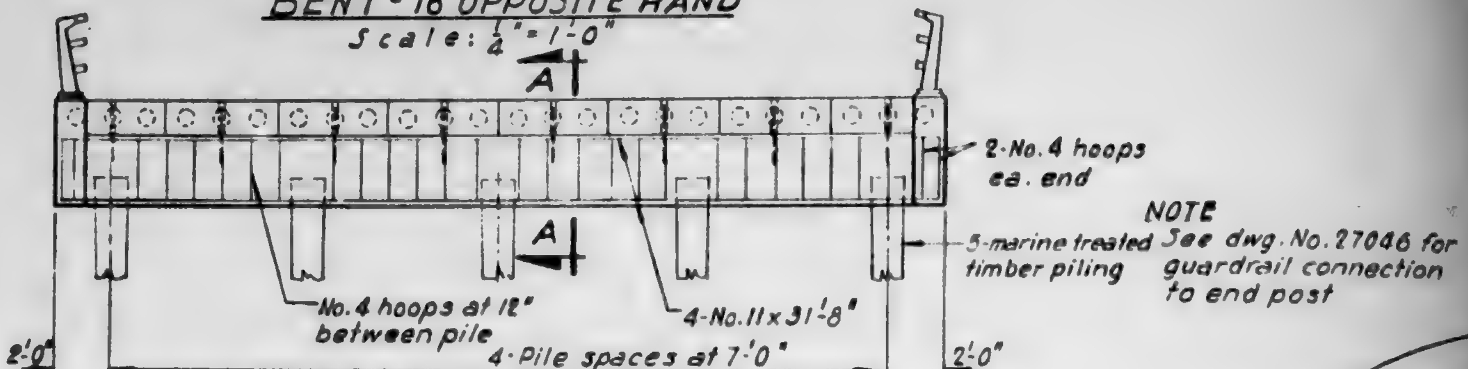
PLAN & ELEVATION

DESIGNED T.J.S
DRAWN T.J.S
CHECKED WRP
CAL. BOOK 1397
DATE 6-20-72 BRIDGE NO 11138A
ACCOMPANIED BY DWGS 28333 thru 28335, 19848, 19850, 23653, 23670, 27046
SHEET 1 OF 9
DRAWING NO. 28332


32'-0" o. to o.
1'-1½"
29'-9" roadway
1'-1½"
14'-10½"
14'-10½"
℄ rdwy.

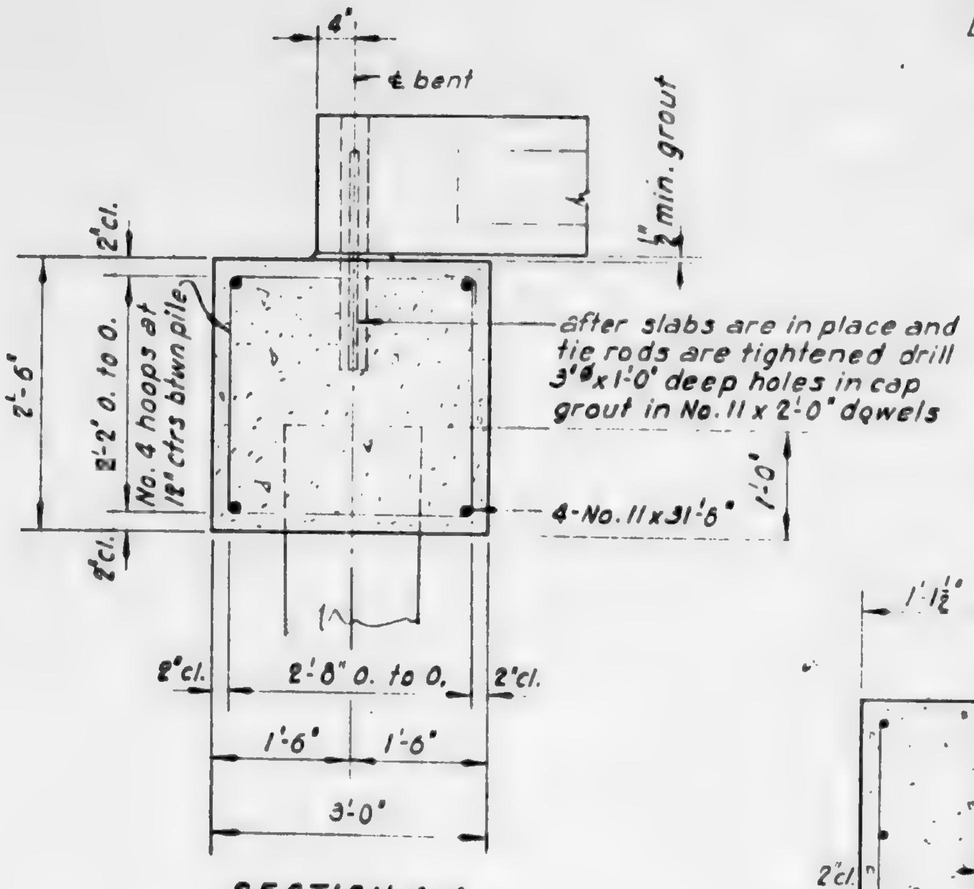
PLAN BENT-1
BENT-16 OPPOSITE HAND

Scale: ¼"=1'-0"


A
A
2-No.4 hoops ea. end
NOTE
See dwg. No. 27046 for guardrail connection to end post
5-marine treated timber piling
No.4 hoops at 12" between pile
4-No.11 x 31'-8"
2'-0"
4-Pile spaces at 7'-0"
2'-0"

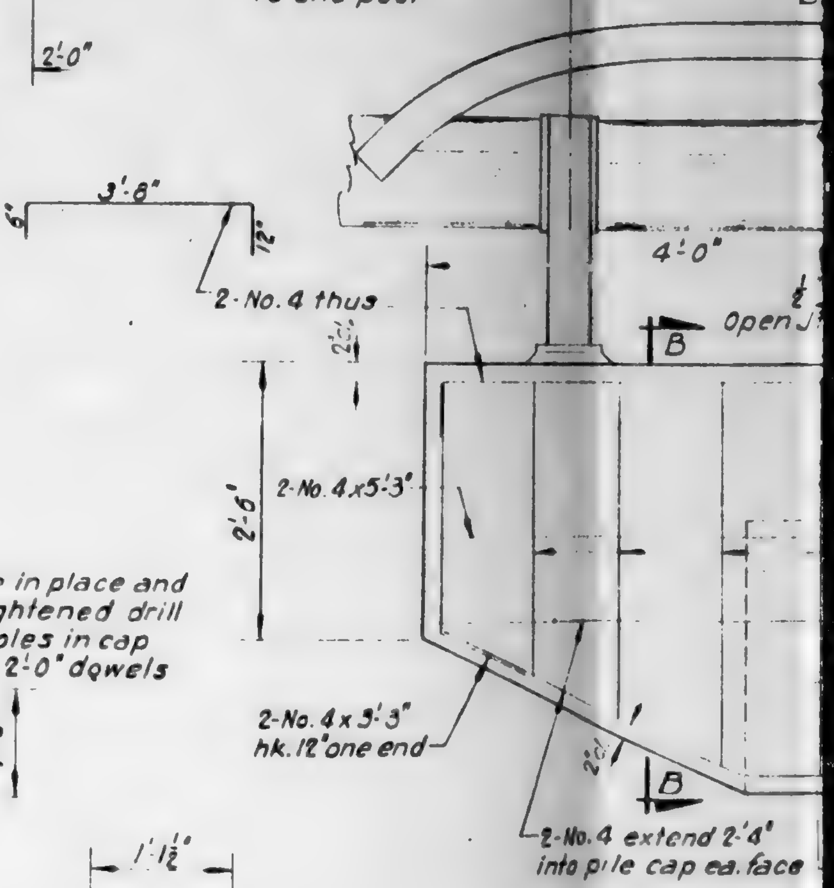
ELEVATION BENT 1 OR 16

Scale: ¼"=1'-0"


4"
℄ bent
½" min. grout
2"cl.
2'-6"
2'-2" o. to o.
No.4 hoops at 12" ctrs btwn pile
after slabs are in place and tie rods are tightened drill 3"⌀ x 1'-0" deep holes in cap grout in No.11 x 2'-0" dowels
1'-0"
4-No.11 x 31'-6"
2"cl.
2"cl.
2'-8" o. to o.
2"cl.
1'-6"
1'-6"
3'-0"

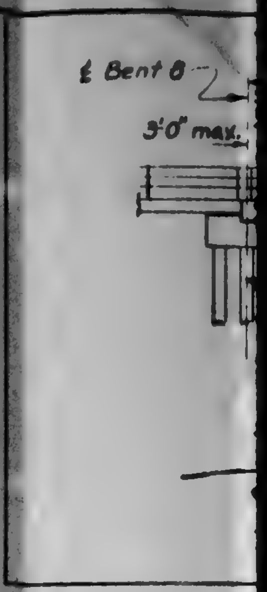
SECTION A-A

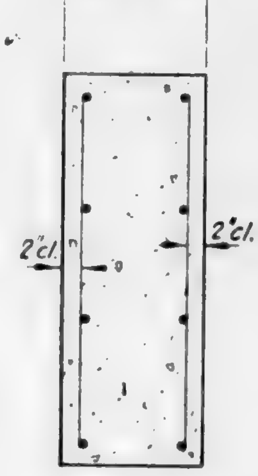
Scale: none


3'-8"
6"
12"
2-No.4 thus
4'-0"
½"
Open J
B
2"cl.
2'-6"
2-No.4 x 5'-3"
2-No.4 x 5'-3" hk. 12" one end
2"cl.
B
2-No.4 extend 2'-4" into pile cap ea. face
3'-3"
B

TYPICAL END P

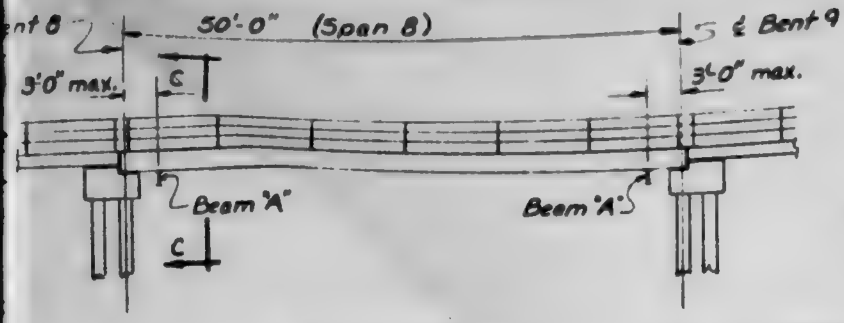
Scale: 1"=1'-


℄ Bent 8
3'-0" max.



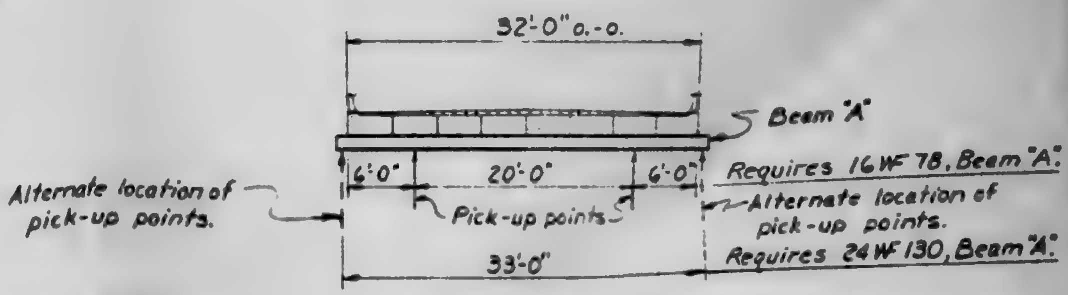
SECTION B-B

2-11-72 JMT
7-14-72


ent 8
50'-0" (Span 8)
¢ Bent 9
3'-0" max.
3'-0" max.
C
C
Beam "A"
Beam "A"

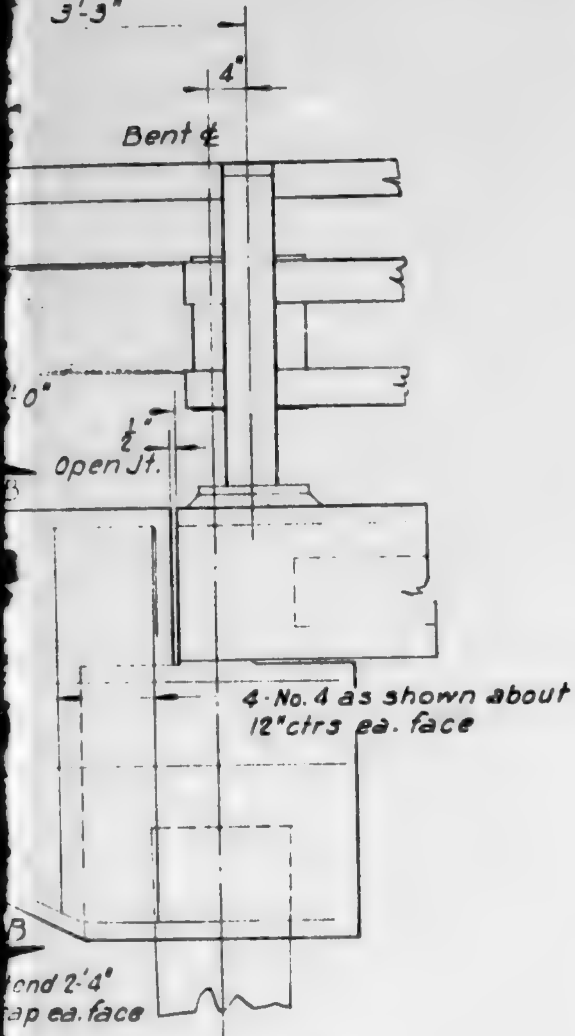
ELEVATION

Total dead load of span = 390 kips
Load per pick-up point = 97.5 kips
(Does not include weight of Beam "A".)

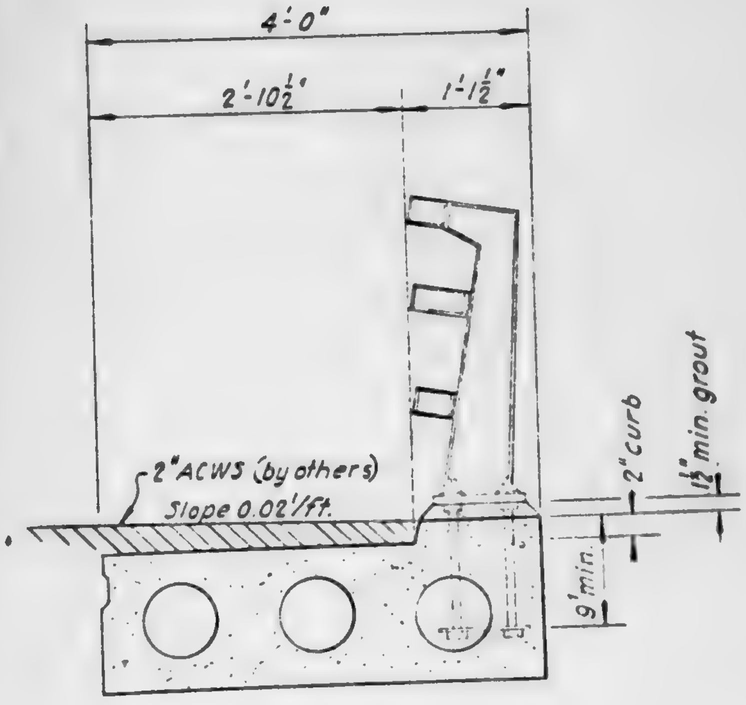

32'-0" o.-o.
Beam "A"
6'-0"
20'-0"
6'-0"
Alternate location of pick-up points.
Pick-up points
Alternate location of pick-up points.
33'-0"
Requires 16WF78, Beam "A".
Requires 24WF130, Beam "A".

SECTION C-C

SUGGESTED METHOD OF LIFTING REMOVABLE SPAN
NOT PART OF CONTRACT


3'-3"
4"
Bent ¢
'-0"
½"
Open Jt.
4-No. 4 as shown about 12"ctrs ea. face
B
tend 2'-4"
ap ea. face

L END POST DETAIL
le : 1" = 1'-0"


4'-0"
2'-10½"
1'-1½"
2"ACWS (by others)
Slope 0.02'/ft.
2" curb
1½" min. grout
9" min.

RAIL POST DETAIL
Scale: 1" = 1'-0"

NOTE
Exception to standard precast slabs
dwg. No.s 19848 and 19850. Exterior slabs only

1. Cast 2"x 1'-1½" raised curb monolithic W/precast slab
2. Omit void 9" each side of each post

Fig. 3

NOTE
THE SCALE OF THIS PRINT IS ½ THAT OF THE ORIGINAL DRWG.
FOR EXAMPLE:
INDICATED SCALE ¾"=1'-0"
SHOULD BE READ ⅜"=1'-0"
INDICATED SCALE ⅛"=1'-0"
SHOULD BE READ 1"=16'-0"

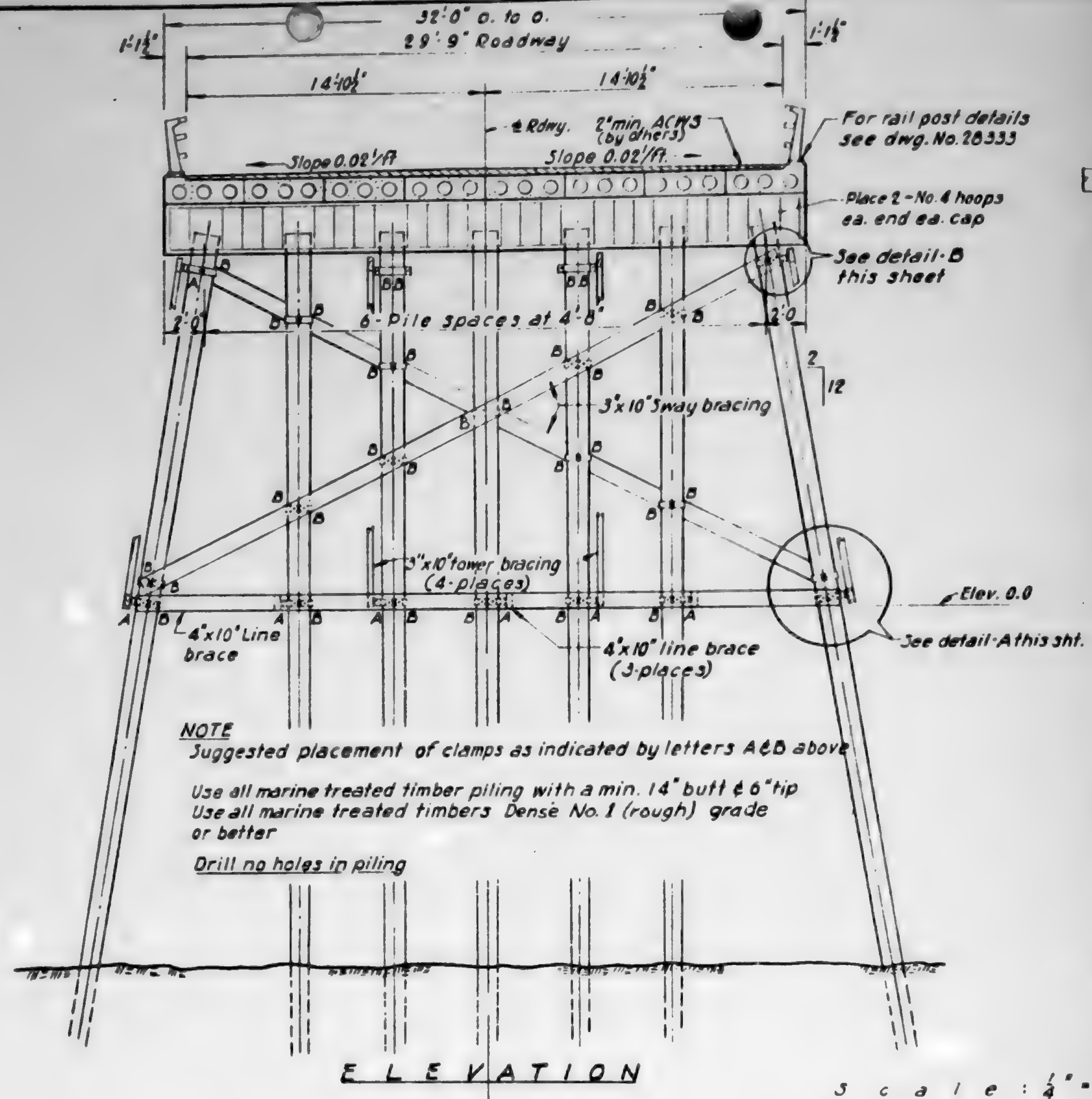
DATE	REVISION

OREGON STATE HIGHWAY DIVISION
BRIDGE SECTION

BLIND SLOUGH BRIDGE

DETAILS BENTS 1 & 16

APPROVED: Walter J. Hart
BRIDGE ENGINEER
DESIGNED T.J.S.
CHECKED WRP
DRAWN JH
CALC. BOOK 1397
DATE 6-20-72
SHEET 2 OF 9
BRIDGE NO. 11133A
DRAWING NO. 28333

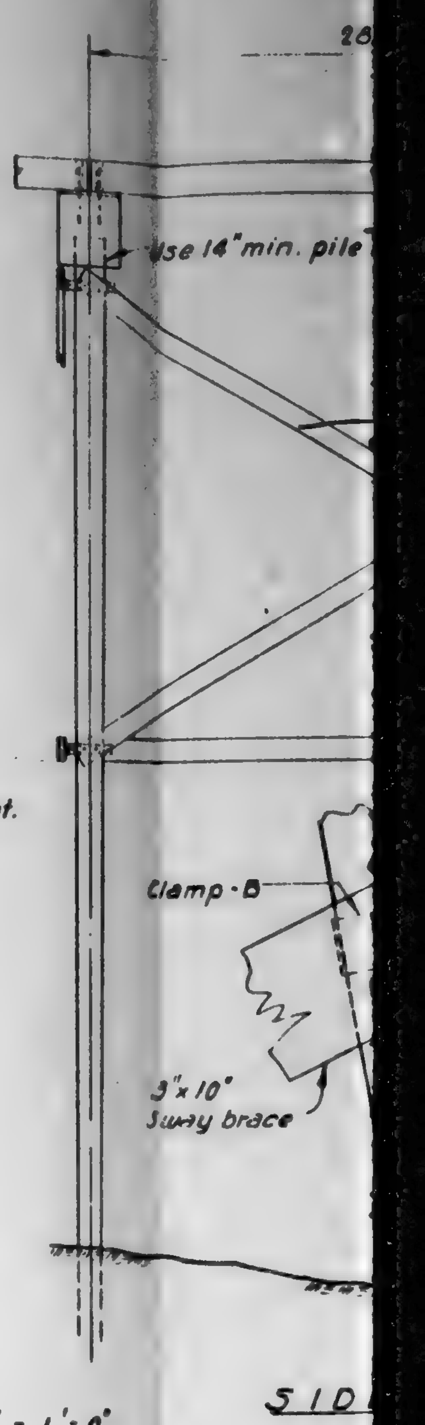

32'-0" o. to o.
29'-9" Roadway
1'-1½"
1'-1½"
14'-10½"
14'-10½"
℄ Rdwy.
2" min. ACWS (by others)
Slope 0.02'/ft
Slope 0.02'/ft.
For rail post details see dwg. No. 28333
Place 2 - No. 4 hoops ea. end ea. cap
See detail-B this sheet
6-Pile spaces at 4'-8"
2'-0"
2'-0"
2
12
3"x10" Sway bracing
3"x10" tower bracing (4-places)
Elev. 0.0
4"x10" Line brace
4"x10" line brace (3-places)
See detail-A this sht.
A
B

NOTE
Suggested placement of clamps as indicated by letters A&B above

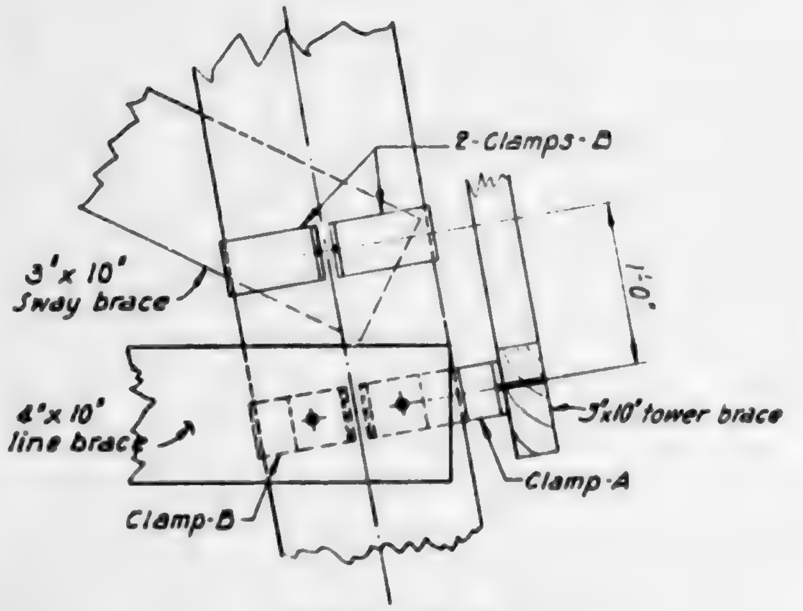
Use all marine treated timber piling with a min. 14" butt & 6" tip
Use all marine treated timbers Dense No. 1 (rough) grade or better

Drill no holes in piling

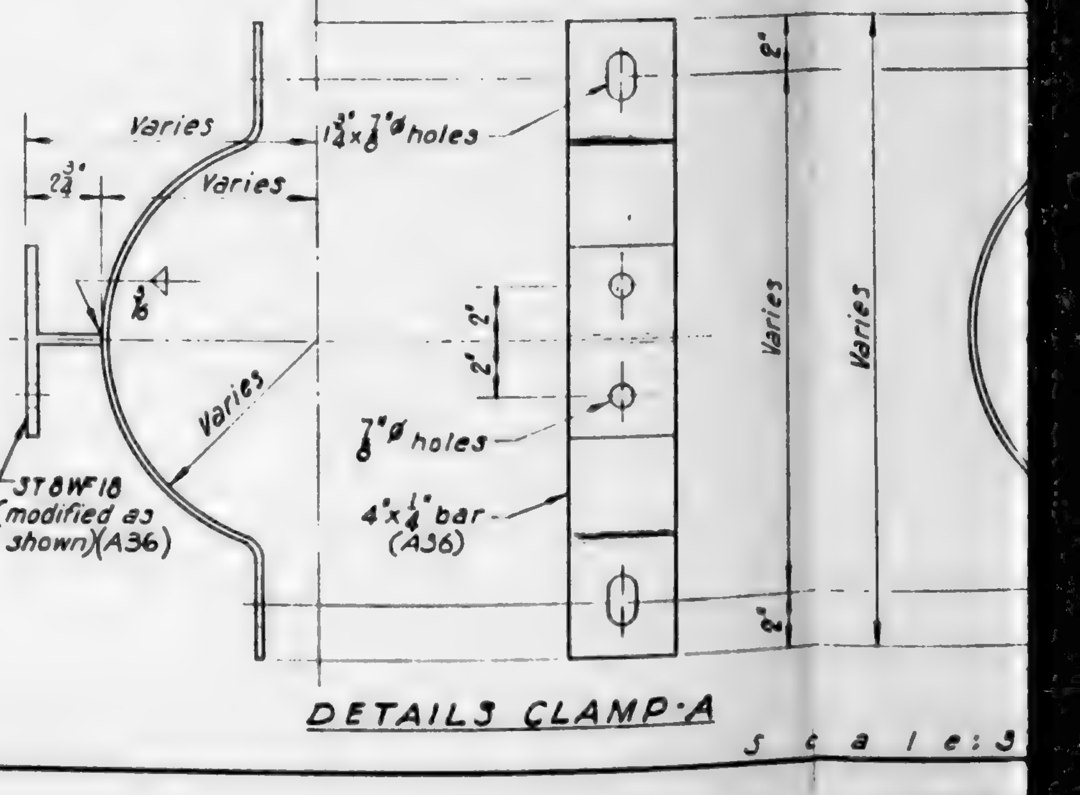
ELEVATION


28
Use 14" min. pile
Clamp-B
3"x10" Sway brace
SID

scale: ¼" = 1'-0"

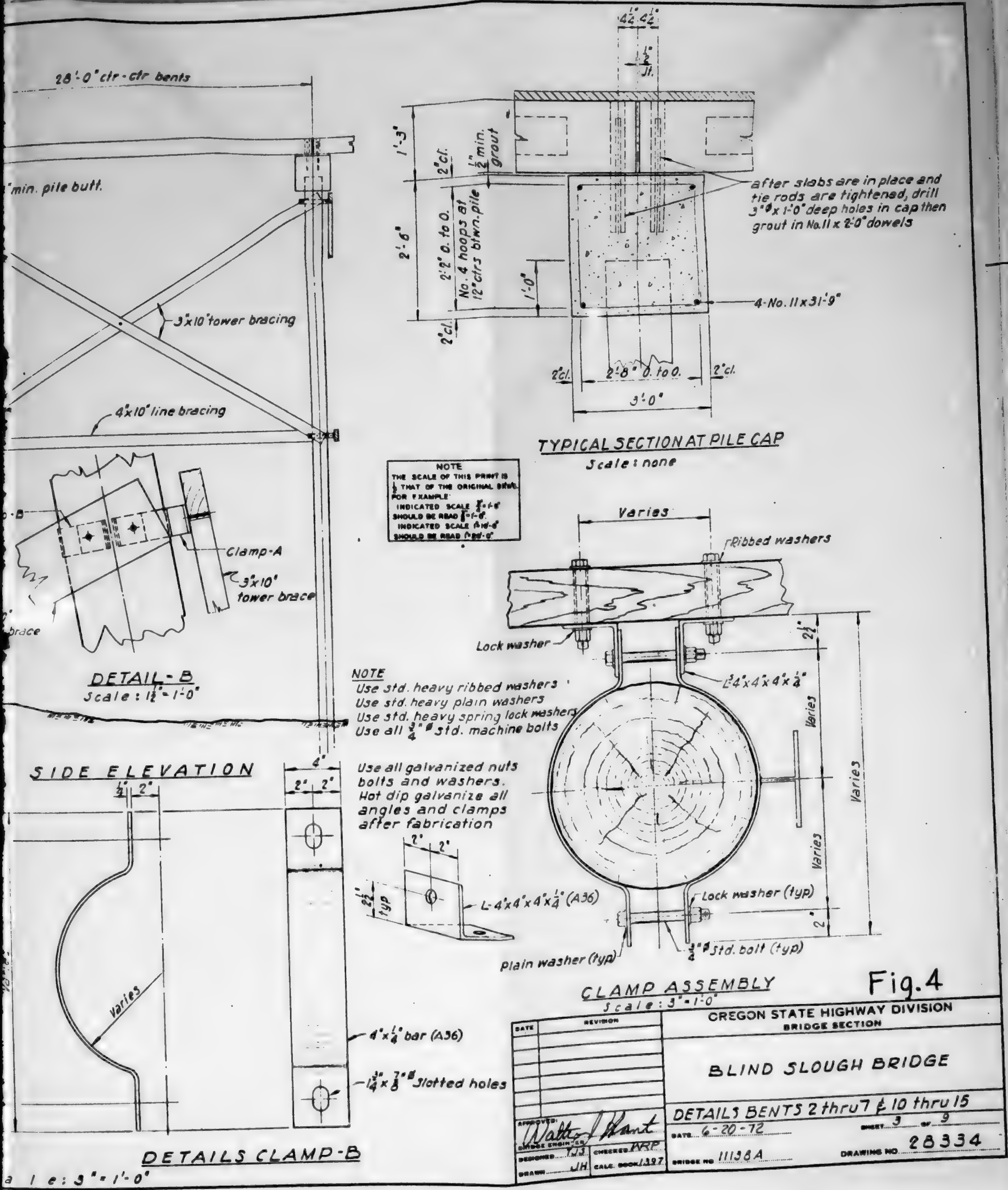

2-Clamps-B
3"x 10" Sway brace
1'-0"
4"x 10" line brace
3"x10" tower brace
Clamp-A
Clamp-B

DETAIL-A


Varies
Varies
2¾"
1¾x⅞"ø holes
2"
2"
2"
2"
Varies
Varies
Varies
⅞"ø holes
4"x¼" bar (A36)
ST 8WF18 (modified as shown)(A36)

DETAILS CLAMP-A

scale: 3



28'-0" ctr-ctr bents
min. pile butt.
3"x10" tower bracing
4"x10" line bracing
Clamp-A
3"x10" tower brace
brace
DETAIL-B
Scale: 1½"=1'-0"
SIDE ELEVATION
4½" 4½"
½" Jt.
1'-3"
2" cl.
½" min. grout
2'-6"
2'-2" O. to O.
No. 4 hoops at 12" ctrs btwn. pile
1'-0"
2'-8" O. to O.
2" cl.
3'-0"
4-No. 11 x 31'-9"
after slabs are in place and tie rods are tightened, drill 3"Ø x 1'-0" deep holes in cap then grout in No. 11 x 2'-0" dowels
TYPICAL SECTION AT PILE CAP
Scale: none
Varies
Ribbed washers
Lock washer
L-4"x4"x4"x¼"
2½"
Varies
Varies
Varies
Lock washer (typ)
2"
plain washer (typ)
¾"Ø std. bolt (typ)
CLAMP ASSEMBLY
Scale: 3"=1'-0"
4"
2" 2"
½" 2"
Varies
4"x¼" bar (A36)
1¾"x ⅞"Ø slotted holes
DETAILS CLAMP-B
Scale: 3"=1'-0"
2" 2"
2½" typ
L-4"x4"x4"x¼" (A36)

NOTE
THE SCALE OF THIS PRINT IS ½ THAT OF THE ORIGINAL DRWG.
FOR EXAMPLE:
INDICATED SCALE ½"=1'-0"
SHOULD BE READ ¼"=1'-0".
INDICATED SCALE 1"=10'-0"
SHOULD BE READ 1"=20'-0".

NOTE
Use std. heavy ribbed washers
Use std. heavy plain washers
Use std. heavy spring lock washers
Use all ¾"Ø std. machine bolts

Use all galvanized nuts bolts and washers. Hot dip galvanize all angles and clamps after fabrication

Fig. 4

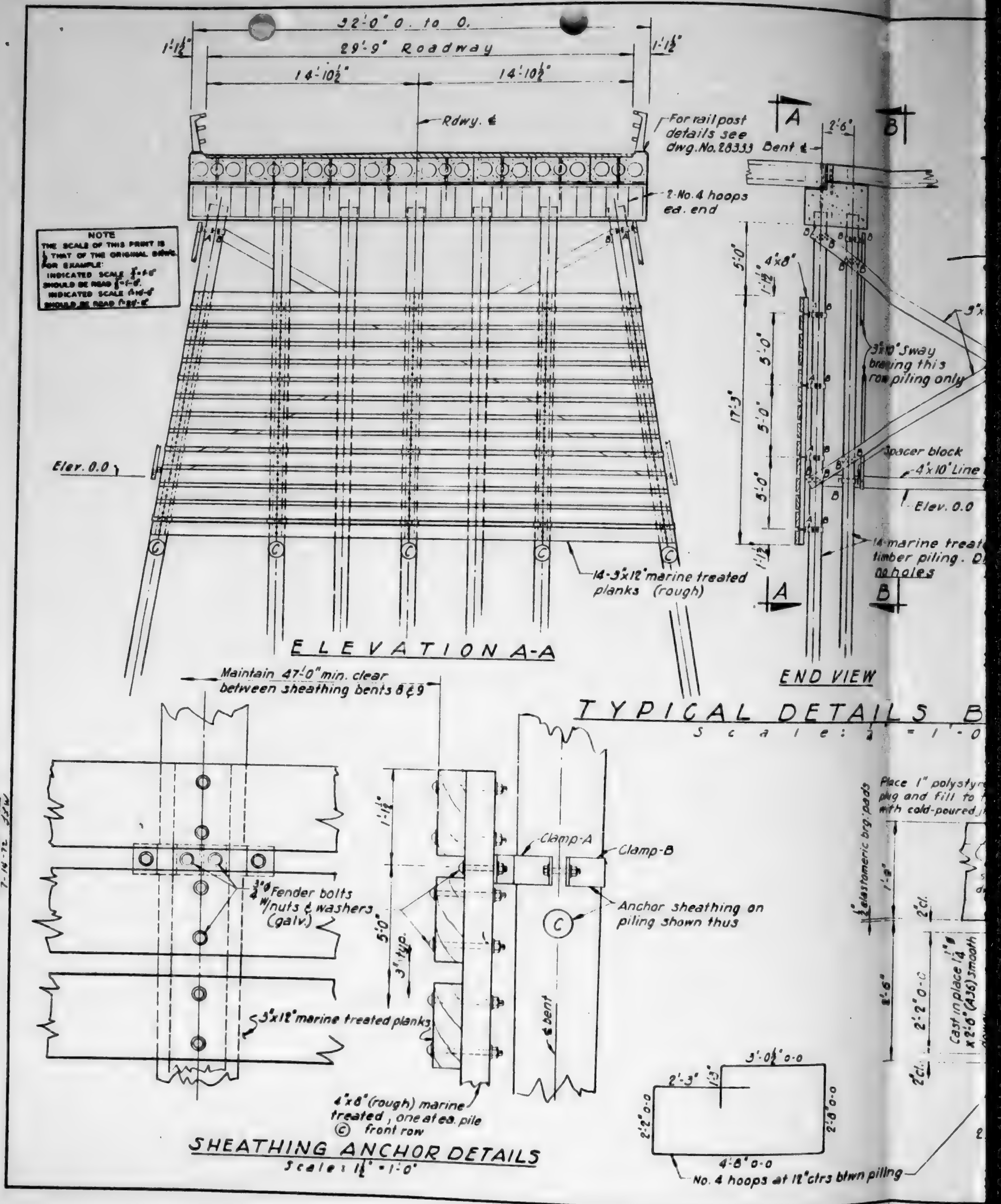
DATE	REVISION

OREGON STATE HIGHWAY DIVISION
BRIDGE SECTION

BLIND SLOUGH BRIDGE

DETAILS BENTS 2 thru 7 & 10 thru 15

APPROVED: Walter J Hunt
BRIDGE ENGINEER
DESIGNED TJJ
CHECKED WRP
DRAWN JH
CALC. BOOK 1397
DATE 6-20-72
SHEET 3 OF 9
BRIDGE NO 11138A
DRAWING NO. 28334



ELEVATION A-A

END VIEW

TYPICAL DETAILS B

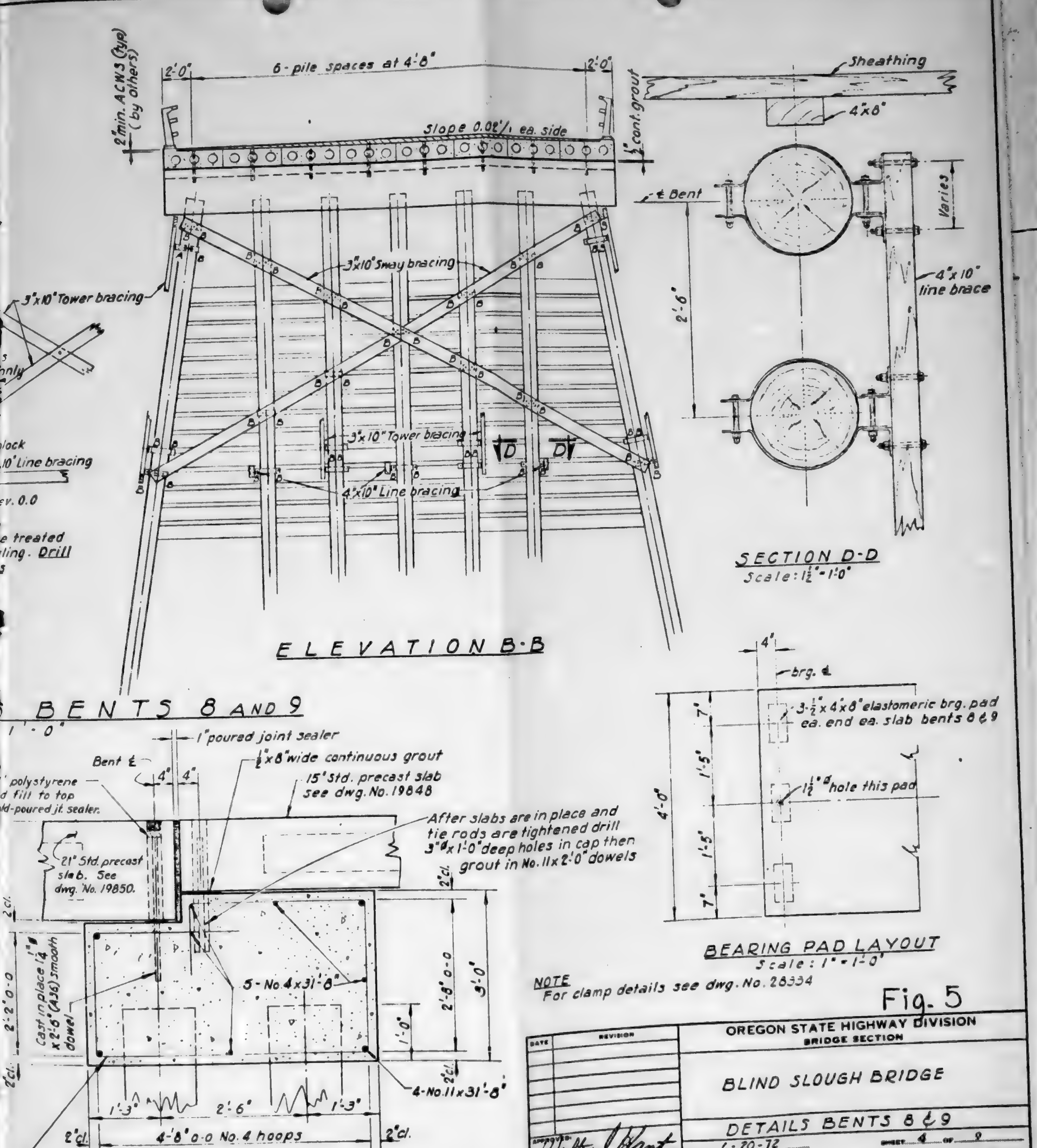
Scale: ½" = 1'-0

SHEATHING ANCHOR DETAILS

Scale: 1½" = 1'-0"

NOTE
THE SCALE OF THIS PRINT IS ½ THAT OF THE ORIGINAL DRWG.
FOR EXAMPLE:
INDICATED SCALE ½"=1'-0" SHOULD BE READ ¼"=1'-0".
INDICATED SCALE 1"=1'-0" SHOULD BE READ ½"=1'-0"

32'-0" O. to O.
1'-1½"
29'-9" Roadway
1'-1½"
14'-10½"
14'-10½"
Rdwy. ℄
For rail post details see dwg. No. 28333
2-No. 4 hoops ea. end
Elev. 0.0
14-3"x12" marine treated planks (rough)
A
B
Bent ℄
2'-6"
4"x8"
5'-0"
1'-1½"
5'-0"
17'-3"
5'-0"
5'-0"
1'-1½"
3"x10" Sway bracing this row piling only
9"x
Spacer block
4"x10" Line
Elev. 0.0
14 marine treat
timber piling. D
no holes
Maintain 47'-0" min. clear between sheathing bents 8 & 9
¾"⌀ Fender bolts w/nuts & washers (galv.)
3"x12" marine treated planks
1'-1½"
5'-0"
3" typ.
Clamp-A
Clamp-B
Anchor sheathing on piling shown thus
C
℄ bent
4"x8" (rough) marine treated, one at ea. pile
C front row
Place 1" polystyr
plug and fill to
with cold-poured j
½" elastomeric brg. pads
1'-8"
2" cl.
8'-6"
2'-2" O-O
2" cl.
Cast in place 1¼"⌀ x 2'-6" (A36) smooth
3'-0½" O-O
2'-3"
1'-3"
2'-2" O-O
2'-8" O-O
4'-8" O-O
No. 4 hoops at 12" ctrs btwn piling
7-11-72
7-14-72


2'-0"
6-pile spaces at 4'-8"
2'-0"
2" min. ACWS (typ) (by others)
Slope 0.02'/, ea. side
1" cont. grout
3"x10" Tower bracing
3"x10" Sway bracing
s
only
lock
10" Line bracing
ev. 0.0
e treated
iling. Drill
s
3"x10" Tower bracing
4"x10" Line bracing
D
D
A
B
ELEVATION B-B
BENTS 8 AND 9
1'-0"
Sheathing
4"x8"
℄ Bent
Varies
2'-6"
4"x10" line brace
SECTION D-D
Scale: 1½" = 1'-0"
4"
brg. ℄
3-½"x4"x8" elastomeric brg. pad ea. end ea. slab bents 8 & 9
1½" ø hole this pad
7"
1'-5"
1'-5"
7"
4'-0"
BEARING PAD LAYOUT
Scale: 1" = 1'-0"
1" poured joint sealer
Bent ℄
4"
4"
½"x8" wide continuous grout
15" Std. precast slab see dwg. No. 19848
' polystyrene
d fill to top
ld-poured jt. sealer.
21" Std. precast slab. See dwg. No. 19850.
After slabs are in place and tie rods are tightened drill 3"ø x 1'-0" deep holes in cap then grout in No. 11 x 2'-0" dowels
2" cl.
2" cl.
Cast in place 1¼"ø x 2'-6" (A36) smooth dowel
2'-2" o-o
5-No. 4 x 31'-8"
2'-8" o-o
3'-0"
1'-0"
2" cl.
2" cl.
4-No. 11 x 31'-8"
1'-3"
2'-6"
1'-3"
2" cl.
4'-8" o-o No. 4 hoops
2" cl.
5'-0"
TYPICAL BENT SECTION
Scale: 1" = 1'-0"

NOTE
For clamp details see dwg. No. 28334

Fig. 5

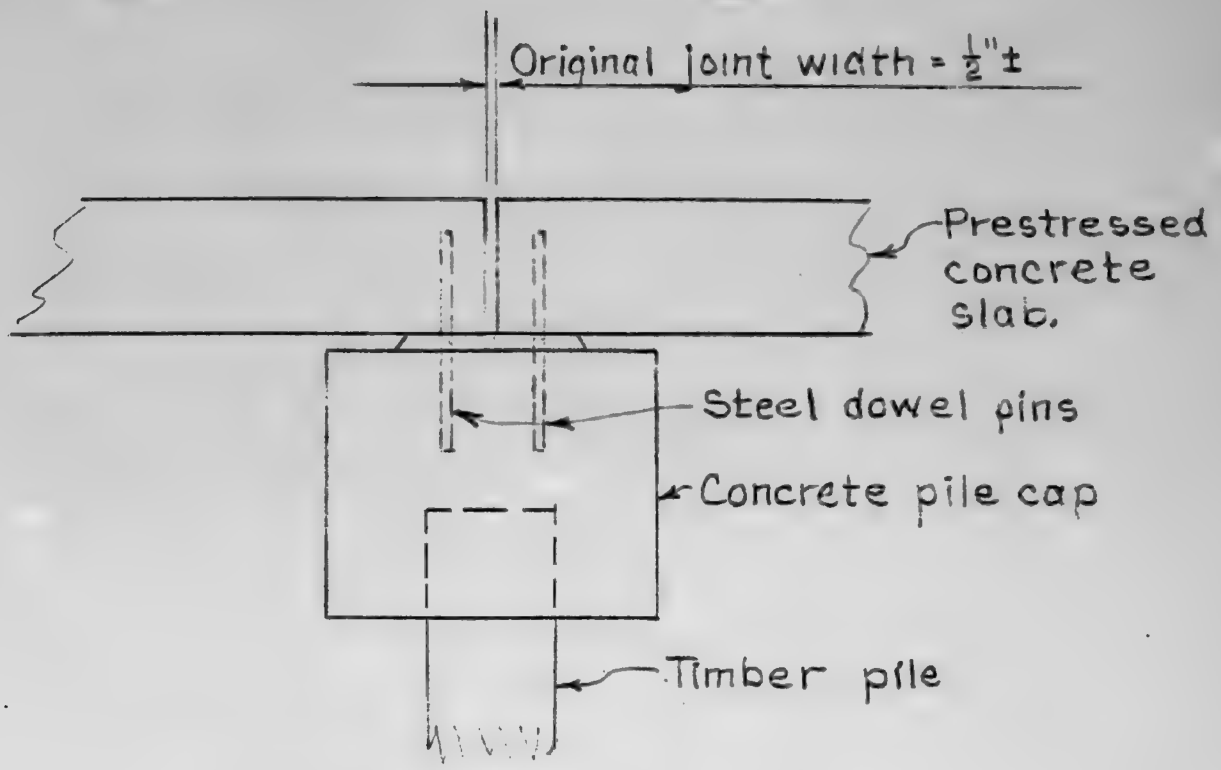
OREGON STATE HIGHWAY DIVISION
BRIDGE SECTION

DATE	REVISION

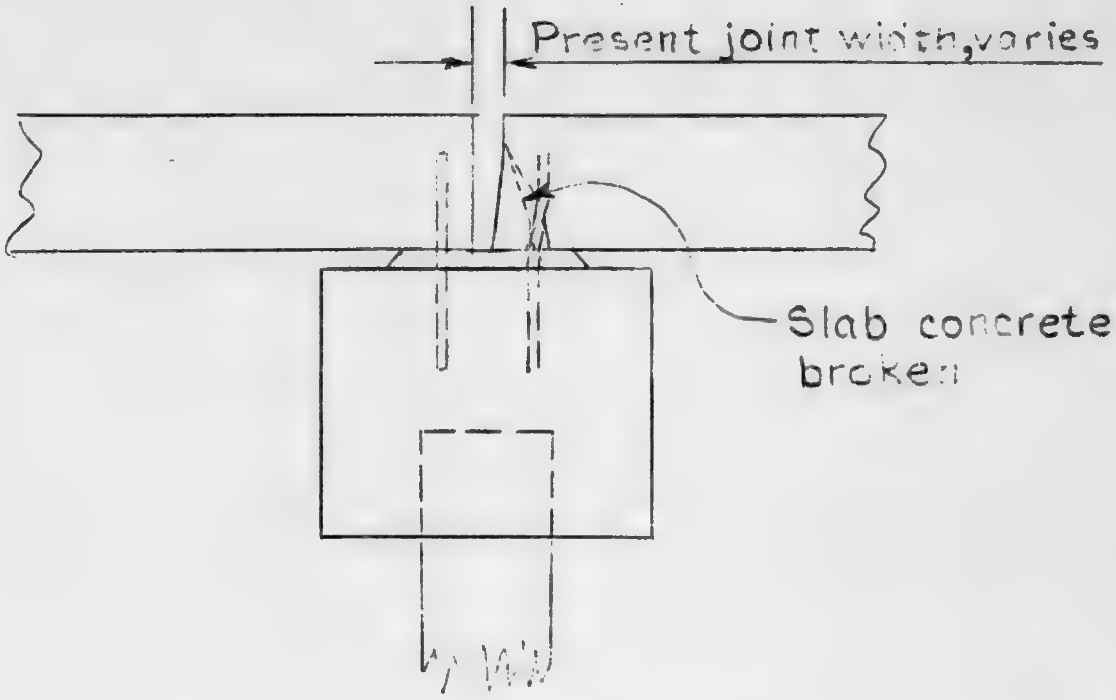
BLIND SLOUGH BRIDGE

DETAILS BENTS 8 & 9

APPROVED: Walter J Hant
BRIDGE ENGINEER
DESIGNED: TJS
DRAWN: JH
CHECKED: WRP
CALC. BOOK: 1397
DATE: 6-20-72
BRIDGE NO.: 11138A
SHEET 4 OF 9
DRAWING NO. 28335

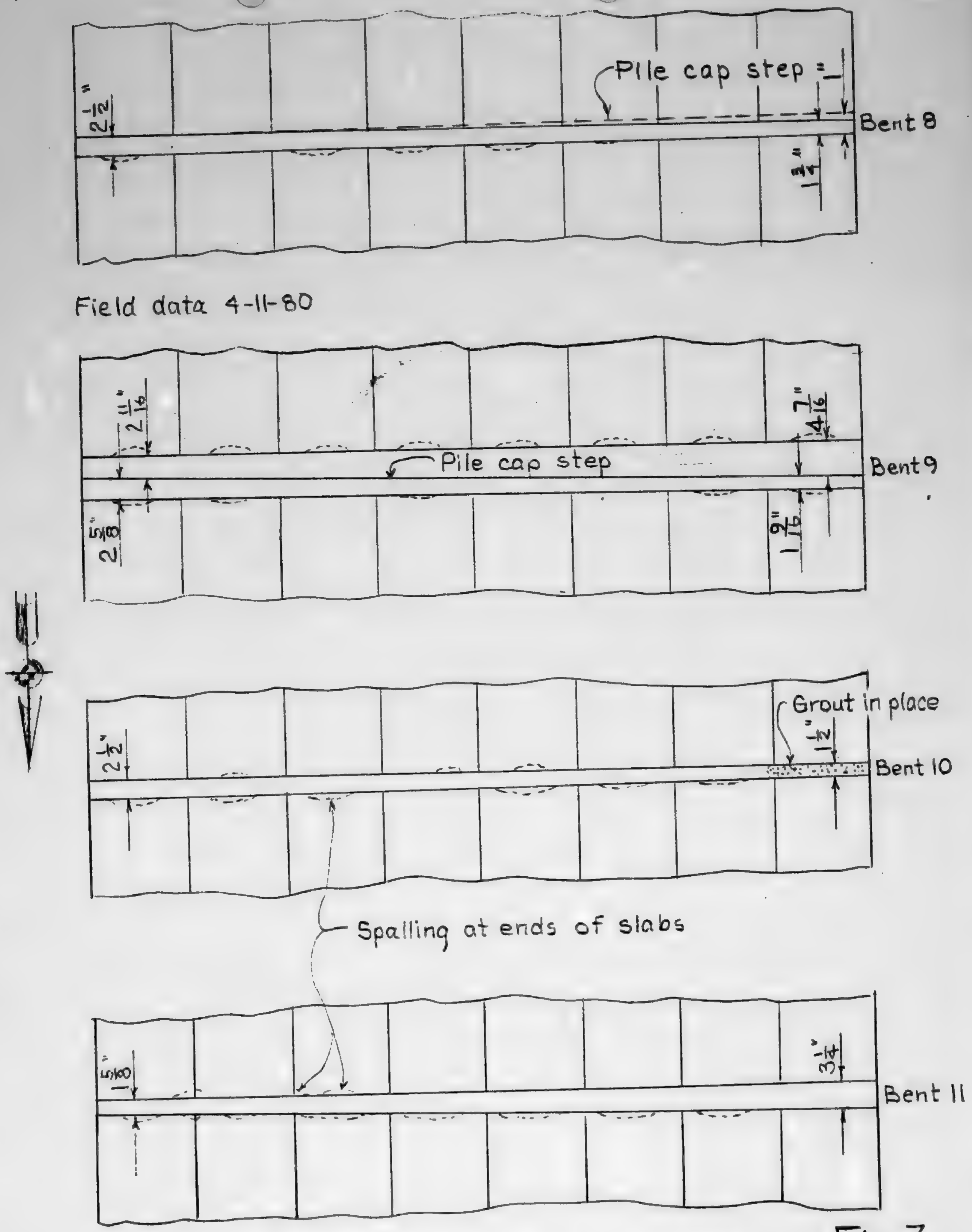

Original joint width = $\frac{1}{2}$" ±
Prestressed concrete slab.
Steel dowel pins
Concrete pile cap
Timber pile

SECTION AT PILE CAP
AS CONSTRUCTED


Present joint width, varies
Slab concrete broken

SECTION AT PILE CAP
AT PRESENT

Fig. 6



Pile cap step
Bent 8
2 1/2"
1 3/4"
2 11/16"
4 7/16"
Pile cap step
Bent 9
2 5/8"
1 9/16"
Grout in place
1 1/2"
2 1/2"
Bent 10
Spalling at ends of slabs
1 5/8"
3 1/4"
Bent 11
N

Field data 4-11-80

PLAN VIEWS OF DECK JOINTS

Fig. 7

Form 81-734-3049X

Fig. 8

OREGON STATE
HIGHWAY DIVISION

TABULATION SHEET
SHEET .... OF .... SHEETS

BLIND SLOUGH (BARENDSE R.D.) BRIDGE

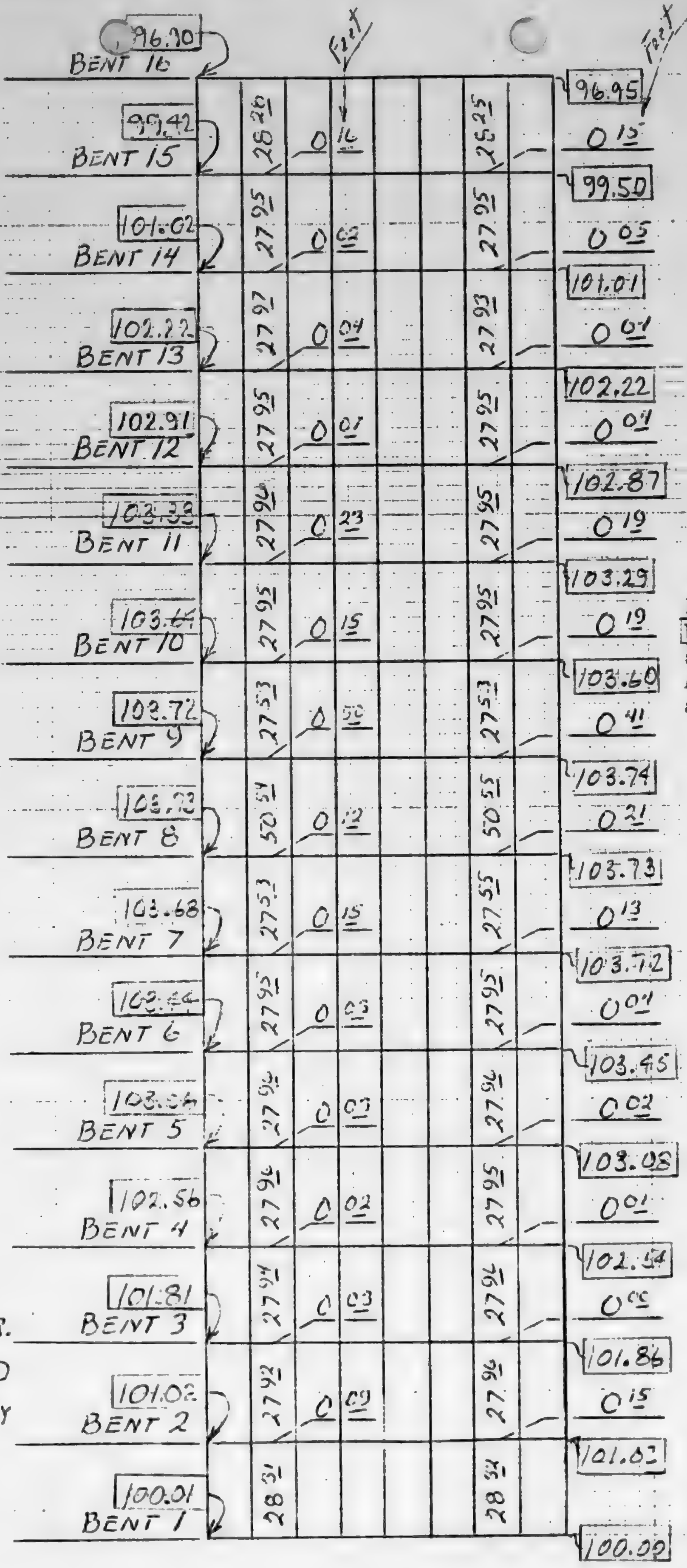
Measurements across joints

Note: refer to points [illegible] set 10-27-76

BENT	10-27-76	change	10-27-78	change	4-19-79	change	11-7-79	change	2-29-80	
1	2.00						new point 2.50	†	2.505	
2	2.00		2.00		2.00	.01	2.01		2.01	
3	2.00		2.00		2.00		2.00		2.00	
4	2.00		2.00		2.00		2.00		2.00	
5	2.00		2.00		2.00		2.00		2.00	
6	2.00		2.00		2.00		2.00		2.00	
7	2.00		2.00		2.00		2.00	†	2.005	
8	2.00		2.00		2.00	.01	2.01	.01	2.02	
9	2.00	.03	2.03	.04	2.07	.02	2.09	.03	2.12	
10	2.00	.01	2.01		2.01		2.01	.01	2.02	
11	2.00	.03	2.03		2.03		2.03	.005	2.035	
12	2.00	.01	2.01		2.01		2.01		2.01	
13	2.00		2.00	.01	2.01		2.01		2.01	
14	2.00		2.00		2.00		2.00		2.00	
15	2.00		2.00		2.00		2.00		2.00	
16	2.00		2.00				new point 2.50	†	2.505	
Σ change bents 2-15		.03		.05		.04		.055		
TEMPERATURE	40°		68°		55°		55°		54°	
Change corrected to 40°		.15		.02		.04		.055		Σ=.265

† No [illegible]

Fig. 9



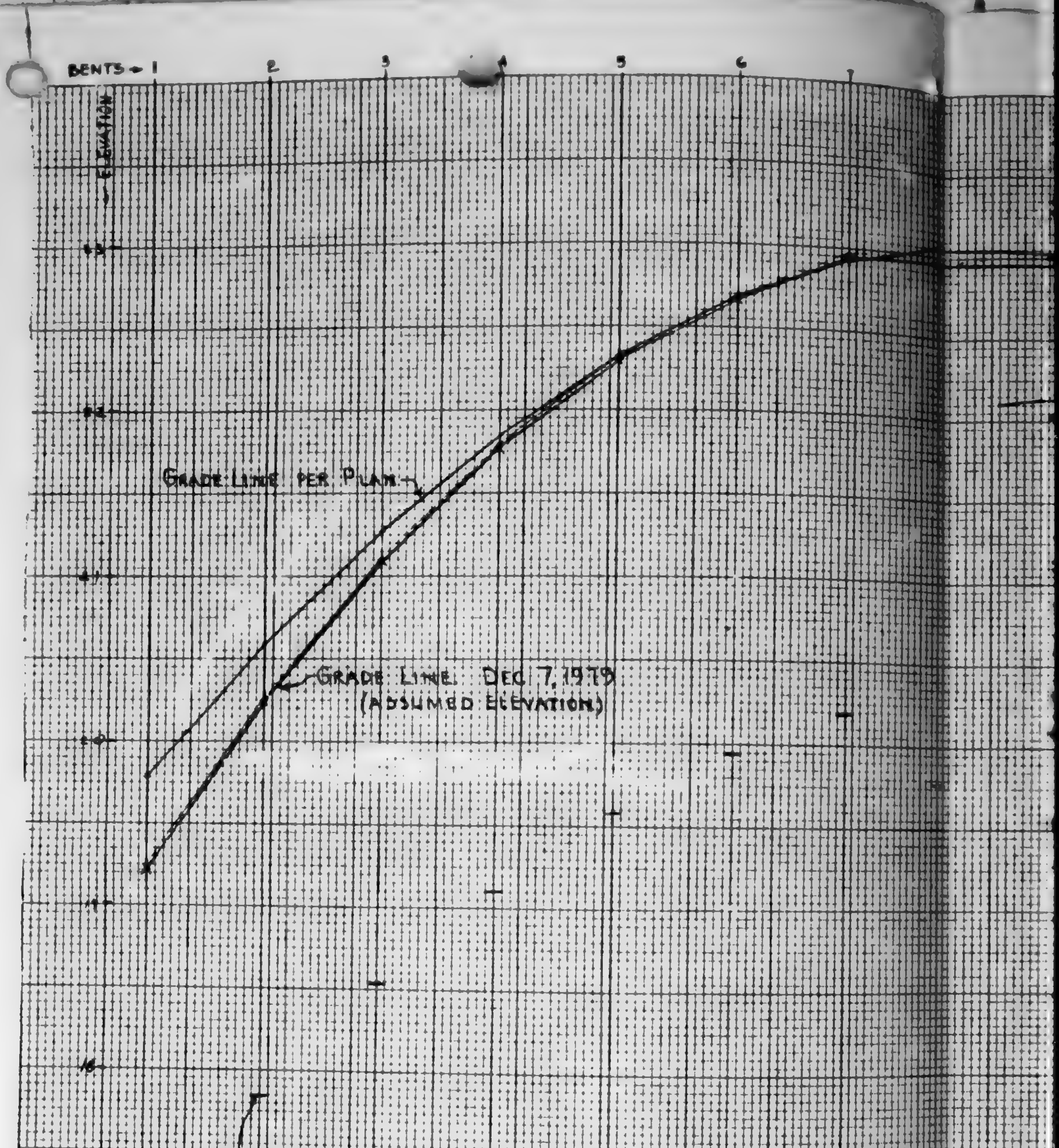
BENT 16	96.90					96.95
		28^{26}	0^{16}	25^{25}	0^{15}	
BENT 15	99.42					99.50
		27^{95}	0^{03}	27^{95}	0^{05}	
BENT 14	101.02					101.01
		27^{97}	0^{04}	27^{93}	0^{04}	
BENT 13	102.22					102.22
		27^{95}	0^{07}	27^{95}	0^{04}	
BENT 12	102.91					102.87
		27^{96}	0^{23}	27^{95}	0^{19}	
BENT 11	103.33					103.29
		27^{95}	0^{15}	27^{95}	0^{19}	
BENT 10	103.64					103.60
		27^{53}	0^{50}	27^{53}	0^{41}	
BENT 9	103.72					103.74
		50^{54}	0^{12}	50^{55}	0^{21}	
BENT 8	103.73					103.73
		27^{53}	0^{15}	27^{55}	0^{13}	
BENT 7	103.68					103.72
		27^{95}	0^{03}	27^{95}	0^{04}	
BENT 6	103.44					103.45
		27^{96}	0^{03}	27^{96}	0^{02}	
BENT 5	103.34					103.08
		27^{96}	0^{02}	27^{95}	0^{01}	
BENT 4	102.56					102.54
		27^{94}	0^{03}	27^{96}	0^{05}	
BENT 3	101.81					101.86
		27^{92}	0^{09}	27^{96}	0^{15}	
BENT 2	101.02					101.03
		28^{31}		28^{32}		
BENT 1	100.01					100.00

Elevations, shown in box, are at top of slab at gutter line. Assumed datum = 100 at bent 1, right.

BLIND SLOUGH BR.
BARENDSE ROAD
CLATSOP COUNTY
DEC. 6, 1979

. NOTED
L. E. WALLACE

RECEIVED
DEC 10 1979
BRIDGE SECTION


BENTS → 1
2
3
4
5
6
7
ELEVATION
GRADE LINE PER PLAN
GRADE LINE DEC 7, 1979
(ASSUMED ELEVATION)
PILE CUT-OFF PER
PILE DRIVING RECORD
4+00
5+00
6+00

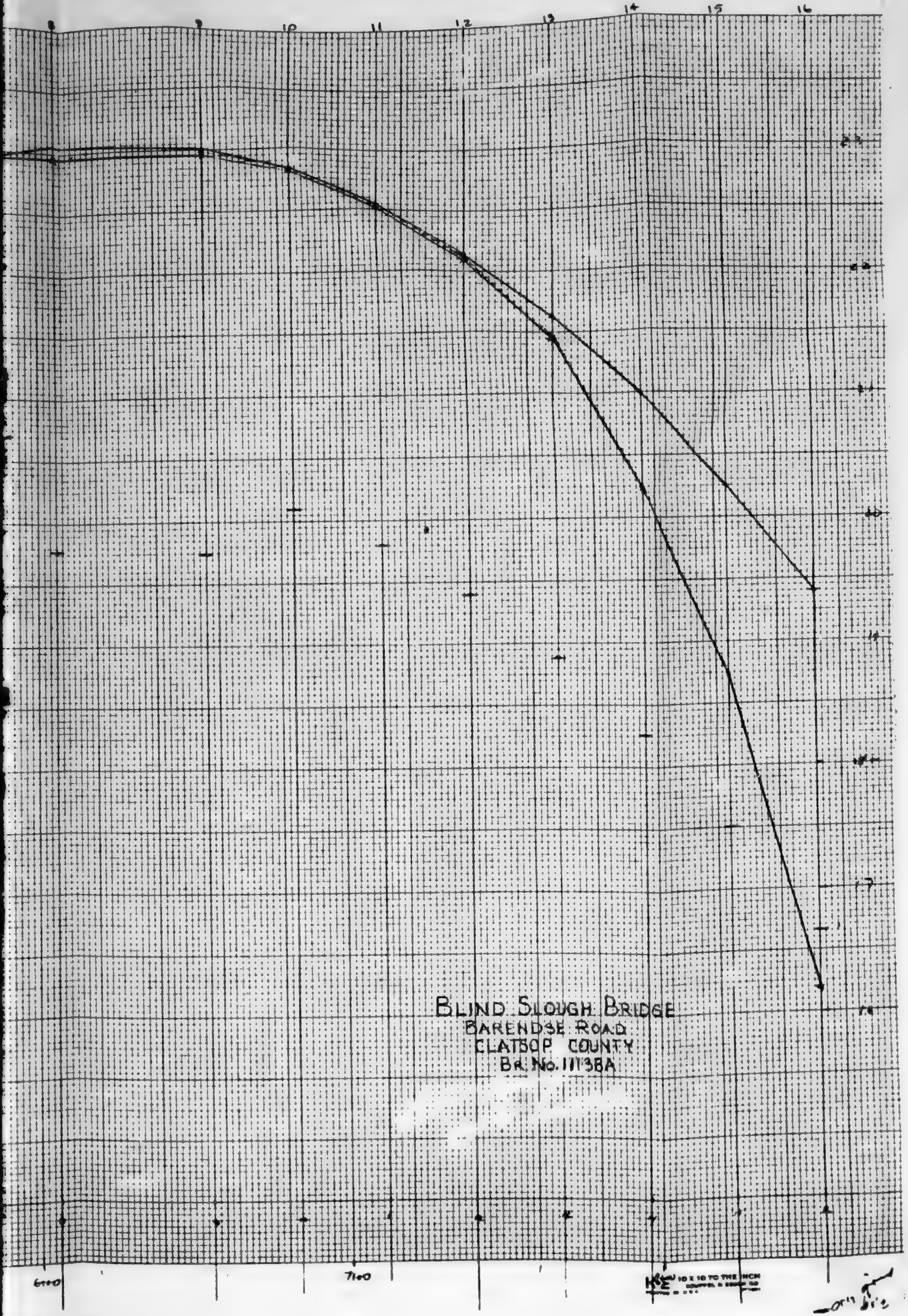
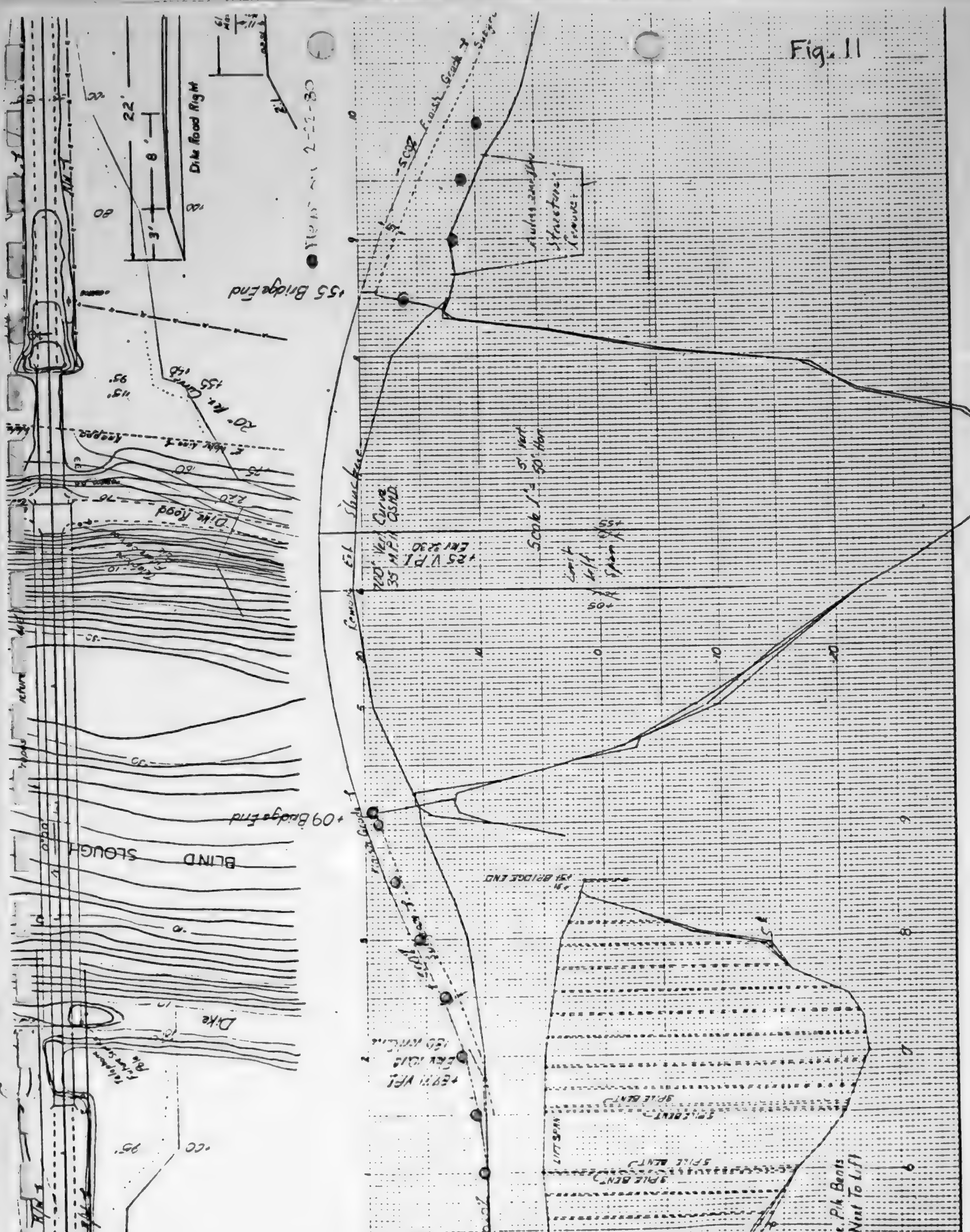

8
9
10
11
12
13
14
15
16
19
17
BLIND SLOUGH BRIDGE
BARENDSE ROAD
CLATSOP COUNTY
BR. NO. 11138A
7100

FIG. 10

Fig. 11


+55 Bridge End
+09 Bridge End
Finish Grade & Subgrade
-.50%
Scale 1" = 5' Vert. 50' Hor.
+25 V.P.I.
Elev 22.30
120' Vert. Curve
35 M.P.H. OSHD
Removal El.
Structure
Dike Road
Dike Road Rig'ht
22'
8'
3'
20° Rt. Curve
BLIND SLOUGH
Dike
1st BRIDGE END
SPILE BENTS
LIFT SPAN
Three Pile Bents Next To Lift
Lim. of Lift Span

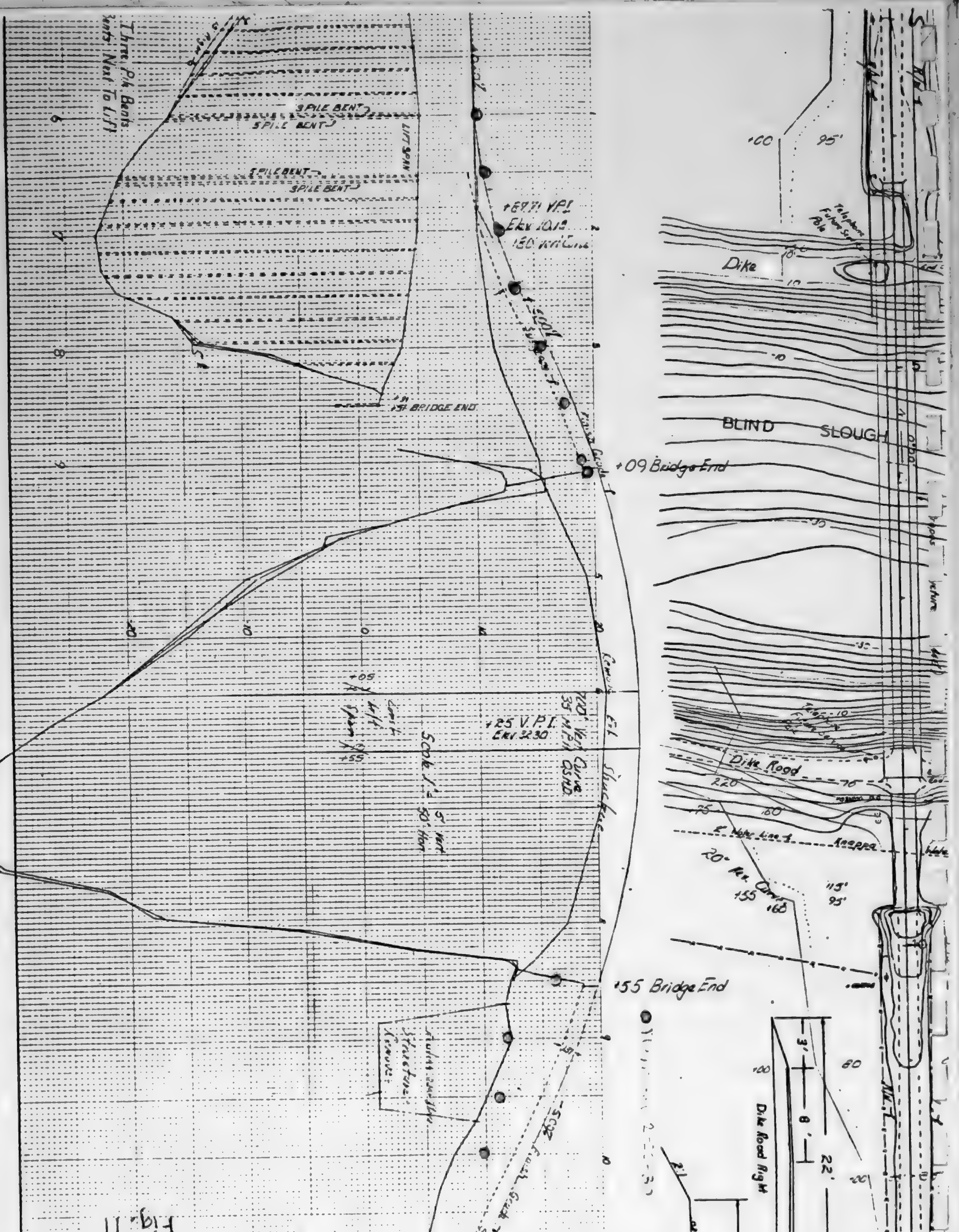

Three Pile Bents
Next To Lift
5 PILE BENT
LIFT SPAN
1st BRIDGE END
+87.71 V.P.I.
Elev. 10.19
180' Vert. Curve
+09 Bridge End
BLIND SLOUGH
Dike
Telephone Poles
Dike Road
+25 V.P.I.
Elev. 32.30
Scale 1" = 5' Vert. 50' Hor.
+05
+55
+55 Bridge End
Retaining Wall
Structure Removed
20° Rt. Curve
Dike Road Right
3'
8'
22'

Fig. 11

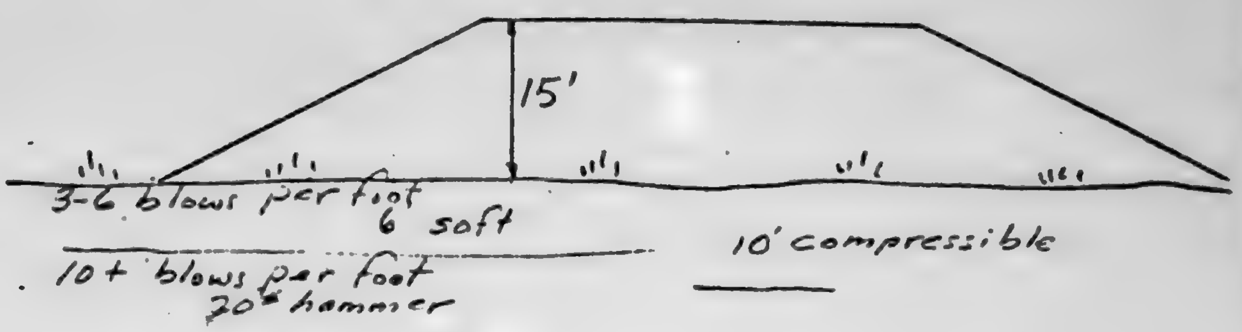
File No. Fig. 12

Sheet ... of ... Sheets

OREGON STATE HIGHWAY DIVISION

Calculations for BLIND SLOUGH, Barendse Road Bridge

Made by Fy 1-28 1972 Checked by .... 19...... Backchecked by 19



RECOMMENDATION:

Excavate foundation to 6' depth and backfill with granular material to above water surface where compacted fill may be placed.

ALTERNATE PLAN:

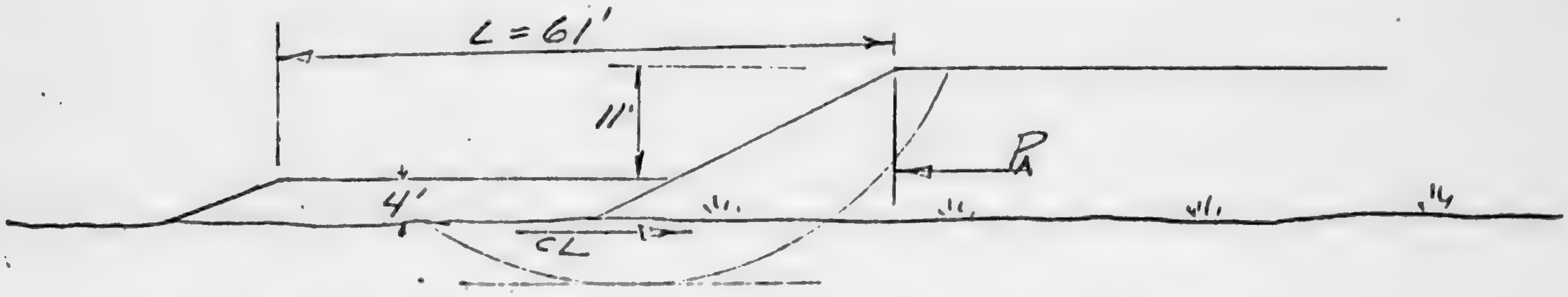
Counterbalance as shown.

Maximum safe height of fill without excavation is probably about 14 feet.

Safe design height $= \frac{14}{1.25} = 11$ feet.

Required height = 15 feet.

Required height of counterbalance = 15' - 11' = 4 feet.



Width of counterbalance CL must be made equal to $P_A = \frac{1}{2}\gamma H^2 = \frac{1}{2}\cdot 130 \cdot 15 \cdot 15 = 14600$

$$\text{safe } c = \frac{\gamma H}{6} = \frac{130 \cdot 11}{6} = 240\ \#/\text{ft}^2$$

$$L, \text{ required} = \frac{P_A}{c} = \frac{14.600\#}{240} = 61 \text{ ft}$$

Fy 1-28-72

Job No. Fig. 13

Sheet ... of ... Sheets

OREGON STATE HIGHWAY DIVISION

Calculations BLIND SLOUGH. Barendse Bridge

Made by Hy 1-28 1972 Checked by ... 19... Backchecked by ... 19...

Settlement, if foundation is not sub-excavated.

$$s = \frac{e_0 - e_1}{1 + e_0} \cdot \text{thickness} = \frac{3.2 - 2.4}{4.2} \cdot 7 = 1.3 \text{ feet}$$

$$+ \quad \frac{2.1 - 1.8}{3.1} \times 5 = \underline{0.5}$$

$$1.8 \text{ feet}$$

s = 0.2 to 0.4 after paving

Settlement, if 6' is subexcavated

$$s = \frac{2.1 - 1.7}{3.1} \cdot 6' = 0.8 \text{ feet}$$

s = 0 to 0.2 after paving

SOIL AND GEOLOGICAL EXPLORATION LOG
Construction Division

Fig. 14

Project BLIND SLOUGH FAS 757 Date 1-25-72, 19
Highway BARENDSE ROAD BRIDGE Resident Engineer LOREN [illegible]
Prefix 504-1-102-906 County CLATSOP
Equipment Used HAND PROBE, 12# HAMMER
Depth ____ Station ____ Lt. ____ C.L. ____ Rt. ____
Hole Location ____
Purpose of Work FOUNDATION INVESTIGATION
Hole No. ____

Sampler & Hammer
O.D. ____ WT. ____ FALL ____
OTHER INFORMATION ____

Soil & Rock				Drill		
Soil Type	% Pass 200	L.L. / P.I.	% Moisture	Driving Resistance Blows/ ___ in.	Depth From – To	
						HOLE # 72-103 Located S. Side & Just East of existing Structure.
					0-2'	Grassy Crust.
				5 Blows	2'-3'	
				6 "	3'-4'	
			62%	4 "	4-5	Moisture Sample. Some peat with Silt & sand-
				10 "	5-6'	
				11"	6'-7'	
				13"	7'-8'	
				16"	8'-9'	
				23"	9'-10	
			53.6%	32"	10'-11'	Moisture Sample. Mil. Sandy.
				36"	11'-12'	
				43"	12'-13'	

NOTE: Moved across to N. side to probe for depth — Run probe down to -25' depth (This represented all the steel we had). Found Conditions Same as Hole #72-102. Some friction resistance at -20'-25' depth

Water Level Water 3"-10" deep on Area
Driller ____
Recorder ____

IL AND GEOLOGICAL EXPLOR.
Construction Division

Fig. 15

Project BLIND SLOUGH FAS [illegible] Date 1-25-72, 19
Highway BARENDSE ROAD BRIDGE Resident Engineer [illegible]
Prefix ' 504 - 1422 - 906 County CLATSOP
Equipment Used HAND PROBE [illegible]
Depth ___ Station ___ Lt. ___ C.L. ___ Rt. ___
Hole Location ___
Purpose of Work Foundation Information.
Hole No. ___

Soil & Rock				Drill			Sampler & Hammer
Soil Type	% Pass 200	L.L. / P.I.	% Moisture	Driving Resistance Blows/ ___ in.	Depth From	Depth To	O.D. ___ WT. ___ FALL ___ OTHER INFORMATION ___
							HOLE # 72-101 Located N. side, 15'
							east of #2 piling Row.
					0'-15'		Probed to -15' depth. Found
							very little resistance to
							vertical pressure.
							HOLE #72-102 Moved about 3'
							North to get blow Counts.
					0-1½'		Grassy, Organic crust.
				0 Blows	1½-5'		Peaty material.
							NOTE: Wt of hammer pushed steel
							to 5' depth. This sample 3'-5
			279%				
				3 Blows	5'-6'		
				9	6'-7'		
				10	7'-8		
				11	8-9		Moisture Sample (Peaty Mt'l.
				12	9'-10		
				21	10-11		
				21	11'-12		
			236%	21	12'-13		Moisture Sample (Peaty Mt'l.
				22	13'-14		
				22	14'-15'		Water Level Area Covered by about 3"
							Driller
							Sampler

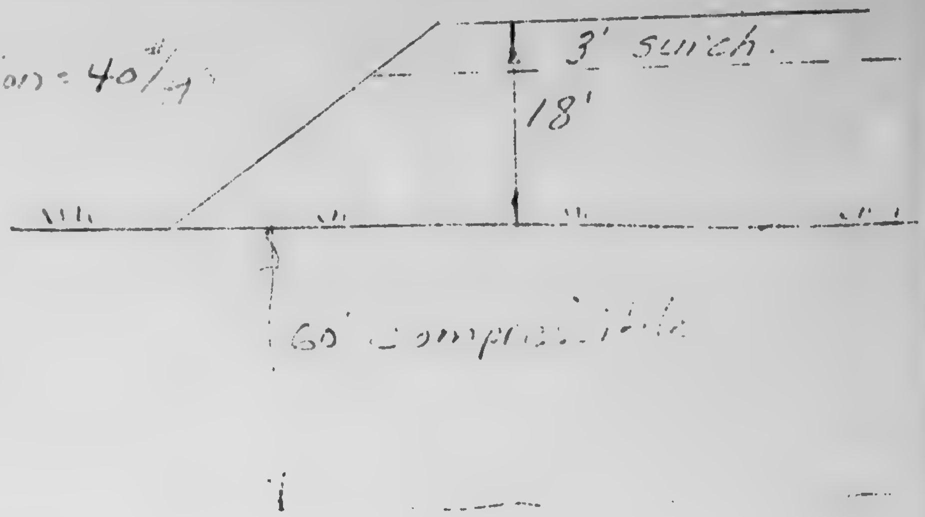
Fig. 16

Blind Slough Bridge, Barendse Road
Clatsop County

Made by FY 2-26 80

Settlement. Recalculation based on drill hole logs from Teo Blaciny, Test Holes 1, 2, 3, 4, 4-11- to 4-20-72.

$\gamma_{fill} = 120$ #/ft³, γ_b foundation = 40 #/ft³



Depth	P_o	ΔP	P_1	e_o	e_1
0-20	400 #/ft²	2160 #/ft²	2500 #/ft²	3.0	2.3
20-40	1200	"	3200	2.6	2.2
40-60	2000	"	5200	1.4	1.25

$$\text{Settlement} = \frac{e_o - e_1}{1 + e_o} \cdot \text{thickness} = \frac{3.0 - 2.3}{4.0} \times 20 = 3.5$$

$$\frac{2.6 - 2.2}{3.6} \times 20 = 2.2$$

$$\frac{1.4 - 1.25}{2.4} \times 20 = \frac{1.5}{7.2}$$

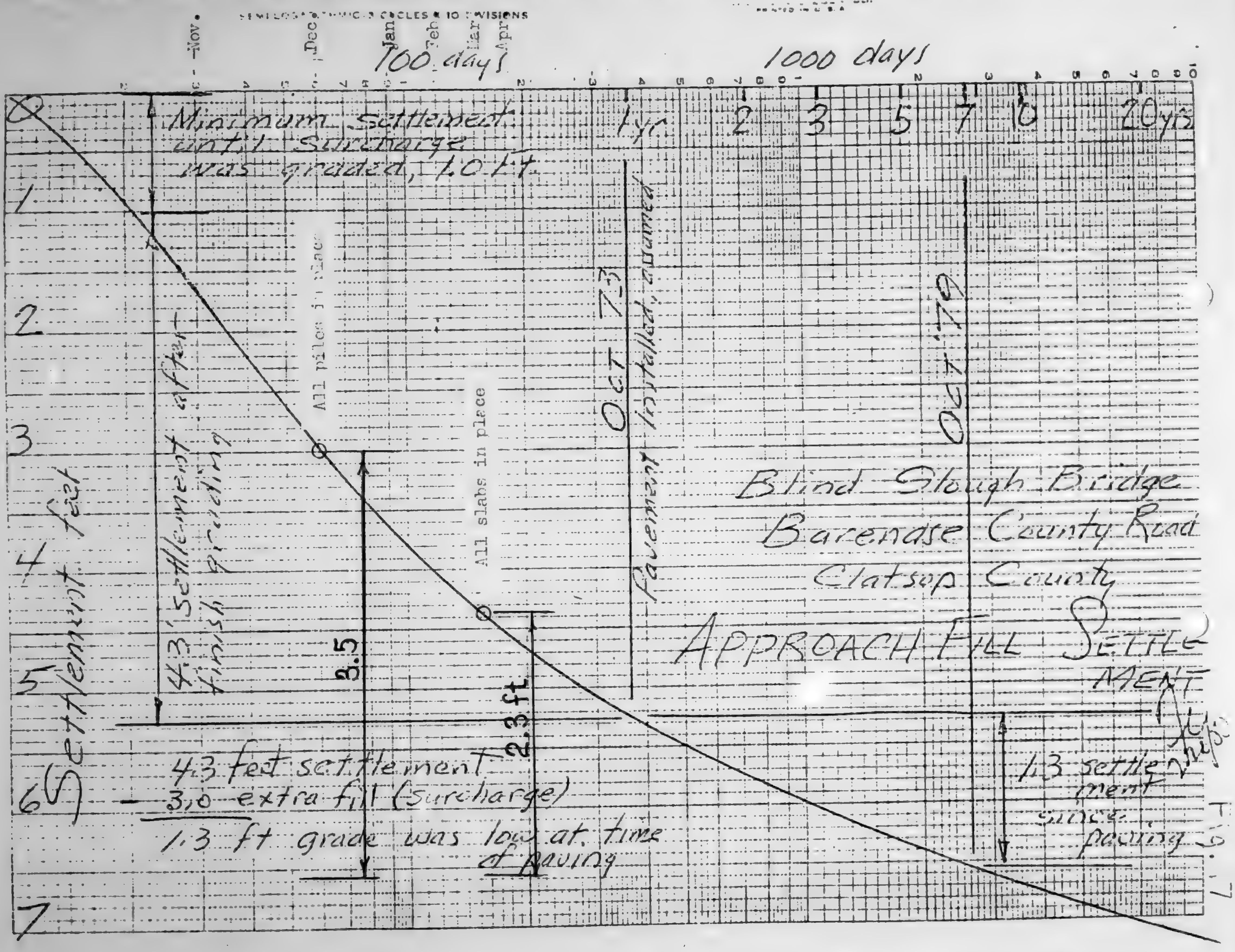
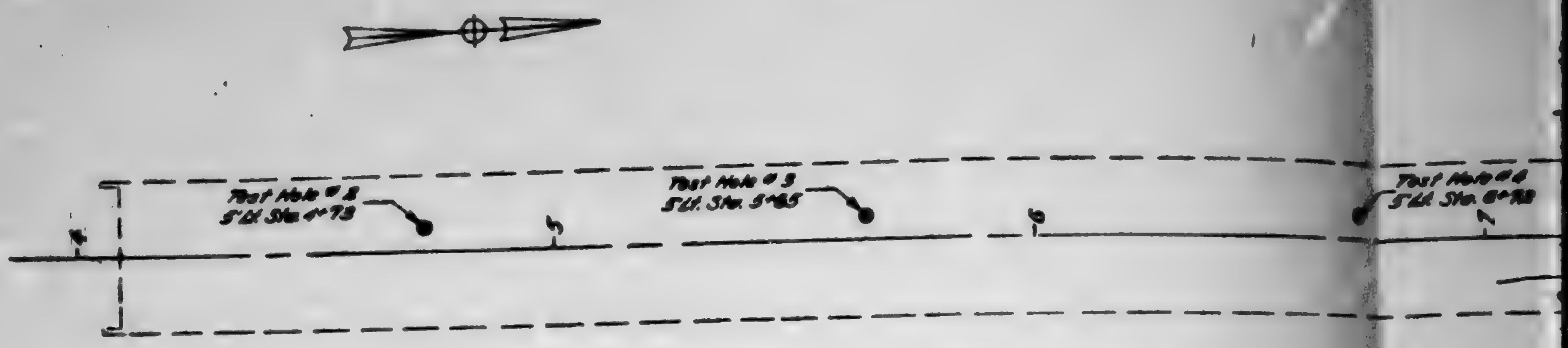
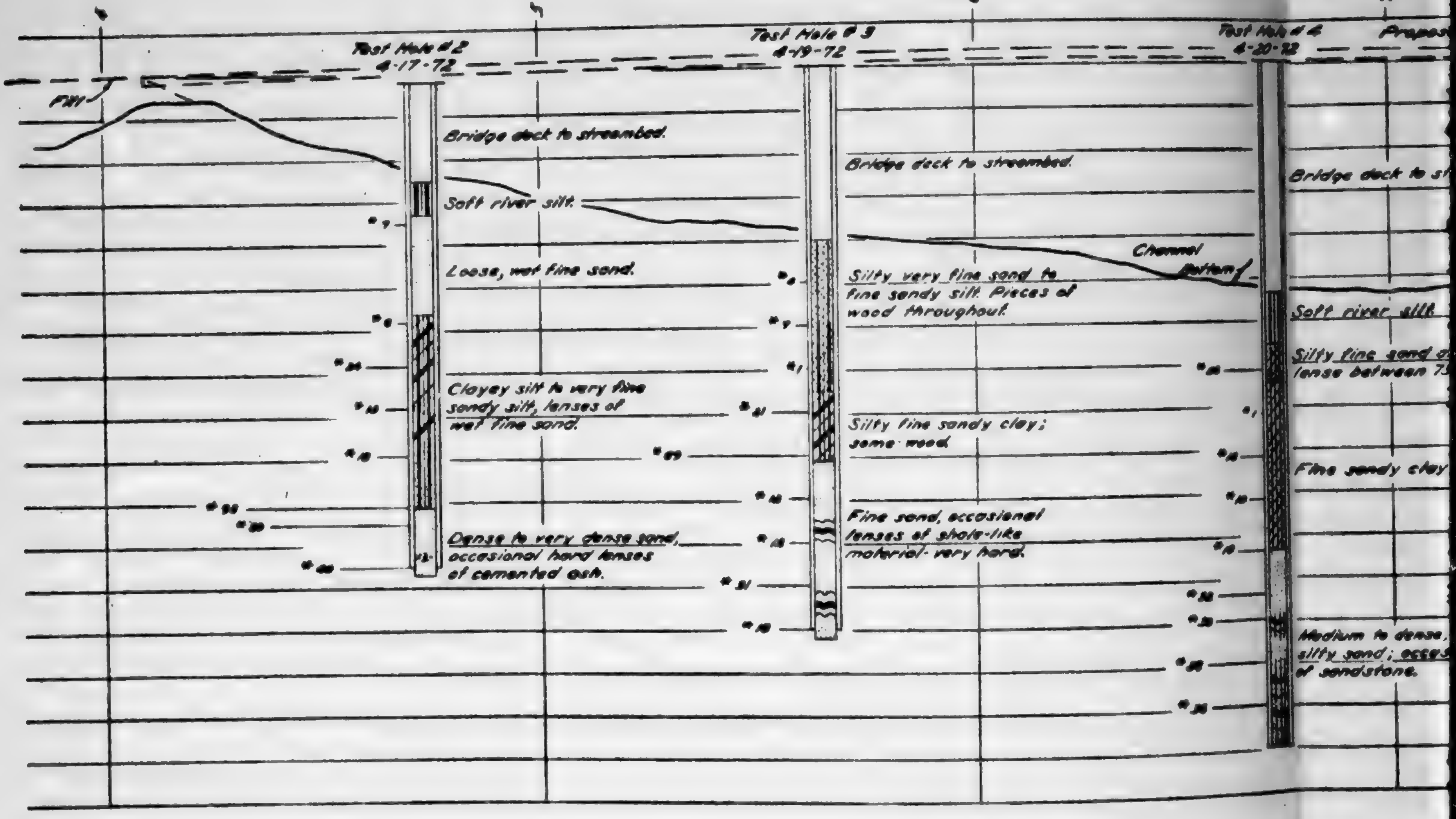

SEMI-LOGARITHMIC 3 CYCLES X 10 DIVISIONS
Nov.
Dec.
Jan
Feb
Mar
Apr
100 days
1000 days
1 yr
2
3
5
7
10
20 yrs
0
1
2
3
4
5
6
7
Settlement feet
Minimum settlement until surcharge was graded, 1.0 ft
4.3' settlement after finish grading
All piles in place
3.5
All slabs in place
2.3 ft
Oct 73
Pavement installed, assumed
Oct '79
Blind Slough Bridge
Barendse County Road
Clatsop County
APPROACH FILL SETTLEMENT
4.3 feet settlement
– 3.0 extra fill (surcharge)
1.3 ft grade was low at time of paving
1.3 settlement since paving

Fig. 7


Test Hole # 2
5' Lt. Sta. 4+73
Test Hole # 3
5' Lt. Sta. 5+65
Test Hole # 4
5' Lt. Sta. 6+58

PLAN DATA
Scale: 1"=20'

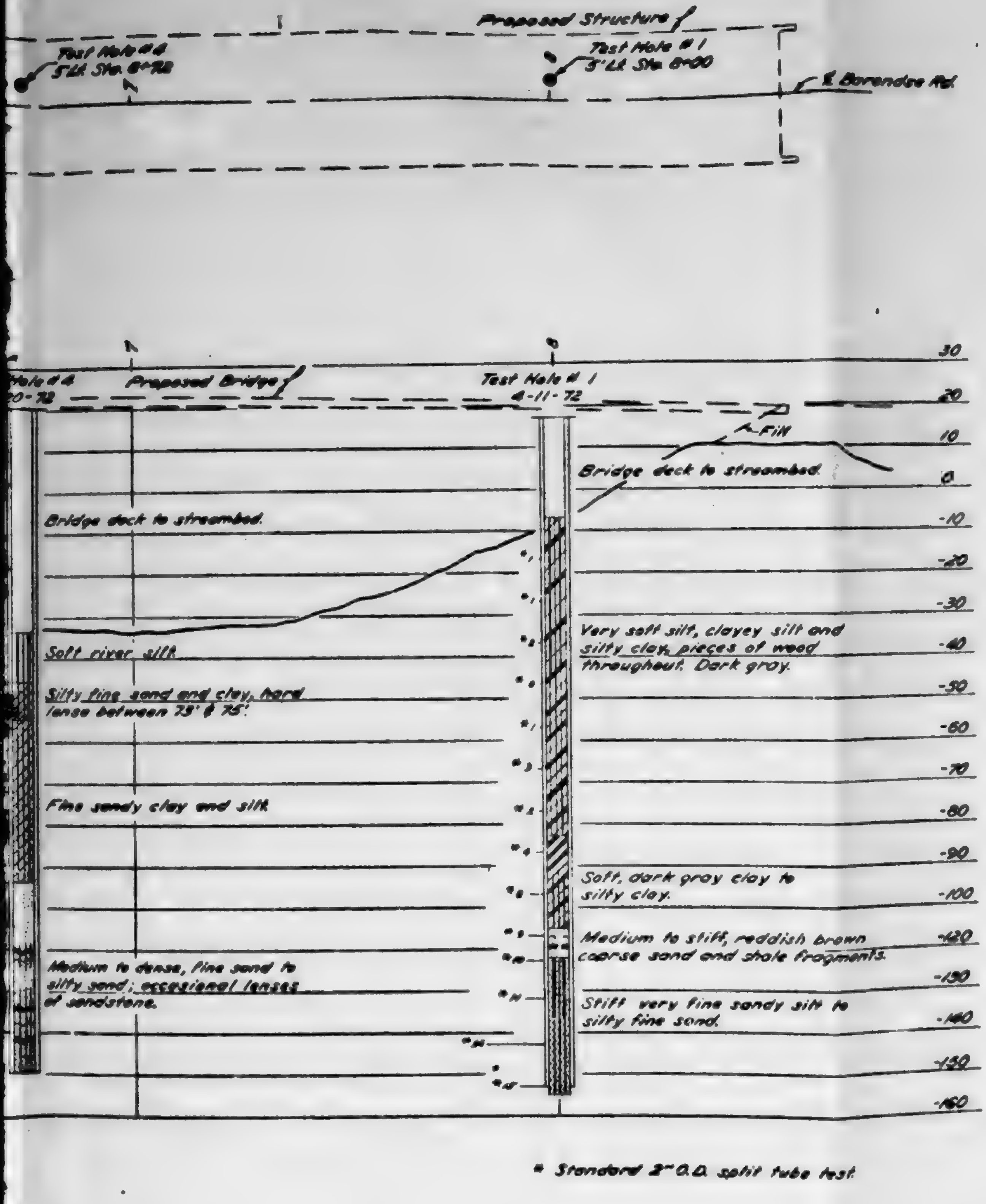

Test Hole # 2
4-17-72
Fill
Bridge deck to streambed.
Soft river silt.
Loose, wet fine sand.
Clayey silt to very fine sandy silt, lenses of wet fine sand.
Dense to very dense sand, occasional hard lenses of cemented ash.
Test Hole # 3
4-19-72
Bridge deck to streambed.
Silty very fine sand to fine sandy silt. Pieces of wood throughout.
Silty fine sandy clay; some wood.
Fine sand, occasional lenses of shale-like material- very hard.
Channel Bottom
Test Hole # 4
4-20-72
Propos
Bridge deck to st
Soft river silt
Silty fine sand
lense between 7
Fine sandy clay
Medium to dense,
silty sand; occas
of sandstone.

FOUNDATION DATA
Scale: 1"=20'

Foundation data shown on this drawing, in some instances, is a consolidation of and a revision in terminology from the original field drilling logs.

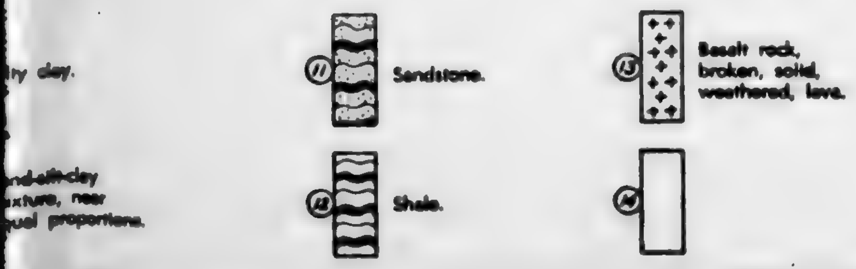
LEGEND OF MATERIALS

- ① Gravels, cobbles and boulders.
- ② Sand.
- ③ Silts.
- ④ Clays.
- ⑤ Silty gravels, gravel-silt mixture.
- ⑥ Silty sand, sand-silt mixture.
- ⑦ Clayey gravel, gravel-clay mixture.
- ⑧ Clayey sand, sand-clay mixture.
- ⑨ Silty clay.
- ⑩ Sand-silt-clay mixture, near equal proportions.


Proposed Structure
Test Hole #4
5' Lt. Sta. 6+72
Test Hole # 1
5' Lt. Sta. 8+00
℄ Barendse Rd.
Hole #4
20-72
Proposed Bridge
Test Hole # 1
4-11-72
Fill
Bridge deck to streambed.
Bridge deck to streambed.
Soft river silt.
Silty fine sand and clay, hard lense between 73' & 75'.
Fine sandy clay and silt.
Medium to dense, fine sand to silty sand; occasional lenses of sandstone.
Very soft silt, clayey silt and silty clay, pieces of wood throughout. Dark gray.
Soft, dark gray clay to silty clay.
Medium to stiff, reddish brown coarse sand and shale fragments.
Stiff very fine sandy silt to silty fine sand.
30
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
-120
-130
-140
-150
-160

* Standard 2" O.D. split tube test.

Fig. 18


lty clay.
nd-silt-clay
ixture, near
qual proportions.
11
Sandstone.
12
Shale.
13
Basalt rock, broken, solid, weathered, lava.
14

DATE	REVISION

APPROVED:

BRIDGE ENGINEER

DESIGNED ......

CHECKED ......

DRAWN JA ......

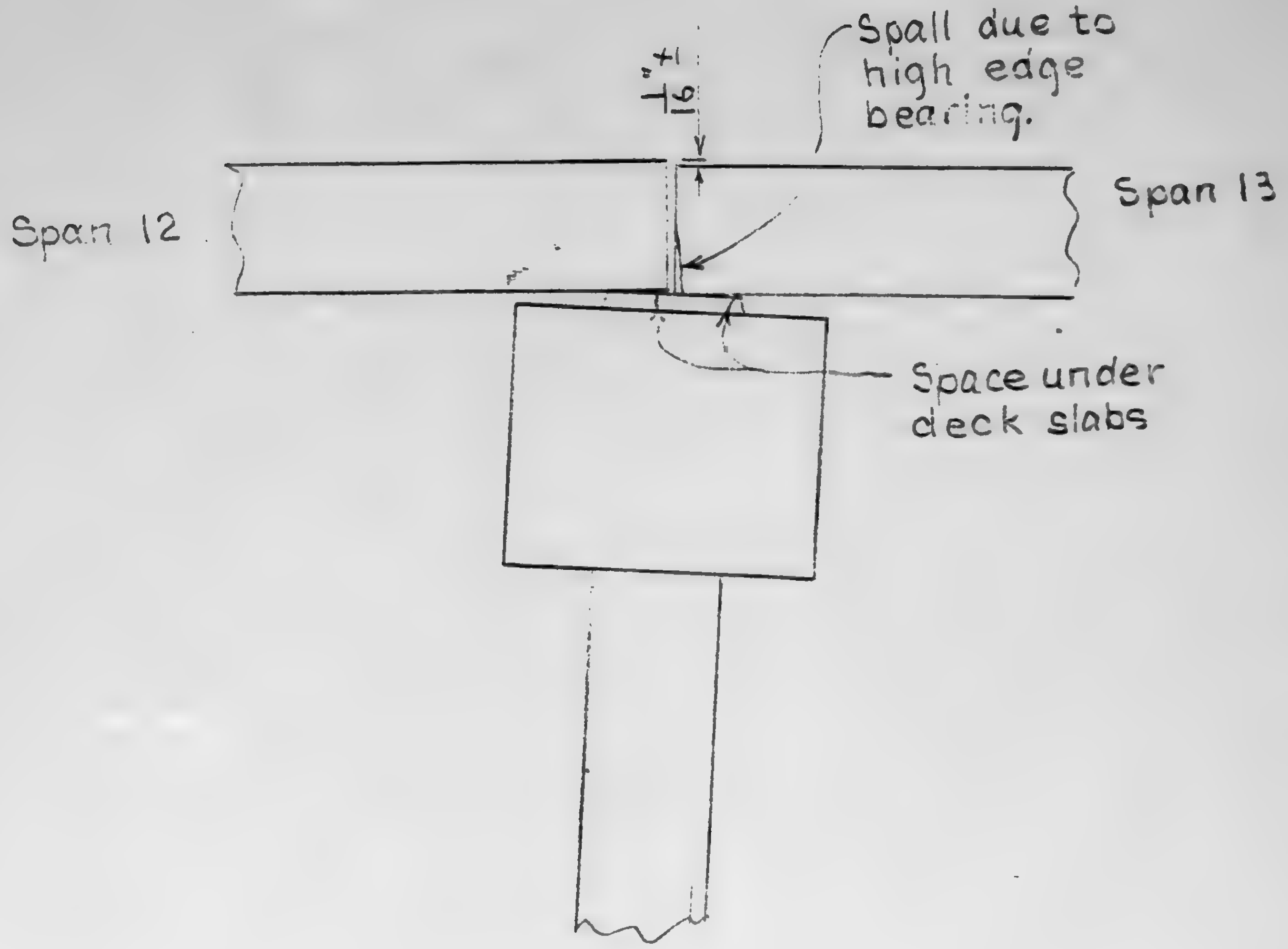
CALC. BOOK ......

OREGON STATE HIGHWAY DEPARTMENT
BRIDGE DIVISION

BLIND SLOUGH BRIDGE
BLIND SLOUGH BR. SECTION
BARENDSE ROAD CLATSOP COUNTY

FOUNDATION DATA

DATE April 1972 SHEET 1 OF 1
BRIDGE NO. 11138A DRAWING NO. 28202


Spall due to high edge bearing.
1/16"±
Span 12
Span 13
Space under deck slabs

EAST END OF BENT 12

Fig. 19

Fig. 20

5

Blind Slough
FE

2-7-80

Clatsop
11138A

Calculate long-term shortening per ACI formulas

Assume slabs were 30 days old when placed, (7x365)= 2595 days now

Shrinkage

$SH_T = \left(\frac{T}{55+T}\right) SH_u$ x correction factors

For 1. steam cured
2. cured 1-3 days
3. Relative humidity 70% C.F = 0.70
4. Ave. thickness 5" C.F = 0.79
5. Slump 2.6"
6. Cement content = 7.35 bags/c.y
7. fines = 50%
8. air content = 3.0 % C.F = .95

SH_u = 0.00073 x .7 x .79 x .95 = .0003592 in/in

SH to present = .0003592 $\left(\frac{2555}{55+2555}\right)$ = .0003517 in/in

SH to 30 days = .0003592 $\left(\frac{30}{55+30}\right)$ = $\underline{.0001268}$

SH 30 days to 2555 days = .0002249 in/in

" " " " " for 442' = $\underline{.0994 \text{ ft}}$

Creep

$C_T = \frac{T^{0.6}}{(10+T^{0.6})} C_u$ where C_u = 2.35 (initial strain) correction factors

CF for 70% humidity = 0.80 for 15" thickness = 0.85

∴ C_u = .8 x .85 x 2.35 (initial strain) = 1.598 (initial strain)

for 20' x 15' slabs w 18 strands and 4000 psi fci

Initial strain = 18 x 28.9k / (569 in² x 3600 k/in²) = .000254 in/in

then C_u = 1.598 x .000254 = .000406 in/in

C_{2555} = .000406 $\left(\frac{2555^{0.6}}{10+2555^{0.6}}\right)$ = .0003723

C_{30} = .000406 $\left(\frac{30^{0.6}}{10+30^{0.6}}\right)$ = $\underline{.0001766}$

$C_{30-2555}$ = .0001958 in/in

" for 442' = $\underline{\underline{.0865 \text{ ft}}}$

Total SH + C = .0994 + .0865 = $\underline{\underline{.1859 \text{ ft}}}$ = $\underline{\underline{2\frac{1}{4}"}}$

Fig. 21

6

Clatsop

11138A

[illegible]

2-7-80

Long term shortening, cont'

If slabs were 5 days old when placed.

$$SH_{2555} = .0003517$$

$$SH_{5} = .0003592\left(\frac{5}{55+5}\right) = \underline{.0000299}$$

$$SH_{5-2555} = .0003218$$

$$C_{2555} = .0003723$$

$$C_{5} = .000406\left(\frac{5^{0.6}}{10+5^{0.6}}\right) = \underline{.0000844}$$

$$C_{5-2555} = .0002879$$

SH + C from 5 days to 2555 days for 442' = $(.0003218 + .0002879) \times 442 = \underline{\underline{.269\text{ ft}}}$

$= 3\frac{1}{4}''$

Form 81-734-3049X

Fig. 22

OREGON STATE
HIGHWAY DIVISION

TABULATION SHEET

SHEET 7 OF ...... SHEETS

BLIND SLOUGH BR.

2-6-80

Change in span length = $\Delta L = \left(\text{span} \div \cos \text{Arctan} \left(\frac{\Delta M - \Delta P}{\text{span}} \right) \right) - \text{span}$

where
ΔM = measured elevation difference
ΔP = plan elevation difference

	PLANS			MEASURED 12-6-79						
Span	El. Bk.	El. Ah.	ΔEl_P	El. Bk.	El. Ah.	ΔEl_M	$\Delta M - \Delta P$	Span L	ΔL	$\Sigma \Delta L$
1	19.78	20.58	-.80	0.00	1.02	-1.02	.22	28	.00086	[illegible]
2	20.58	21.27	-.69	1.02	1.84	-.82	.13	"	.00030	.00116
3	21.27	21.85	-.58	1.84	2.55	-.71	.13	"	.00030	.00146
4	21.85	22.32	-.47	2.55	3.07	-.52	.05	"	.00004	.00150
5	22.32	22.68	-.36	3.07	3.45	-.38	.02	"	.000007	.001507
6	22.68	22.92	-.24	3.45	3.70	-.25	.01	"	[illegible]	[illegible]
7	22.92	23.05	-.13	3.70	3.73	-.03	-.10	"	.00018	.001689
8	23.05	23.01	.09	3.73	3.73	0	.04	50	.00002	.00170
9	23.01	22.83	.18	3.73	3.62	.11	.07	28	.00009	.001799
10	22.83	22.54	.29	3.62	3.31	.31	-.02	"	.000007	.001806
11	22.54	22.14	.40	3.31	2.90	.41	-.01	"	.000002	.001808
12	21.14	21.62	.52	2.90	2.22	.68	-.16	"	.00046	.002268
13	21.62	20.99	.63	2.22	1.02	1.20	-.57	"	.00580	.0081
14	20.99	20.25	.74	11.02	9.46	1.56	-.82	"	.01200	.0200
15	20.25	19.70	.55	9.46	6.92	2.54	-1.69	"	.05096	.0797

BLIND SLOUGH BRIDGE
BRIDGE No 1113BA
CLATSOP Co.

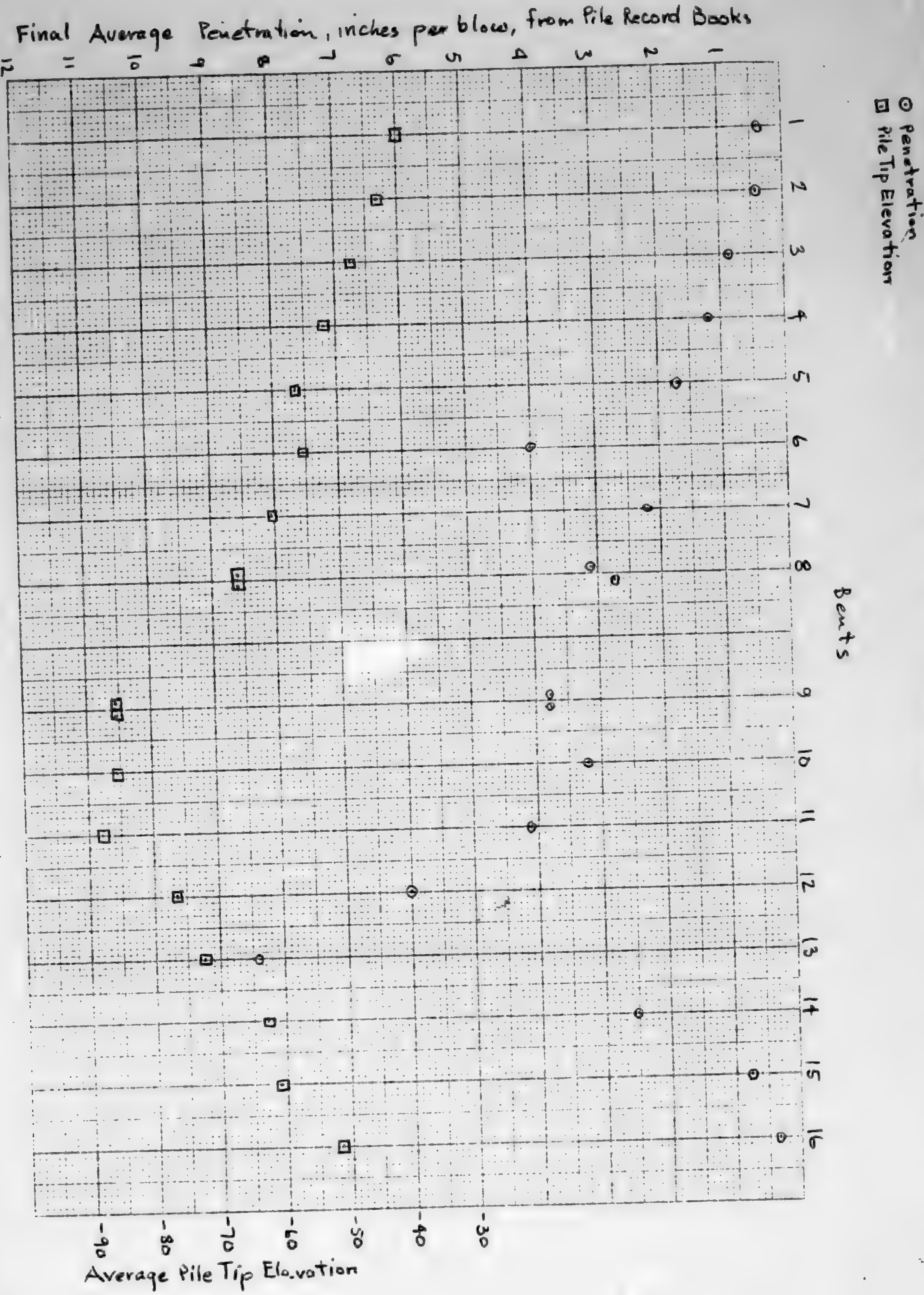
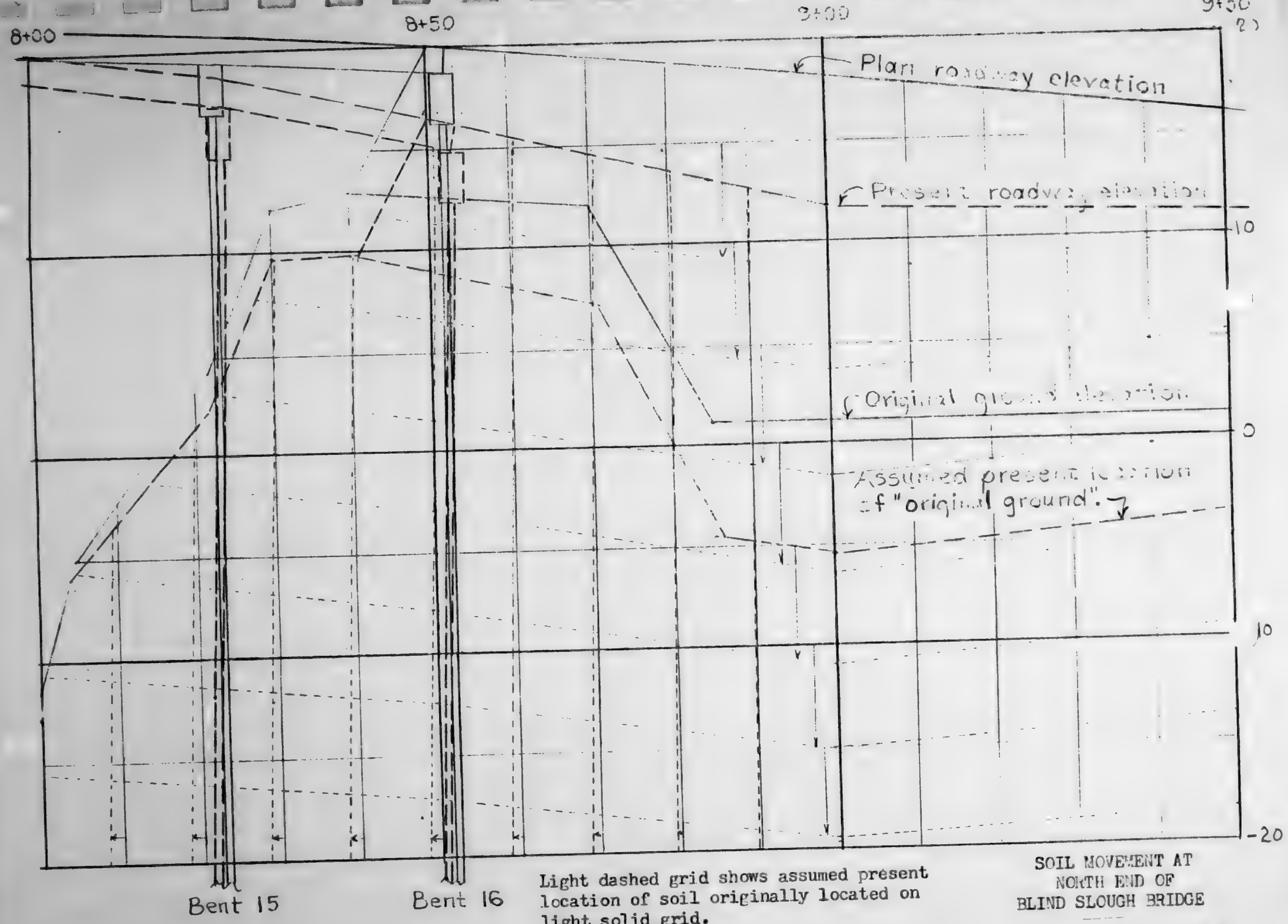


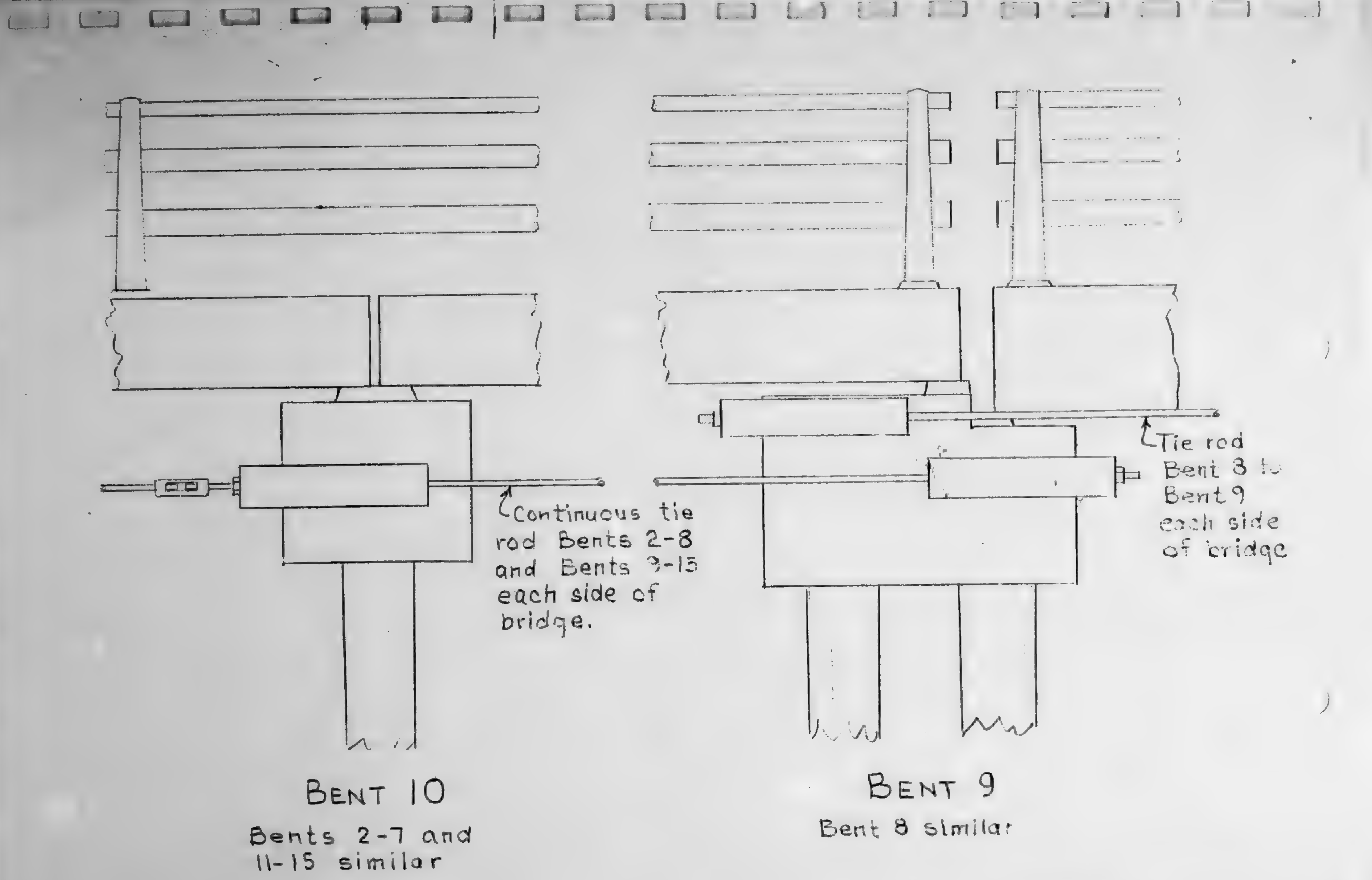
Fig. 23


8+00
8+50
9+00
9+50
20
10
0
10
-20
Plan roadway elevation
Present roadway elevation
Original ground elevation
Assumed present location of "original ground".
Bent 15
Bent 16

Light dashed grid shows assumed present location of soil originally located on light solid grid.

SOIL MOVEMENT AT
NORTH END OF
BLIND SLOUGH BRIDGE

Fig. 24



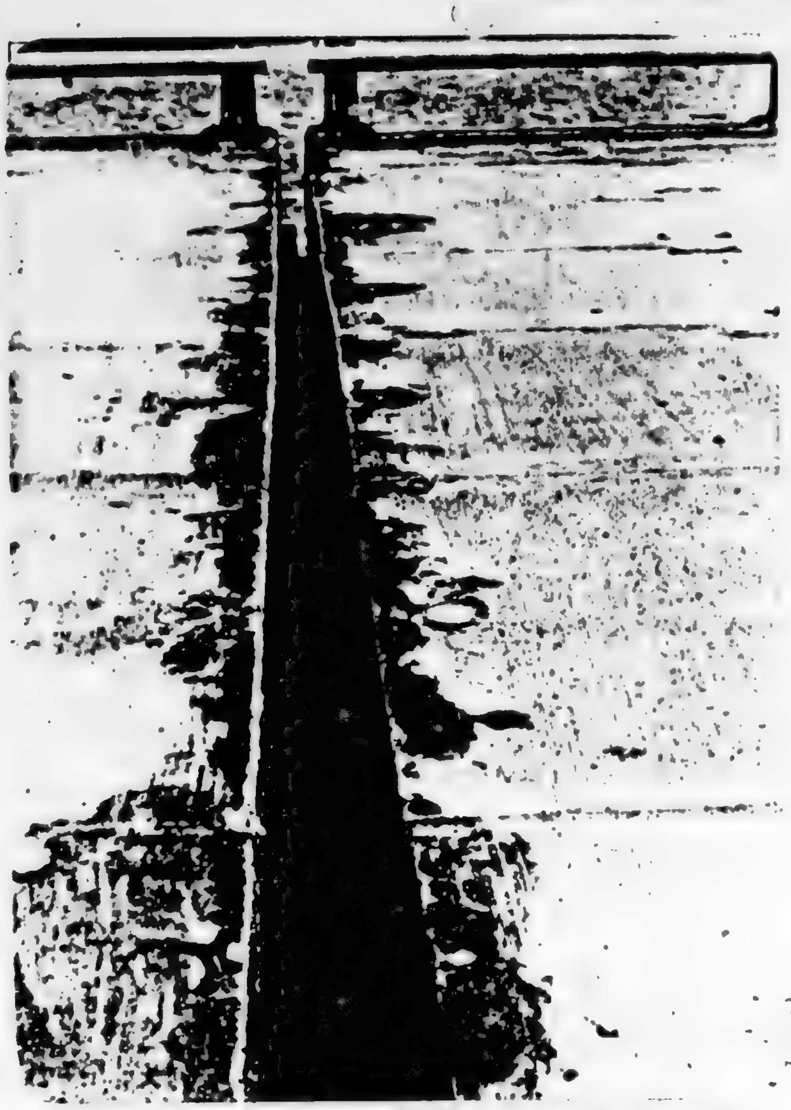
Continuous tie rod Bents 2-8 and Bents 9-15 each side of bridge.
Tie rod Bent 8 to Bent 9 each side of bridge
BENT 10
Bents 2-7 and 11-15 similar
BENT 9
Bent 8 similar

PROPOSED TIE RODS
BLIND SLOUGH BRIDGE
CLATSOP COUNTY

Fig. 25

AB 5-1-80

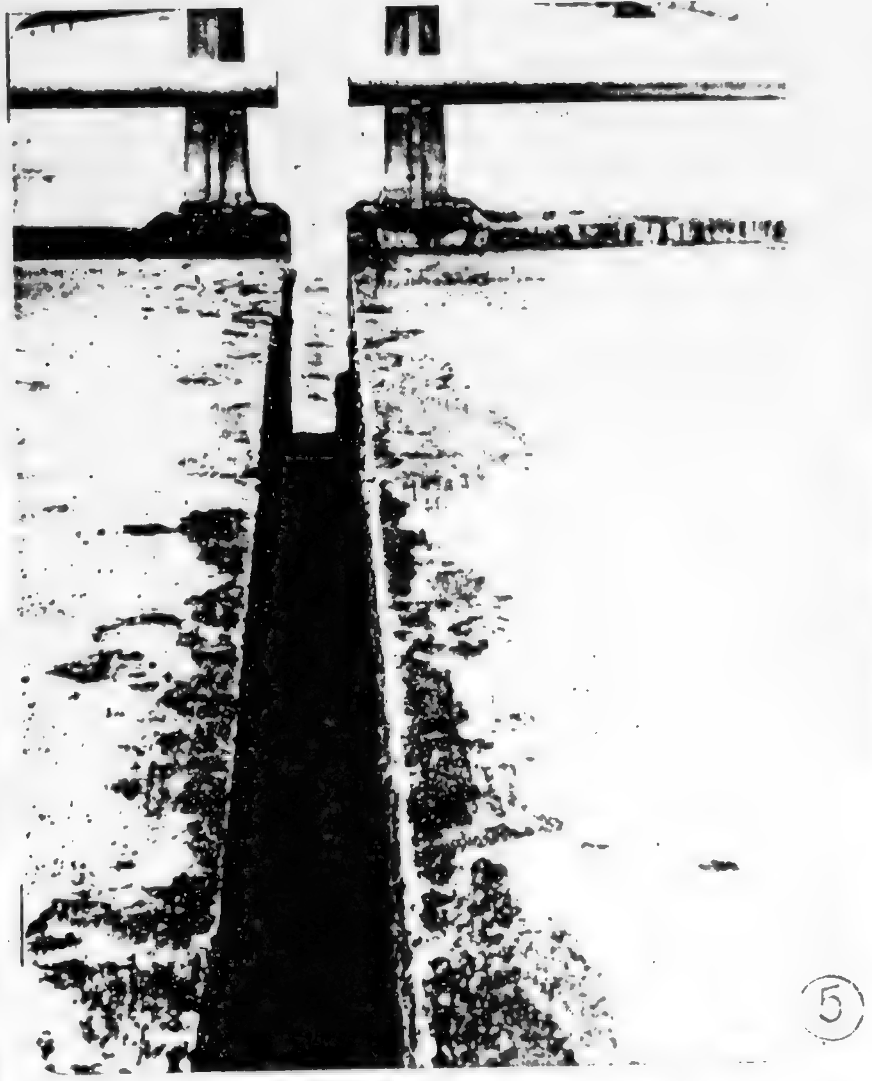
Views of easterly part of Bent 9



1

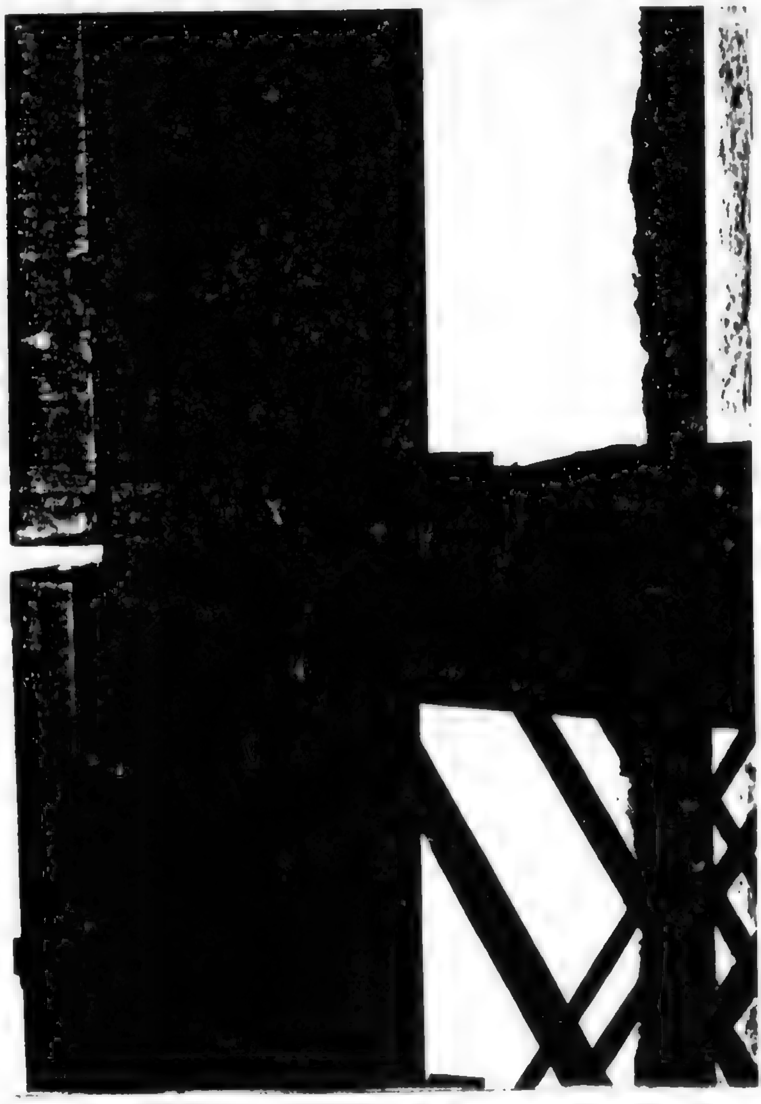
3

[illegible] of westerly part of Bent 9


⑤

⑥

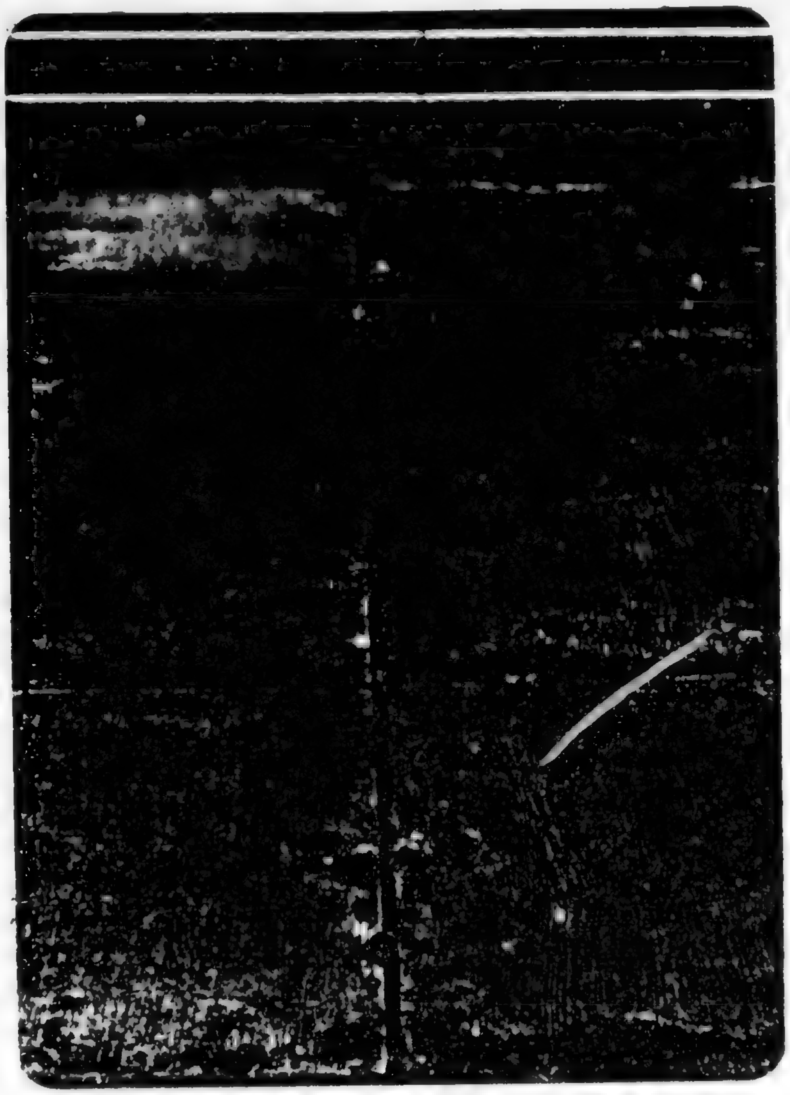
⑦


⑧

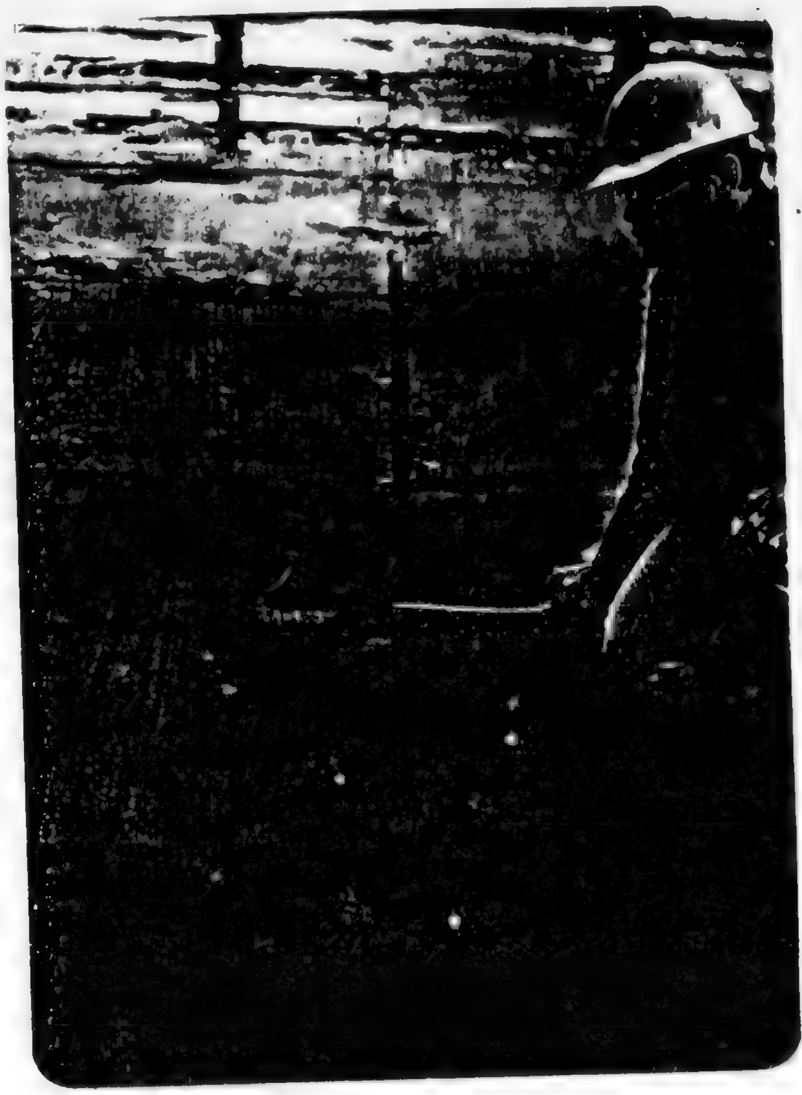
⑨ Bent 8, East side.

⑩ Bent 8, West side

⑪ Bent 9, spalls at ends of both Span 8 and Span 9 slabs.

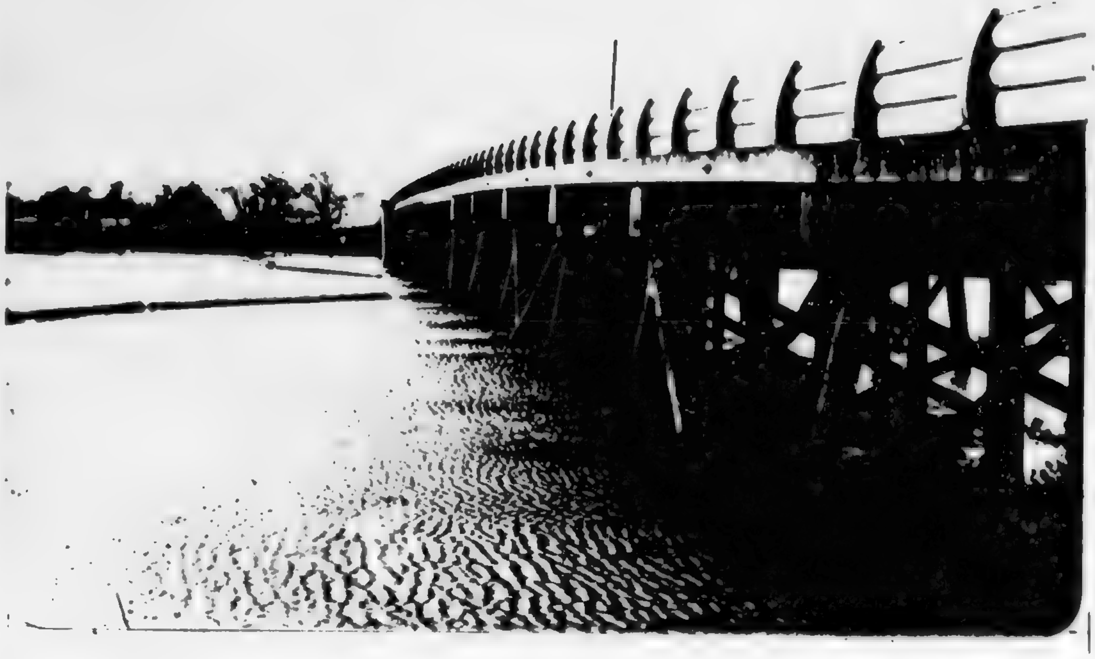


⑫ Joint grout missing but little apparent movement at Bent 15

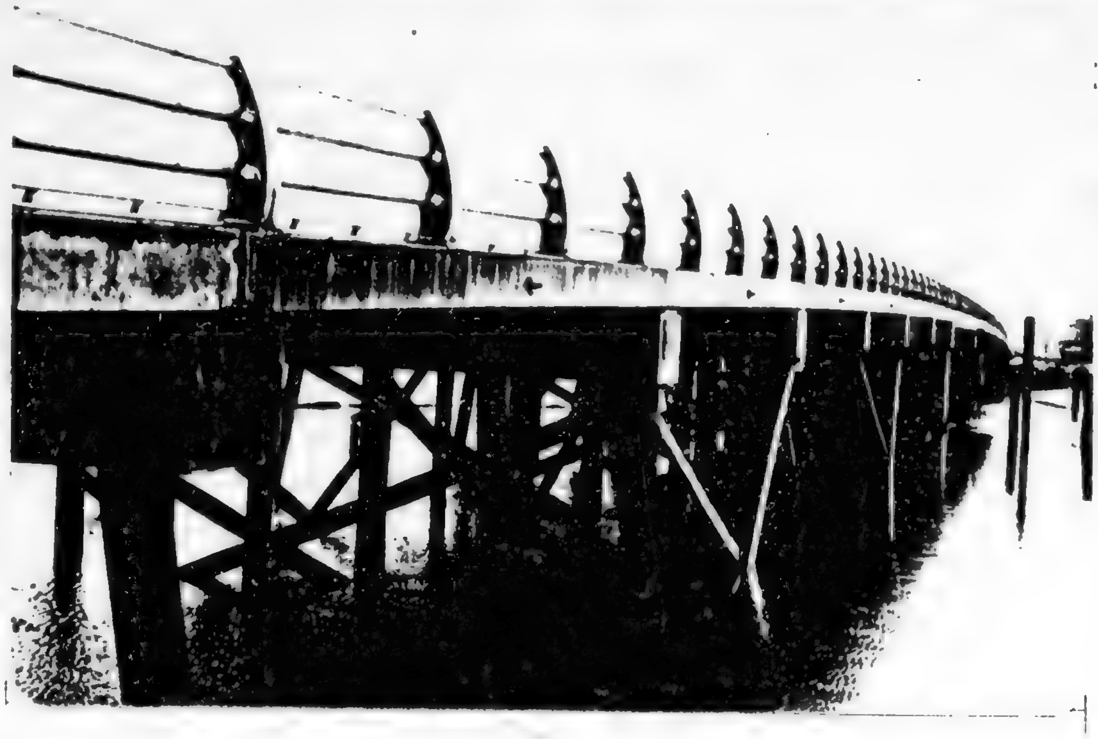


⑬ Wide joint but little apparent movement

⑭ [illegible] rd small at end of deck slab



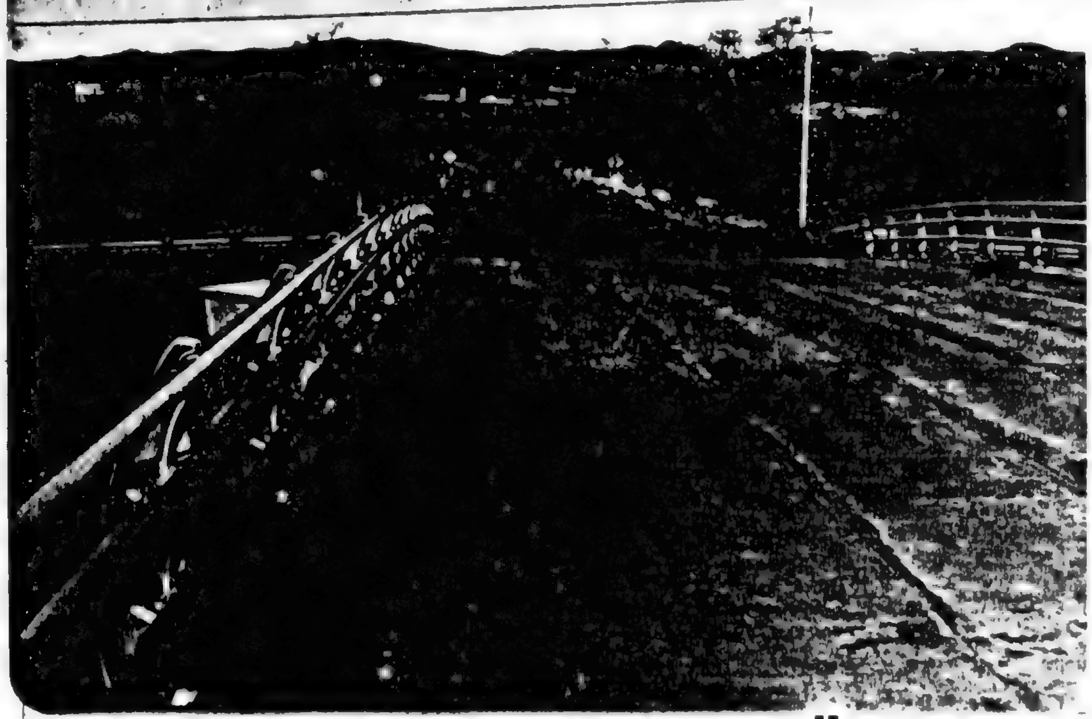
⑮ Northerly view along west side of bridge.



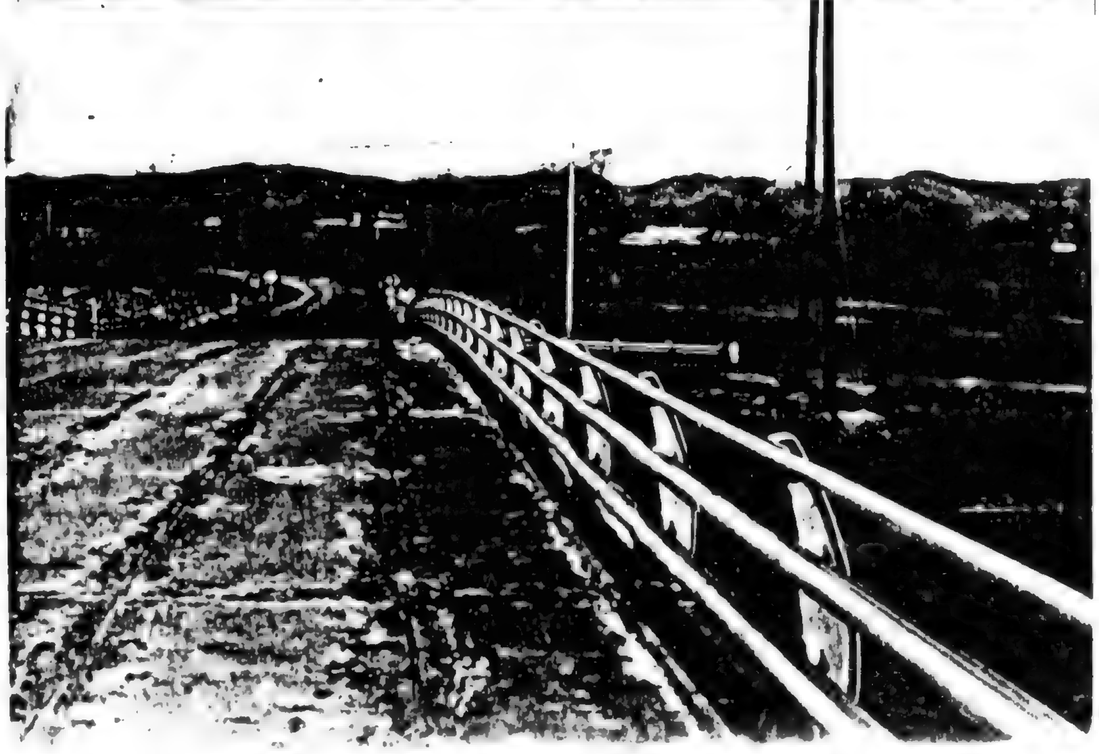
⑯ Northerly view along east side of bridge.

⑰ Northwesterly view along east side of bridge.

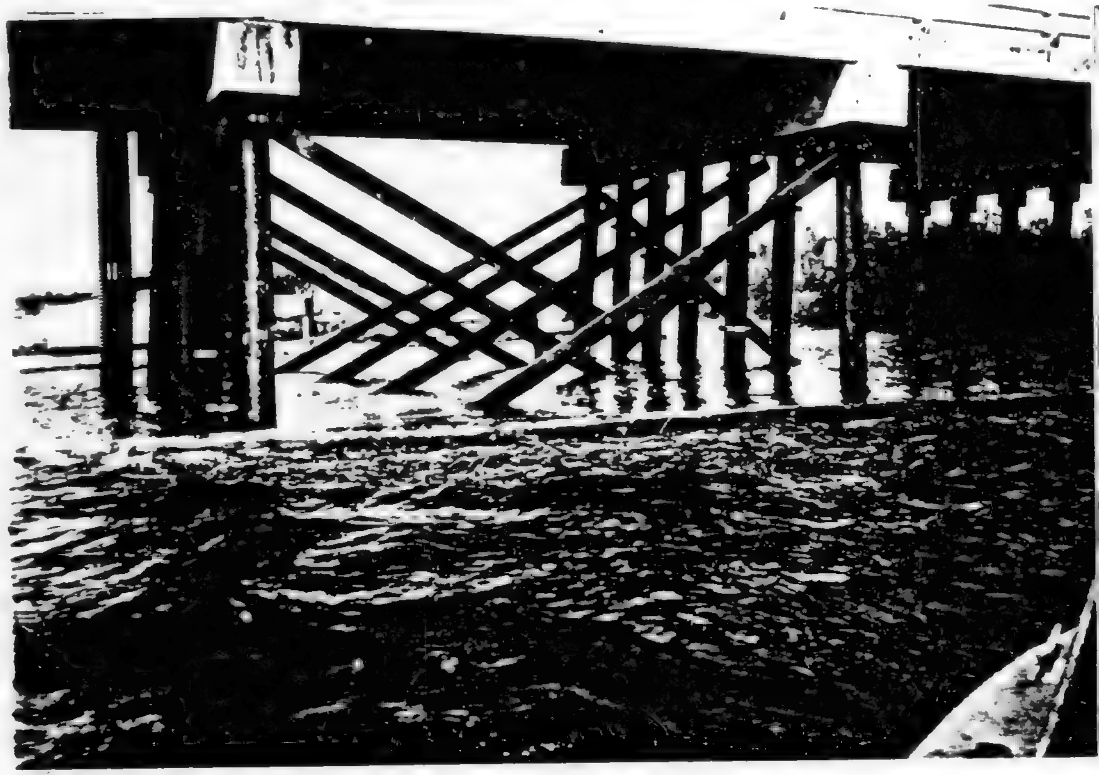
⑱ Northerly view along bridge deck.



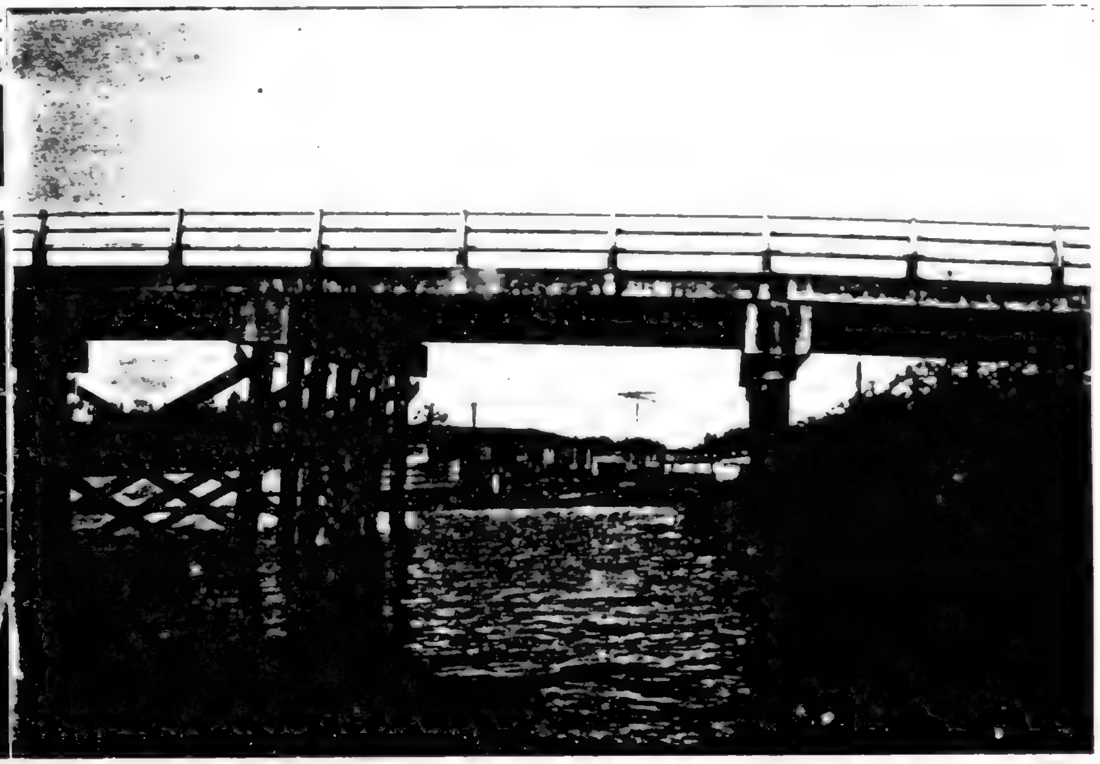
⑲ Northerly view along west rail.



⑳ Northerly view along east rail.

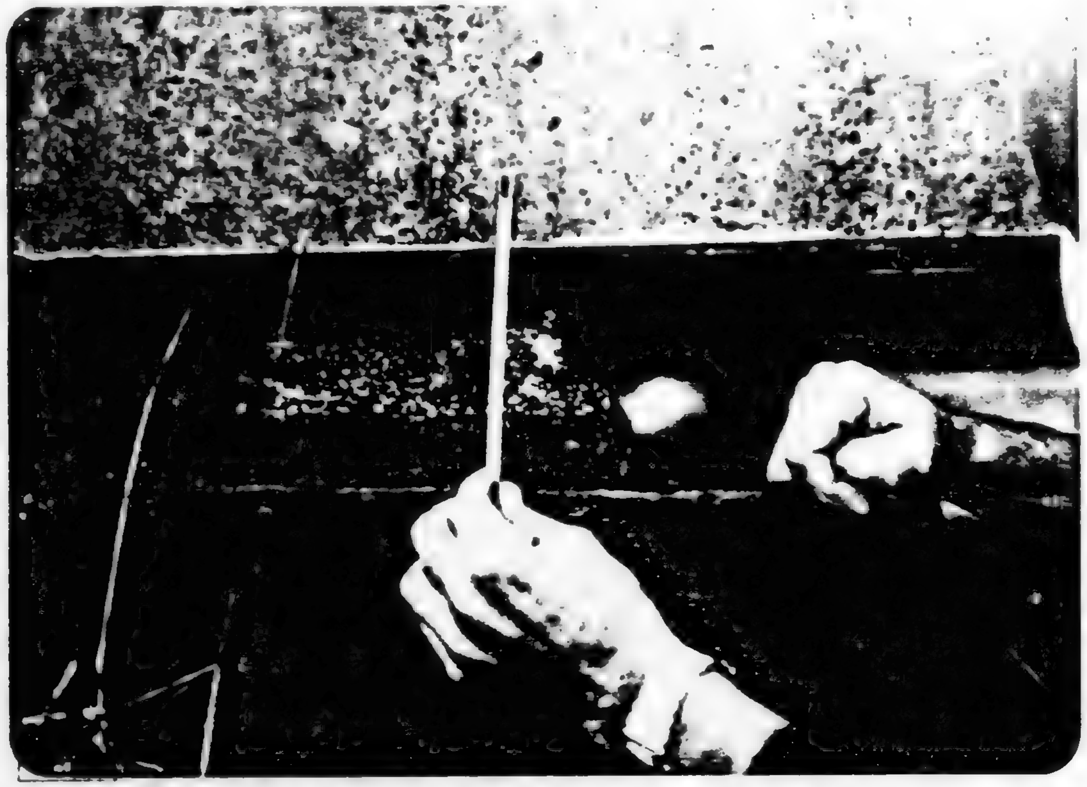


(21)



(22)

Bents 13, 14 & 15. [illegible] of piles have moved south [illegible] leaving piles [illegible].



(23) Bent 16. Gap above grout pad is due to settlement [illegible] of pile cap.

(24) Easterly view along north dike. Second power [illegible] rotation of base. [illegible].

Form 81-734-3030 9364

Br # 11138 A

OREGON STATE HIGHWAY DIVISION

AUTHORITY FOR SUSRVEY

Section Blind Slough Bridge

Highway Barendse Road FAS757

County Clatsop

Date January 14, 1980

Authorization No. 1

Survey Prefix 204-1444
(Assigned by Salem office)

Description of termini, route; length, etc.:

Blind Slough Bridge

Purpose of survey:

To make a design and provide drawings for repair of a county-owned bridge.

BEN GIFFORD
NOT IN PMS

Estimate of cost:

927 $1,000.00

INSTRUCTIONS

Submit four copies to Salem. After approval by the Assistant State Highway Engineer, one copy will be sent to the Regional Engineer and one copy to the Resident Engineer.

This form does not constitute authority for making survey until approved and returned.

Submit separate order for each survey.

Total estimated cost of survey	$1,000.00
Previous authorization	
Additional authorization requested	
Additional authorization approved (Salem)	
Total all authorizations approved (Salem)	

Requests made by: Walter J. Hart ~~Field Engineer~~ Br.

Recommended for Approval: Regional Engineer

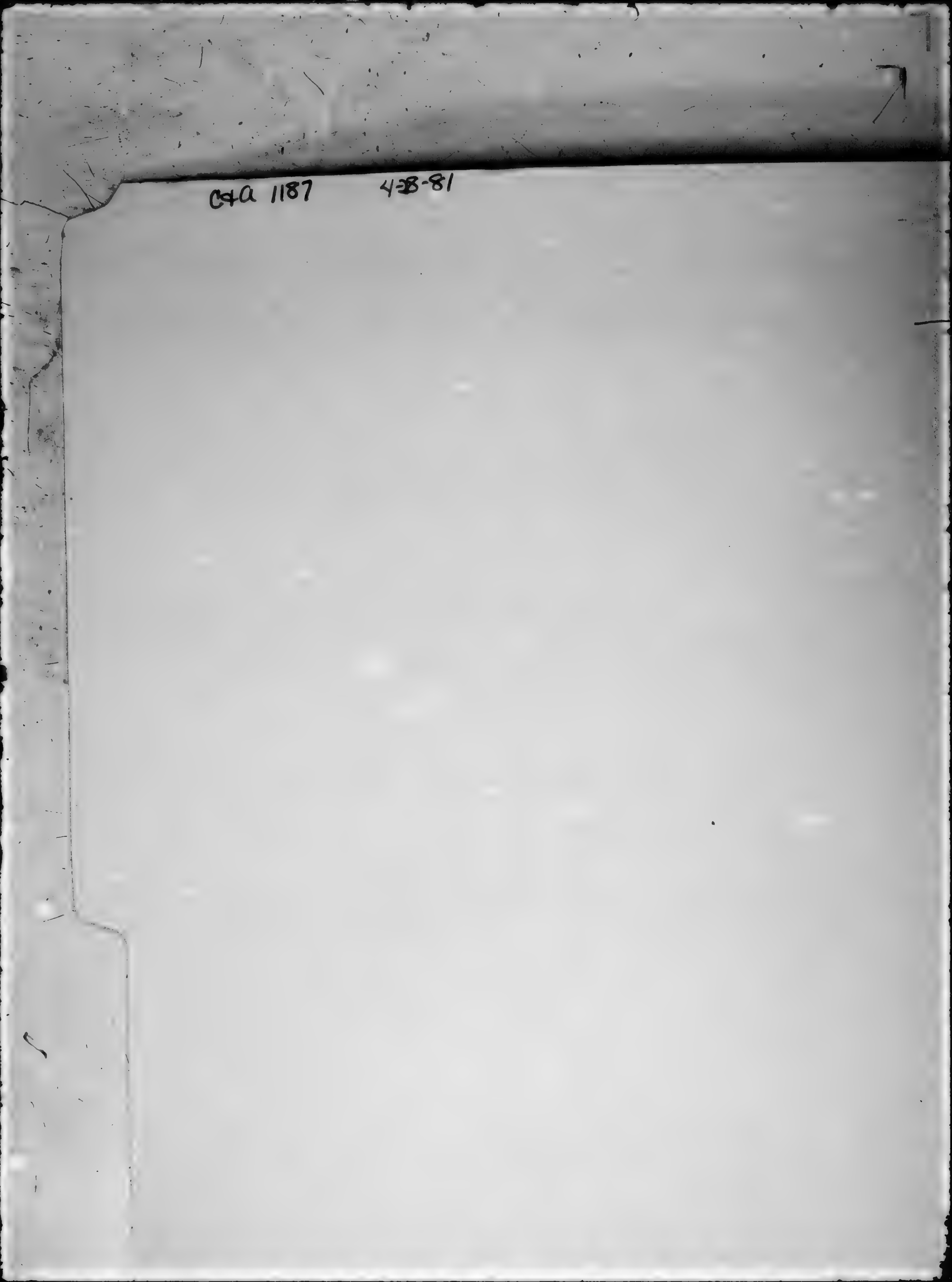
Recommended for Approval: Frank E. Perpin Location Engineer

Approved: Assistant State Highway Engineer

N

SP*19760-734

1981 Pacific Hwy. E. at Lana 9365
Ave. NE (Salem) Sec.
(Traffic Signal Installation)



C&A 1187 4-28-81

9365

Form Approved: OMB No. 2125-0529
Exp. Date 8/31/85

TO BE COMPLETED BY FHWA MONTHLY TRANSACTION NUMBER 7-291	U.S. Department of Transportation **Federal Highway Administration**	State Oregon
PROJECT REPORT NUMBER	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	County Marion
MODIFICATION NUMBER 2	7-21-86	Project Number HES-26(22)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 30, 19 80,

is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 75,236	$ 70,230
Federal funds	$ 67,712	$ 63,207
Other revisions		

This modification is made for the following reasons: To release funds for use on other projects.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 21ST day of JUL, 1986

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By Donald L. Ross
for
Manager, Program Section
(Title)

For: Larry Rulien
XXXX

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)
For: Dale E. Wilken

Form PR-2A
(Rev. 7-83)

Previous editions are obsolete

Gen Files

OREGON STATE HIGHWAY DIVISION
SALEM, OREGON JULY 15, 1986

FEDERAL AID PROJECT NO. HES-26(22)

PACIFIC HWY. E. AT LANA AVE. N.E. SALEM
PACIFIC HIGHWAY
MARION COUNTY

REVISED PROJECT AGREEMENT ESTIMATE

TYPE CODE P.E.
PRELIMINARY ENGINEERING

Preliminary Engineering	All Required $ 8,130.00

ITEM	UNIT PRICE	ORIGINAL QUANTITY	ORIGINAL AMOUNT	REVISED QUANTITY	REVISED AMOUNT
Temporary Signs	$ 5.00	185	$ 925.00	39.5	$ 197.50
Temporary Barricades	25.00	6	150.00	----	----
Flagmen	22.50	30	675.00	----	----
			$ 1,750.00		$ 197.50

To Release	$ -1,552.50
Subtotal from estimate of Oct. 5, 1981	57,150.00
Subtotal	$ 55,597.50
Engineering	6,502.50
Total	$ 62,100.00

SUMMARY OF FUNDS (90%)

Description	Appn Code	Total Cost	Federal Funds	State Funds
Preliminary Engineering	141	$ 8,130.00	$ 7,317.00	$ 813.00
Traffic Signal	141	62,100.00	55,890.00	6,210.00
Total		$ 70,230.00	$ 63,207.00	$ 7,023.00

Group 1	100%
Contract No.	9365
Prefix:	24-1986
Prefix:	C09365

RLC:bkb

9365

STATE COPY

TO BE COMPLETED BY FHWA MONTHLY TRANSACTION NUMBER 10-65	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State Oregon
PROJECT REPORT NUMBER	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	County Marion
MODIFICATION NUMBER 1	10-9-81	Project Number HES-26(22)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 30, 1980, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 9,800.00	$ 75,236.00
Federal funds	$ 8,820.00	$ 67,712.00
Other revisions		

This modification is made for the following reasons: Adding construction phases.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 9th day of October, 1981.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Exec. Asst. to State Hwy. Engineer
(Title)

~~XX~~ For: H.S. Coulter

State Highway Engineer
(Title)

By ______________________

____
(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Oregon State Highway Division
Salem, Oregon October 5, 1981

Federal Aid Project
No. HES-26(22)

Pacific Hwy. E. at Lana Ave. N.E. Salem
Pacific Highway
Marion County

REVISED PROJECT AGREEMENT ESTIMATE

Type Code P.E.
Preliminary Engineering

Preliminary Engineering		All Required	$ 9,800.00

Type Code Y031
Traffic Signal at Lana Ave.

Temporary Protection and Direction of Traffic		All Required	$ 950.00
Temporary Signs	185 Sq. Ft.	5.00	925.00
Temporary Barricades	6 Each	25.00	150.00
Flagmen	30 Hour	22.50	675.00
Sidewalk Ramps	4 Each	375.00	1,500.00
Traffic Signal Installation, Complete		All Required	47,015.00
Fire Pre-emption System, Complete		All Required	4,135.00
			$55,350.00

Anticipated Items

Permanent Pavement Striping	All Required	$ 1,450.00
State Furnished Software Controller	All Required	350.00
		$ 1,800.00

SUBTOTAL ----------------------------------	$57,150.00
Engineering -------------------------------	6,186.00
Engineering (Sig. Controller Testing)----	1,200.00
Engineering (Opticom Testing) ------------	900.00
TOTAL	$65,436.00

SUMMARY OF FUNDS (90%)

Description	Total Cost	Federal Funds	State Funds
Preliminary Engineering	$ 9,800.00	$ 8,820.00	$ 980.00
Traffic Signal	65,436.00	58,892.00	6,544.00
TOTAL	$75,236.00	$67,712.00	$7,524.00

Group 1	100%
Contract No.	9365
Prefix	24-1986
Prefix	24-1065

STATE COPY

OMB No. 04-R2089

TO BE COMPLETED BY FHWA MONTHLY TRANSACTION NO. 11-62	U. S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION **FEDERAL-AID PROJECT AGREEMENT** 10/30/80	State OREGON County MARION Project No. HES-26(22)

The State, through its Highway Agency, having complied, or hereby agreeing to comply, with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) the Regulations issued pursuant thereto and, (3) the policies and procedures promulgated by the Federal Highway Administrator relative to the above designated project, and the Federal Highway Administration having authorized certain work to proceed as evidenced by the date entered opposite the specific item of work, Federal funds are obligated for the project not to exceed the amount shown herein, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends only to project costs incurred by the State after the Federal Highway Administration authorization to proceed with the project involving such costs.

PROJECT TERMINI

SR 99E, Intersection Lana Ave. N.E. (Salem)

PROJECT CLASSIFICATION OR PHASE OF WORK	EFFECTIVE DATE OF AUTHORIZATION	APPROXIMATE LENGTH *(Miles)*
HIGHWAY PLANNING AND RESEARCH (HP & R)		
PRELIMINARY ENGINEERING	10-15-80	0.0
RIGHTS-OF-WAY		
CONSTRUCTION		

OTHER *(Specify)*

FUNDS PRO RATA 90.0%

ESTIMATED TOTAL COST OF PROJECT	FEDERAL FUNDS
$ 9,800.00	$ 8,820.00

The State further stipulates that as a condition to payment of the Federal funds obligated, it accepts and will comply with the applicable provisions set forth on the reverse hereof.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By
Asst. State Highway Engineer
(Title)

XX For: H. S. Coulter
State Highway Engineer
(Title)

By
(Title)

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)
For: G. L. green

Date executed by Division Administrator 10-30-80

Form PR-2 (Rev. 10-75) PREVIOUS EDITIONS ARE OBSOLETE

AGREEMENT PROVISIONS

1. RESPONSIBILITY FOR WORK

a. Except for projects constructed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in compliance with the approved plans and specifications or project proposal which, by reference, are made a part hereof.

b. With regard to projects performed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in accordance with the terms of its approved Certification, or exceptions thereto as may have been approved by the Federal Highway Administration.

2. HIGHWAY PLANNING AND RESEARCH (HP&R) PROJECT. The State highway agency will (a) conduct or cause to be conducted, under its direct control, engineering and economic investigations of projects for future construction, together with highway research necessary in connection therewith, pursuant to the work program approved by the Federal Highway Administration and (b) prepare reports suitable for publication of the result of such investigations and research, but no report will be published without the prior approval of the Federal Highway Administration.

3. PROJECT FOR ADVANCE ACQUISITION OF RIGHTS-OF-WAY. In the event that actual construction of a road on this right-of-way is not undertaken by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

4. PRELIMINARY ENGINEERING PROJECT FOR PREPARATION OF RIGHT-OF-WAY PLANS OR FOR PREPARATION OF CONSTRUCTION PLANS, SPECIFICATIONS AND ESTIMATES. In the event that right-of-way acquisition for, or actual construction of the road for which this preliminary engineering is undertaken is not started by the close of the fifth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

5. INTERSTATE SYSTEM PROJECT. (a) The State highway agency will not add or permit to be added, without the prior approval of the Federal Highway Administration any points of access to, or exit from, the project in addition to those approved in the plans and specifications for the project. (b) The State highway agency will not permit automotive service stations, or other commercial establishments for serving motor vehicle users, to be constructed or located on the right-of-way of the interstate system. (c) The State highway agency will not after June 30, 1968, permit the construction of any portion of the Interstate Route on which this project is located, including spurs and loops, as a toll road without the written concurrence of the Secretary of Transportation or his officially designated representative. The term 'toll road' does not include toll bridges or toll tunnels.

6. PROJECT FOR CONSTRUCTION IN ADVANCE OF APPORTIONMENT. (a) This project authorized pursuant to 23 U.S.C. 115 as amended, will be subject to all procedures and requirements, and conform to the standards applicable to projects on the system on which located, financed with the aid of Federal funds. (b) No obligation of previously apportioned Federal funds is created by this agreement, its purpose and intent being to provide that, upon application by the State highway agency, and approval thereof by the Federal Highway Administration, any Federal-aid funds of the class designated by the project number prefix, apportioned to the State under 23 U.S.C. 104 subsequent to the date of this agreement, may be used to reimburse the State for the Federal share of the cost of work done on the project.

7. STAGE CONSTRUCTION. The State highway agency agrees that all stages of construction necessary to provide the initially planned complete facility, within the limits of this project, will conform to at least the minimum values set by approved AASHTO design standards applicable to this class of highways, even though such additional work is financed without Federal-aid participation..

8. BOND ISSUE PROJECT. Construction, inspection and maintenance of the project will be accomplished in the same manner as for regular Federal-aid projects. No present or immediate obligation is created by this Agreement against Federal funds, its purpose and intent being to provide aid to the State, as authorized by 23 U.S.C. 122, for retiring maturities of the principal indebtednesss of the bonds referred to below. When the State requests Federal reimbursement to aid in the retirement of such bonds, the request will be supported by the appropriate certification required by 23 CFR Part 140, Subpart F, and Volume 1, Chapter 4, Section 8 of the Federal-Aid Highway Program Manual or the alternative State procedure set forth in the State's Certificate, and payment of the authorized Federal share will be made from appropriate funds available. If in any year there is no unobligated balance of any apportioned Federal funds available from which payments hereunder may be made, there will be no obligation on the part of the Federal Government on account of bond maturities for that year. Funds available to the highway agency for this project are the proceeds of bonds issued by the governmental unit indicated on the attached tabulation, pursuant to the authority and in the amounts by date of issue and beginning date of maturities set forth therein.

9. SPECIAL HIGHWAY PLANNING AND RESEARCH PROJECT. The State Highway agency hereby authorizes the Federal Highway Administration to charge the State's pro rata share of costs incurred against funds apportioned to the State under 23 U.S.C. 307 (c), as amended. In the event a project is financed with both Federal-aid funds and State matching funds, the State agrees to advance to The Federal Highway Administration the State matching funds for its share of the estimated cost. For a National Pooled Fund study, the State hereby assigns its responsibility for the work to the Federal Highway Administration. For an Intra-Regional Cooperative Study, the State hereby assigns its responsibility for the work to the lead State for the study.

10. PARKING REGULATION AND TRAFFIC CONTROL. The State highway agency will not permit any changes to be made in the provisions for parking regulations and traffic control as contained in the agreement between the State and the local unit of Government referred to in the paragraph on "Additional Provisions," without the prior approval of the Federal Highway Administration, unless the State determines, and the Division Administrator concurs, that the local unit of Government has a functioning traffic engineering unit with the demonstrated ability to apply and maintain sound traffic operations and control.

Gen File

Oregon State Highway Division
Salem, Oregon October 29, 1980

Federal Aid Project
No. HES-26(22)

Pacific Hwy. East @ Lana Ave. N.E. (Salem) Section
SR 99E in Marion County

Project Agreement Estimate

Type Code PE
Preliminary Engineering

Preliminary Engineering	All Required	$ 9,800.00
	Total	$ 9,800.00

Length of Project- - - 0.0 mile

Summary of Funds

Description	Total Cost	Federal Funds	State Funds
Preliminary Engineering	$ 9,800.00	$ 8,820.00	$ 980.00
Retain in Program Status			
Traffic Signals	65,000.00	58,500.00	6,500.00
Total	$ 74,800.00	$ 67,320.00	$7,480.00

Group 1 - 100%
Prefix-

9365

jc cc: (Rulien) **STATE COPY**

U.S. Department of Transportation
Federal Highway Administration

FINAL ACCEPTANCE REPORT

REGION NO. 10	REPORT NO. 2	COUNTY Marion	DIVISION Oregon
DATE OF REPORT 3/24/86	REPORT MADE BY 3-24-86 W. H. Kappus, Area Engineer		PROJECT NO. HES-26(22)
COMPLETION DATE (Actual) 4/23/82	ACCEPTANCE DATE BY CONRTACT AGENCY August 9, 1982	TIME ELAPSED 97 %	CONTRACT TIME 200 C. D.

LOCATION

SEE BELOW

The FHWA-47, Statement of Materials and Labor Used by Contractors on Highway Construction Involving Federal Funds, has been submitted. (Projects over $500,000)
A copy of the State's materials certificate is attached to the Division office copy of this report.
There is compliance with section 1.23 of the Regulations pertaining to encroachments on the right-of-way.

REMARKS: *The project has been completed in reasonably close conformity with the approved plans and specifications including authorized changes and extra work.*

PACIFIC HIGHWAY EAST @ LANA AVENUE
PACIFIC HIGHWAY EAST (SALEM)
Traffic Signal Installation

This project provided for the upgrading of a signalized intersection by installing multiphase traffic signal with left turn refuges and phases.

The contract work was awarded to Electric Corporation on September 29, 1981. Work started on December 17, 1981 and was completed on April 23, 1982. There were no major overruns or underruns and no contract claims.

Final inspection of the completed project was made April 29, 1984.

- WHK -

RECEIVED
TAT. HWY ENGR
MAR 28 '86
REFER TO Fredrickson
FOR
Info	Inves	R/D	D/R	Sign	Act	File

NOTED
W. E. SCHWARTZ Cy 3/31

ACCEPTANCE OF PROJECT IS RECOMMENDED		ACCEPTED BY FEDERAL HIGHWAY ADMINISTRATION	
SIGNATURE Original Signed By WILLIAM H. KAPPUS Area Engineer		SIGNATURE Original Signed By ROBERT B [illegible] Asst. Division Administrator	
TITLE Area Engineer	DATE MAR 25 1986	TITLE Field Operations Engineer	DATE MAR 26 1986

FORM FHWA 1446B (Rev. 2-84) PREVIOUS EDITIONS MAY BE USED.

9365

L.

September 30, 1982

St. Paul Fire & Marine Insurance Co.
825 N. E. Multnomah, Suite 800
Portland, OR 97232

CON 5
#9365

Gentlemen or Ladies:

On August 11, 1982, we wrote to you concerning release of final payment on Contract No. 9365 awarded to Electric Corp. for traffic signals on Pacific Highway East at Lana Avenue N.E. in Salem, Marion County.

Final payment on this contract is $1,000.50 and the total contract amount is $53,798.00. No work was performed under force account.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

js
cc: Electric Corp.
P. O. Box 12186
Salem, OR 97309

bc: C. T. Keasey
Walt Hart
C. O. Fredrickson

9365

L

9-9-82

REPORT OF ACTION UNDER DELEGATED AUTHORITY BY
ASSISTANT STATE HIGHWAY ENGINEER

On behalf of the Commission and under delegated authority, the following contracts were accepted as being completed according to specifications:

Contractor and Contract No.	Section and County	Acceptance Date
Hansen Electric Co. No. 9332	Pendleton/John Day Hwy. @ SW 20th St. (Pendleton) Umatilla County	August 4, 1982
Electric Corp. No. 9365	Pacific Hwy. E. @ Lana Ave. NE (Salem) Marion County	August 9, 1982
Ausland Construction, Inc. No. 9371	Manzanita Safety Rest Area Josephine County	August 11, 1982
Hamilton Electric, Inc. No. 9282	Beaverton/Tualatin Hwy. @ SW Locust St. Washington County	August 16, 1982
Weaver Construction Co. No. 9422	South Pine Creek Bridge Harney County	August 18, 1982
Douglas S. Coats, Inc. No. 9278	Dewey Ave.-UPRR U-X'ing (Baker) Baker County	August 18, 1982
Sims Electric, Inc. No. 9390	SE King Rd. @ SE Price Fuller Rd. Clackamas County	August 19, 1982
Holst Construction Co. No. 9421	Scappoose Creek Bridge Columbia County	August 25, 1982
Michael A Becker, Gen. Contractor No. 9405	Whitney Sand Storage Shed Baker County	August 31, 1982
Steeck Electric Co. No. 9281	Wallowa Lake Hwy. @ Monroe Ave. (LaGrande) Union County	August 31, 1982

Orig [illegible]
[illegible]
files

September 9, 1982

W. E. Schwartz, P.E.
Asst. State Highway Engineer

9365

L.

FORM 81-734-3001

OREGON STATE HIGHWAY DIVISION

FIELD ENGINEER'S WEEKLY REPORT

FOR CONSTRUCTION PROJECTS ONLY
CONSTRUCTION AND BRIDGE SECTION

SECTION: PAC. HWY. E. @ LANA AVE. (SALEM)

WEEK ENDING: 6-19-82

SECTION PREFIX: 24-1065

HIGHWAY: PACIFIC HWY, EAST

COUNTY: MARION

NAME OF JOB: PAC. HWY. E. @ LANA AVE. NE. (SALEM)

KIND OF WORK: TRAFFIC SIGNAL INSTALLATION

CONTRACTOR: ELECTRIC CORP.

CONTRACT NUMBER: 9365

FEDERAL AID PROJECT NUMBER: HES-26(22)

DATE OF CONTRACT: 9/29/81

DATE WORK STARTED: 12/17/81

ESTIMATED COMPLETION DATE: 4/29/82

AVERAGE FORCE ON PROJECT FOR THE WEEK:

MEN: SUPERVISION:

SPECIFIED WORK DAYS:

SPECIFIED CALENDAR DAYS: 200

SPECIFIED COMPLETION DATE:

WORK DAYS USED:

CALENDAR DAYS USED: 194

PERCENT OF TIME ELAPSED: 97

PROJECT AUTHORIZATION: $ 67,841.25

EXCLUSIVE OF ENGINEERING: $ 61,916.25

ESTIMATED COST OF COMPLETED PROJECT, EXCLUSIVE OF ENGINEERING: $ 59,250.00

ESTIMATED PERCENT: OVERRUN UNDERRUN -4½ %

ENGINEERING AUTHORIZATION: $ 5,925.00

ENGINEERING COST TO DATE: $ 5,150.00

PERCENT OF AUTHORIZATION: 87 %

PERCENT OF CONTRACT COMPLETED BASED ON ESTIMATED COST: 100

PERCENT OF CONTRACT COMPLETED BASED ON TOTAL AUTHORIZATION: 100

DATE PROJECT WAS COMPLETED: 4-23-82

ESTIMATED PERCENT COMPLETE (ROADWORK)

CLEARING	DRAINAGE	GRADING	BASE	OIL AND/OR PAVE.	MAT'L. PROD.		
----------	----------	----------	----------	----------	----------	----------	----------

	GRADING	SURFACING	MAINTENANCE MATERIALS	OIL & BITUMINOUS MACADAM	PAVING
MILES IN PROJECT					
MILES PARTIALLY COMPLETED					
MILES COMPLETED					
TOTAL ESTIMATED QUANTITIES (CONTRACT)					
TOTAL QUANTITIES CORRECTED TO DATE					
ESTIMATED QUANTITIES MOVED OR PLACED TO DATE					
AVERAGE DAILY QUANTITIES					
AVERAGE DAILY QUANTITIES NECESSARY TO COMPLETE PROJECT ON TIME					
NUMBER OF SHIFTS PER DAY					
HOURS PER SHIFT					

EQUIPMENT USED DURING THE WEEK:

ESTIMATED PERCENT COMPLETE (STRUCTURES)

BRIDGE NO.	N/A							
PERCENT								

	WEATHER	WORK DAYS CHARGED	HOURS DELAY	CAUSE OF DELAY
SUNDAY	**************			PROJECT COMPLETE
MONDAY				
TUESDAY				
WEDNESDAY				
THURSDAY				
FRIDAY				
SATURDAY	**************			

CE K
CAE
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RECEIVED
JUN 23 1982
CONSTRUCTION SECTION

OM
CA
LS
TC
FE
CP

GENERAL DESCRIPTION OF ACTIVITIES FOR THE WEEK

SUNDAY	
MONDAY	
TUESDAY	
WEDNESDAY	
THURSDAY	
FRIDAY	
SATURDAY	

REMARKS

PROJECT COMPLETE	4/13/82
FINAL INSPECTION	4/29/82
3rd NOTIFICATION	5/17/82
SEMI-FINAL	6-15-82

LAST REPORT

SIGNED Warren E Mueller LOCATION SALEM

WARREN E. MUELLER PROJ. MANAGER

PRIME RESIDENT SUBMIT 2 COPIES WHEN BRIDGES AND GRADING BOTH ARE INVOLVED, SUBMIT 3 COPIES

SP-F216

9365

9-2-81

L.

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/~~OR~~ AUTHORIZATION

1. FEDERAL-AID PROJECT NO.
HES-26(22)

2. STATE PROJECT NO.
See below

2A. COUNTY NAME
Marion

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO.
10029

6. TO

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE
9/2/81

8. FEDERAL ROUTE NUMBER
Primary 26

9. STATE ROUTE NUMBER
Primary 1E

10. GENERAL LOCATION:
Pacific Highway East at Lana Avenue NE (Salem)

11. GENERAL DESCRIPTION OF WORK
Traffic signal

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☒ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)*
Permanent Pavement Striping S.F $1,450
State Furnished Software Controller $350

13. REMARKS

After concurrence in award you are authorized to proceed with those items listed above as shown in your Estimate.

Mr. Swan's August 31, 1981 request and certifying statements are accepted.

PS&E documents for the subject project have been reviewed and are approved at a total estimated cost of $79,500 Federal Funds $71,550.

A signed copy of the Title Sheet is returned herewith.

(This is a 20% limitation project)

[illegible] HWY ENGR
SEP 3 '81
REFER TO
[illegible]
FOR

[illegible] 9-8-81

14. DATE
9/2/81

15. SIGNATURE OF APPROVING OFFICIAL
G. K. [illegible]

16. TITLE
for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

1E

ROAD DESIGN SECTION 378-6558

J. B. Boyd, Manager
Right of Way Section

June 22, 1981

J. H. Versteeg
Road Design Engineer

File No. 52134
[redacted] at
Lana Avenue (Salem) Section
Pacific Highway East
Marion County

Attached is a description, an authorization and prints for one file for the subject project, scheduled for fiscal third quarter of 1982.

ORIGINAL SIGNED BY
W. H. WAKERLIG

By:

W. H. Wakerlig
R/W Descriptions Engineer

WHW:rlr
Attachments

Versteeg
Anderson
Christensen
Olson
Sullivan
Terpin
Trout
Wakerlig

RECEIVED
JUN 22 1981
ROAD DESIGN SECTION

Do Not File ☐
Return To
Bring up __/__
Action

9365

L.

April 28, 1981

City of Salem
City Hall
Salem, OR 97301

AGR 4

Attention: Betty J. Marsh
City Recorder

MISC. CONTRACTS and
AGREEMENTS No. 1187

Gentlemen:

Attached for your files is a fully executed copy of an agreement covering the installation of 3-phase traffic control signal equipment on the Pacific Highway East (Portland Road) at Lana Avenue.

We are retaining a fully executed copy of this agreement for the Transportation Commission's files.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

dmc

Attachment

bc: Don Harwell (agree. att.)

PRO 6

STATE OF OREGON
Highway - Traffic

INTEROFFICE MEMO

DATE: August 12, 1980

TO: H. S. Coulter
State Highway Engineer

FROM: L. E. George
Traffic Engineer

SUBJECT: Proposed Title II, Hazard Elimination Project
Pacific Highway East at Lana Avenue (Salem)

Region II has requested a project to upgrade the traffic signal on the Pacific Highway East at Lana Avenue in Salem to a five-phase signal in order to provide for protected left turn movements.

IN SUMMARY:

Jurisdiction	Project Name	Cost Total	Federal Funds	State Funds
State	Pacific Hwy. East @ Lana Avenue (Salem)	$65,000	$58,500	$6,500

The project has been investigated and is eligible for funding under the Title II, Hazard Elimination Program. We recommend your approval and request that you authorize this project under delegated authority.

L E George
L. E. George
Traffic Engineer

RHB:sh

Attachment

APPROVED:

H S Coulter
State Highway Engineer

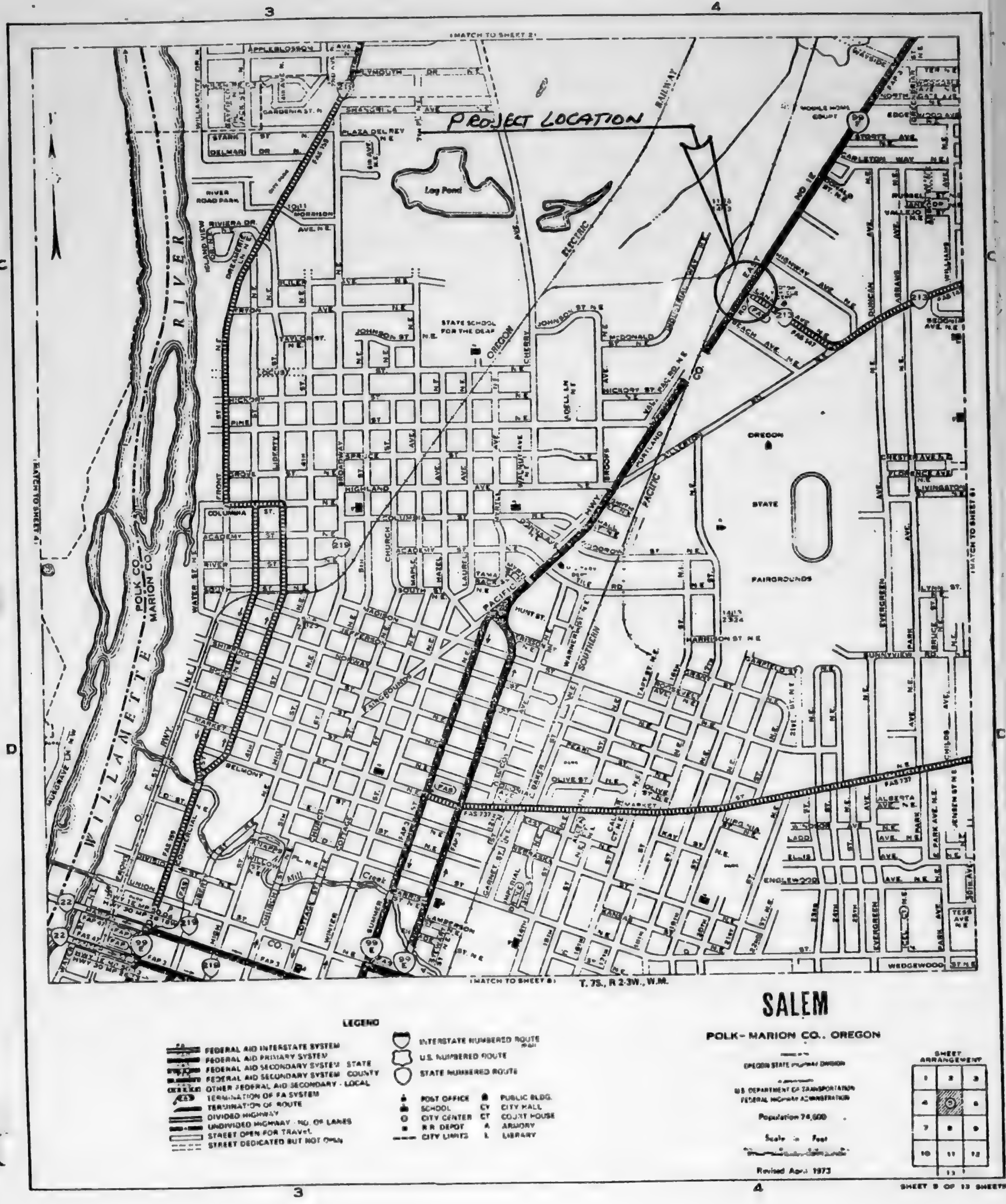
DATE: 8/14/80

8-14
orig. to Gorman
cy George
Files

no report

Contains Recycled Materials
81-125-1387

SP*75683-125


3
4
C
D
(MATCH TO SHEET 2)
(MATCH TO SHEET 4)
(MATCH TO SHEET 6)
(MATCH TO SHEET 8)
T. 7S., R 2-3W., W.M.
PROJECT LOCATION
WILLAMETTE RIVER
POLK CO.
MARION CO.
Log Pond
STATE SCHOOL FOR THE DEAF
OREGON ELECTRIC RAILWAY
SOUTHERN PACIFIC CO.
OREGON STATE FAIRGROUNDS
PLAZA DEL REY N.E.
RIVER ROAD PARK
LEGEND
FEDERAL AID INTERSTATE SYSTEM
FEDERAL AID PRIMARY SYSTEM
FEDERAL AID SECONDARY SYSTEM - STATE
FEDERAL AID SECONDARY SYSTEM - COUNTY
FEDERAL AID SECONDARY - LOCAL
OTHER FEDERAL AID SECONDARY - LOCAL
TERMINATION OF FA SYSTEM
TERMINATION OF ROUTE
DIVIDED HIGHWAY
UNDIVIDED HIGHWAY - NO. OF LANES
STREET OPEN FOR TRAVEL
STREET DEDICATED BUT NOT OPEN
INTERSTATE NUMBERED ROUTE
U.S. NUMBERED ROUTE
STATE NUMBERED ROUTE
POST OFFICE
SCHOOL
CITY CENTER
R.R. DEPOT
CITY LIMITS
PUBLIC BLDG.
CY CITY HALL
CT COURT HOUSE
A ARMORY
L LIBRARY
SHEET ARRANGEMENT
1 2 3
4 5 6
7 8 9
10 11 12
13
Scale in Feet

SALEM

POLK-MARION CO., OREGON

OREGON STATE HIGHWAY DIVISION

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

Population 74,600

Revised April 1973

SHEET 5 OF 13 SHEETS

9365

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
Region 2
2960 E. STATE STREET, SALEM, OREGON 97310 PHONE 378-2626

March 16, 1981

Ralph Hanley
City Manager
City Hall/555 Liberty St.
Salem, OR 97301

Attn: Ron Merry
Ass't Director of Public Works

Gentlemen:

Enclosed are four copies of the construction-finance agreement for installation of traffic signals at the intersection of Lana Avenue and Pacific Highway East. The agreement has been revised to include a statement for "mutual review."

Please review the agreement and, if satisfactory, present it to your City Council for their consideration. If approved, have the Council adopt a resolution authorizing the Mayor and Recorder to sign the agreement. Forward three copies of the signed agreement and resolution authorizing the signatures to this office. Retain the extra copy of the agreement for your information. A fully executed copy will be returned for your records.

Sincerely,

Phillip O. Stearns

Phillip O. Stearns
REGION FEDERAL AID ENGINEER

POS/cal

Attach.

cc: D. H. Moehring

9365

L.FILE
1E
47.55

U. S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

10-15-80

FEDERAL AID PROJECT NO. HES-26(22)

STATE PROJECT NO. See below

COUNTY NAME Marion

PROGRAM STAGE (Check) ☐ 1. ☐ 2.

FROM:
G. L. Green, Division Administrator
FHWA, Oregon Division, Salem, OR

PROGRAM NO.

ITEM NO. 10029

TO:

Mr. H. S. Coulter
State Highway Engineer
Oregon State Highway Division
Salem, Oregon

DATE PS&E APPROVED	DATE AUTHORIZATION EFFECTIVE 10-15-80	FEDERAL ROUTE NUMBER Primary 26 STATE ROUTE NUMBER Primary 1E

GENERAL LOCATION:

Pacific Highway East at Lana Avenue N. E. (Salem)

GENERAL DESCRIPTION OF WORK:

Preliminary Engineering

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

PRELIMINARY ENGINEERING TO DETERMINE
☐ LOCATION ONLY
PRELIMINARY ENGINEERING FOR SURVEY AND PLAN
☒ PREPARATION XX Including utility preparatory work.
☐ OTHER (Specify) TEC $9,800
F.F.$8,820

☐ ACQUISITION OF RIGHT-OF-WAY
CONSTRUCTION - ADVERTISE FOR RECEIPT
☐ OF BIDS
☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested by Mr. Swan's letter of 10-8-80.

RECEIVED
OCT 2 1980
[illegible] ENGINEERING

NOTED
VERNON L. TABERY

NOTED
RICHARD BLADORN

DATE 10-15-80	SIGNATURE OF APPROVING OFFICIAL	TITLE for Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U. S. GOVERNMENT PRINTING OFFICE: 1975-631-455

9365

~~Dick~~
~~File~~

1E
47.53

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

NOTED
L.E. GEORGE

In Reply Refer to
File No.:

PRO 6

October 8, 1980

TO: G. L. Green, Division Administrator
Federal Highway Administration

Original Signed By
D. E. Swan

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 10029
Project No. HES-26(22)
Pacific Highway East @ Lana Ave. N.E. (Salem) Sec.
Marion County

Attached support data consists of PR-1 forms with project maps, Authority for Survey, Investigation Report, Traffic Signal Warrant Comparison, pictures, accident data and other traffic data.

NOTED
VERNON L TABERY

I request the following:

1) Concurrence that this project qualifies for the "Timesavings Procedures" enumerated in FHPM 8-2-3.

2) Concurrence that this project falls under the Statewide Categorical Exclusions approved by FHWA 2-25-80 satisfying the requirements of FHPM 7-7-2.

3) Authorization to proceed with all phases of preliminary engineering including utility preparatory work necessary to obtain PS&E approval for the project at an estimated total cost of $9,800 with an obligation of $8,820 in Federal Funds.

The section of highway containing this project ranks 25th on the Urban Priority List that was previously submitted to your office.

NOTED
RICHARD BLADORN

DRH:bke
Attachments

✓ cc: L.E. George
C.O. Fredrickson

RECEIVED
OCT 8 1980
TRAFFIC ENGINEERING

NOTED
DWAYNE HOFSTETTER

Form 734-3122

-9365

1E

LOCATION PROSPECTUS

OREGON DEPARTMENT OF TRANSPORTATION
LOCATION UNIT

NOTE: SHADED AREAS TO BE COMPLETED IN SALEM OFFICE

DATE 9/12/80

PREFIX

1 - IDENTIFICATION

PROJECT NAME: Pacific Highway East at Lana Avenue NE - Salem

HIGHWAY NAME: Pacific East

HIGHWAY NUMBER: 1E

REGION 2	ADMINISTRATIVE DISTRICT 3	COUNTY Marion	CITY Salem
LENGTH 0.1	MILEPOST NUMBER 47.55 TO	☐ RURAL	☒ URBAN

LOCAL GOVERNMENT PROJECT? ☐ YES ☒ NO

IF YES, UNIT OF GOVERNMENT

TYPE OF FUNDS: ☐ FAI ☐ FAP ☐ FAS ☐ STATE ☐ FAUS ☒ OTHER Title II Hazard Elimination

METHOD OF CONSTRUCTION: ☒ CONTRACT ☐ STATE FORCE ☐ OTHER

TYPE OF WORK: ☐ GRADING ☐ PAVING ☐ STRUCTURE ☐ SIGN ☒ SIGNAL ☐ ILLUMINATION ☐ ROADSIDE IMPROVEMENT ☐ OTHER

PROJECT DESCRIPTION

Upgrade the existing signal system on Pacific Highway East at Lana Avenue in Salem to a five-phase signal to provide for protected left turn movements.

1 Versteeg ✓
Anderson
2 Christensen Doc
3 Olson all
Sullivan
Terpin
Trout
4 Wakerlig

RECEIVED
NOV 20 1980
ROAD DESIGN SECTION

Do Not File ☐
Return To
/ /
Action

2 - TRAFFIC DATA

EXISTING AVERAGE DAILY TRAFFIC (YEAR-VOLUME): 28,825 - 1980

PROJECTED AVERAGE DAILY TRAFFIC (YEAR-VOLUME):

LEVEL OF SERVICE		A	B	C	D	E	F
	EXISTING	☐	☐	☐	☐	☐	☐
	PROPOSED	☐	☐	☐	☐	☐	☐

DESIGN SPEED (MPH) 35	DESIGN STANDARDS	TRAFFIC ANALYSIS ☒ LIGHT ☐ MEDIUM ☐ HEAVY

APPROVED

Frank E. Terpin

Location Engineer

Date 10/31/80

FORM 734-1730 (12-78) Page 1

3 - FEATURES

	EXISTI NUMBER AND WIDTH	P OSED NUMBER AND WIDTH
TRAVEL LANES	4 - 12'	Same
SHOULDERS	none	--
MEDIANS	1 - 16'	same
PARKING LANES	none	same
SIDEWALKS	2	same
BIKEWAYS	none	same
INTERCHANGES	none	same
OTHER:		

	YES	NO	MAYBE
Channelization	☐	☒	☐
Frontage Roads	☐	☒	☐
Traffic Signals	☒	☐	☐
Signing	☒	☐	☐
Illumination	☐	☒	☐
Structures	☐	☒	☐
Stage Construction	☐	☒	☐
Pedestrian Crossing	☐	☒	☐
Rest Area	☐	☒	☐
Truck Scale Site	☐	☒	☐
Landscaping	☐	☒	☐
Drainage	☐	☒	☐
River ________	☐	☒	☐
Stream ________	☐	☒	☐
Storm Sewer	☐	☒	☐
Sanitary Sewer	☐	☒	☐
Right of Way	☐	☒	☐
Simple Acquisition	☐	☒	☐
Complex Acquisition	☐	☒	☐
Relocations	☐	☒	☐

	YES	NO	MAYBE
Right of Way (cont.) Improvements	☐	☒	☐
Access Control	☐	☒	☐
Railroad Crossing	☐	☒	☐
At Grade	☐	☒	☐
Separated	☐	☒	☐
Railroad Encroachment	☐	☒	☐
Permits	☐	☒	☐
Conditional Use	☐	☒	☐
Flood Plain	☐	☒	☐
Irrigation District	☐	☒	☐
Water District	☐	☒	☐
Drainage District	☐	☒	☐
Div. of State Lands	☐	☒	☐
Dept. of Geology & Min. Ind.	☐	☒	☐
Corps of Engineers	☐	☒	☐
Coast Guard	☐	☒	☐
DEQ NPS Air Pollution	☐	☒	☐
DEQ NPS Water Pollution	☐	☒	☐
Building	☐	☒	☐
Fish & Wildlife Approval	☐	☒	☐

3 - FEATURES (cont.)

	Y	NO	MAYBE
Agreements (City-County Etc.)	☐	☒	☐
Environmental Assessment	☐	☒	☐
Statewide Assessment	☒	☐	☐
Negative Declaration	☐	☒	☐
Environmental Impact Statement	☐	☒	☐
4-F Statement	☐	☒	☐
Citizen Advisory Committee	☐	☒	☐
Public Hearing ______	☐	☒	☐
Borrow Source	☐	☒	☐
Material Source	☐	☒	☐
Utilities	☐	☐	☒

Type ______

	YES	NO	MAYBE
Hydraulics Study	☐	☒	☐
Soils Investigation	☐	☒	☐
Airport Clearance	☐	☒	☐
Economic Analysis	☐	☒	☐
Requires Field Survey	☒	☐	☐
Old Survey Available	☐	☒	☐
Requires Vicinity Map	☒	☐	☐
Requires Photogrammetry	☐	☒	☐
Requires Reconnaissance Survey	☐	☒	☐
Reconnaissance Available	☐	☒	☐
Design Review	☐	☐	☒

4 - WORK ITEMS

TO BE PERFORMED BY

		APPLICANT	STATE	CONSULTANT
PRELIMINARY ENGINEERING		☐	☒	☐
RIGHT-OF-WAY	N/A	☐	☐	☐
CONSTRUCTION ENGINEERING		☐	☒	☐

5 - DURATION TIMES (MONTHS)

	FLOAT	ACTIVE
RECONNAISSANCE SURVEY	( )	N/A
DRAFT ENVIRONMENTAL IMPACT STATEMENT	( )	N/A
CORRIDOR APPROVAL	( )	N/A
FIELD SURVEY	(2)	0.5
PRELIMINARY DESIGN	( )	N/A
DESIGN APPROVAL/FINAL EIS	( )	N/A
RIGHT-OF-WAY DESCRIPTIONS	( )	N/A
RIGHT-OF-WAY ACQUISITION	( )	N/A
P.S. & E. DOCUMENTS	( )	3
RECOMMENDED CONSTRUCTION DATE	6/1981 (Region)	[redacted] (Salem)

6 - SUGGESTED BASE DESIGN

ITEM	NEW WORK	OVER EXISTING
N/A		

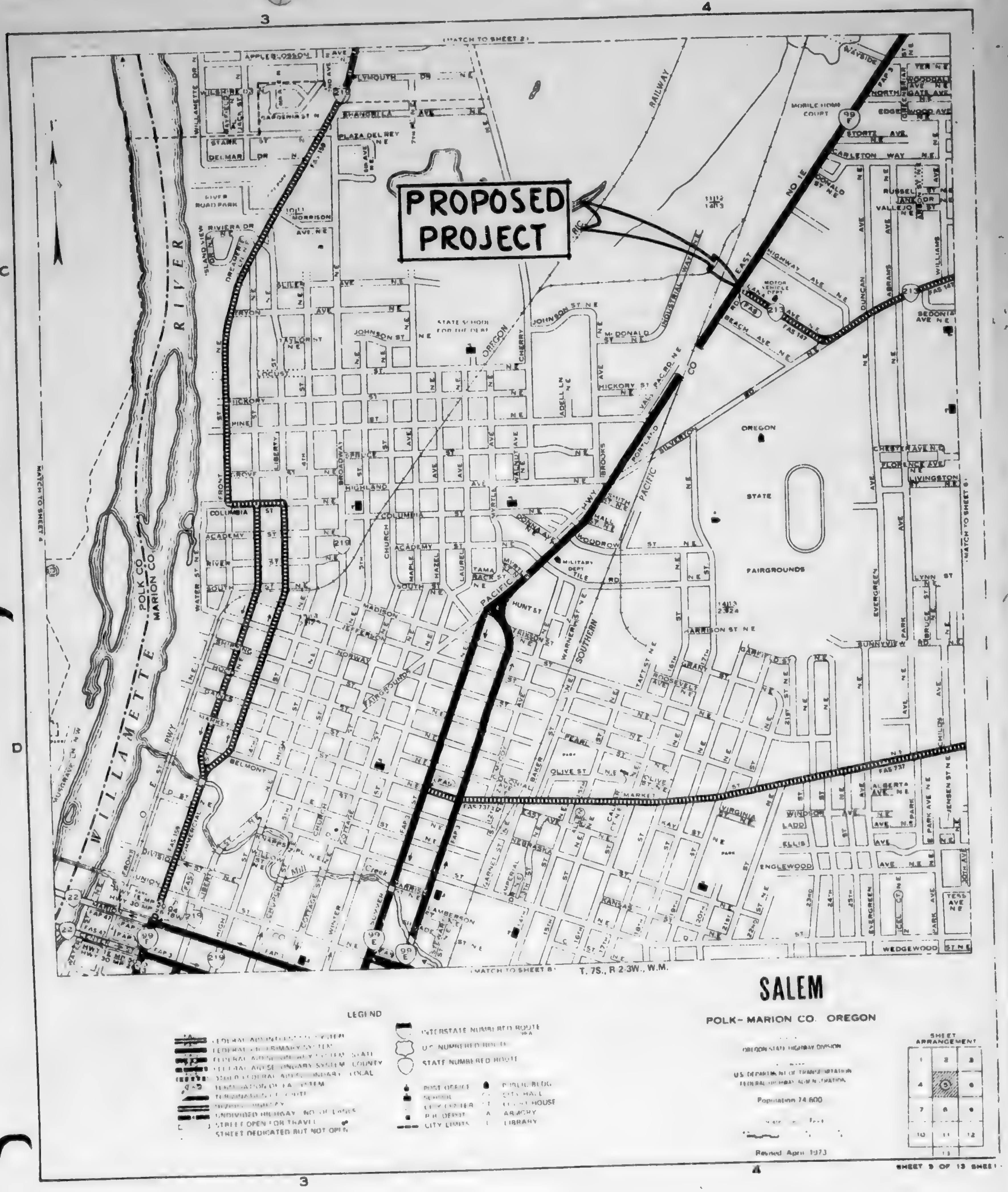
7 - TYPICAL SECTION AND LOCATION

Attach 8½ x 11 inch sheets for general location map and typical section (roadway & structure).

8 - PROJECT COST ESTIMATES

	REGION	SALEM
PRELIMINARY ENGINEERING		9,800
RIGHT OF WAY		
TRAFFIC CONTROL	65,000	65.000
ILLUMINATION		
STRUCTURES		
RAILROAD		
ROADWAY		
OTHER		
ENGINEERING & CONTINGENCIES	13,000	13.000
PROJECT TOTAL	80,000	87.800

SUBMITTED BY

PROPOSED
PROJECT
MATCH TO SHEET 2
MATCH TO SHEET 4
MATCH TO SHEET 6
MATCH TO SHEET 8
T. 7S., R. 2-3W., W.M.
WILLAMETTE RIVER
POLK CO.
MARION CO.
STATE FAIRGROUNDS
OREGON
SOUTHERN PACIFIC
OREGON ELECTRIC RAILWAY
LEGEND
INTERSTATE NUMBERED ROUTE
U.S. NUMBERED ROUTE
STATE NUMBERED ROUTE
POST OFFICE
SCHOOL
PUBLIC BLDG
CITY HALL
COURT HOUSE
ARMORY
LIBRARY
STREET OPEN FOR TRAVEL
STREET DEDICATED BUT NOT OPEN
CITY LIMITS
SALEM
POLK-MARION CO. OREGON
OREGON STATE HIGHWAY DIVISION
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
Population 74,600
Revised April 1973
SHEET ARRANGEMENT
1
2
3
4
5
6
7
8
9
10
11
12
13
SHEET 5 OF 13 SHEETS
3
4
C
D

1981 Mt. Hood Hwy. @ Towle 9366
Ave. Sec. in Gresham.
(Traffic Signal Installation)

C£A 7409- 3/20/81

9366 5-5-83

r11

OSHD (Coulter)

STATE COPY

U.S. DE[illegible]RTMENT OF TRANSPORTATION
FED[illegible] HIGHWAY ADMINISTRATION

FINAL ACCEPTANCE REPORT

REGION NO. 10	REPORT NO. 2	COUNTY Multnomah	DIVISION Oregon
DATE OF REPORT 5/5/83	REPORT MADE BY T. P. Lowe, Area Engineer		PROJECT NO. HES-24(28)
COMPLETION DATE 4/1/82	ACCEPTANCE DATE BY CONTRACT AGENCY 7/20/82	TIME ELAPSED 86 %	CONTRACT TIME 200 calendar days
APPROVED EXTENSIONS ----------	LOCATION See Below		

*The PR-47, Statement of Materials and Labor Used by Contractors on Highway Construction Involving Federal Funds, has been submitted.

*A copy of the State's materials certificate is attached to the Division office copy of this report.
There is compliance with section 1.23 of the Regulations pertaining to encroachments on the right-of-way.

REMARKS: *The project has been completed in reasonably close conformity with the approved plans and specifications including authorized changes and extra work.*

MT. HOOD HIGHWAY @ TOWLE AVENUE
MT. HOOD HIGHWAY
Signals

The project provided a multi-phase signal at the subject intersection.

The final cost underran the original authorization of $74,000 by 8%.

NOTED
W. E. SCHWARTZ

RECEIVED
STATE HWY ENGR
MAY 24 '83
REFER TO
[illegible]
FOR

Info	Inves	R/D	D/R	Sign	Act	File

cy
5/2

*NOTE: Not applicable for direct federal projects.

ACCEPTANCE OF PROJECT IS RECOMMENDED		ACCEPTED BY FEDERAL HIGHWAY ADMINISTRATION	
SIGNATURE T. P. Lowe Original Signed by T. P. LOWE		SIGNATURE G. K. Hossner Original Signed By G. K. HOSSNER Field Operations Engineer	
TITLE Area Engineer	DATE 5/10/83	TITLE Field Operations Engineer	DATE 5/23/83

FORM FHWA-1446 B (12-73) FORMERLY PR-33E

Previous Editions of PR-33E Will Not Be Used.

9366

L.

August 30, 1982

American Insurance Company
Attn: Fidelity & Surety Department
121 S.W. Salmon St., Suite 900
Portland, OR 97204

CON 5
#9366

Gentlemen or Ladies:

On July 23, 1982, we wrote to you concerning release of final payment on Contract No. 9366 awarded to W. R. Grasle Co. for traffic signal installation on the Mt. Hood Highway at Towle Avenue in Gresham, Multnomah County.

The total contract amount is $58,753.11, including $2,208.11 for work performed under force account.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

dmc

cc: W. R. Grasle Co.
P. O. Box 4123
Portland, OR 97208

Fred S. James & Co. of Oregon
111 S.W. Columbia
Portland, OR 97201

bc: C. T. Keasey
Walt Hart
E. L. Hardt

9366

8-4-82

file

L.

REPORT OF ACTION UNDER DELEGATED AUTHORITY BY

ASSISTANT STATE HIGHWAY ENGINEER

On behalf of the Commission and under delegated authority, the following contracts were accepted as being completed according to specifications:

Contractor and Contract No.	Section and County	Acceptance Date
Todd Building Co. No. 9198	Justice Center, Phase 2 Multnomah County	July 12,1982
Mill Plain Elect., Inc. No. 9388	SE Powell Blvd. @ SE 174th Ave. Multnomah County	July 20, 1982
W. R. Grasle Co. No. 9366	Mt. Hood Hwy. @ Towle Ave. (Gresham) Multnomah County	July 20, 1982
Roy L. Houck Construction Co. No. 9290	"S" Curve (Woodburn) Marion County	July 20, 1982
Mill Plain Electric,Inc. No. 9387	NE Columbia Blvd. @ NE 47th Ave. Multnomah County	July 30, 1982
Roy L. Houck Const. No. 9260	Clackamas/Boring Hwy. @ SE Foster Rd. (Damascus) Clackamas County	July 30, 1982
Elting, Inc. No. 9086	NE Hancock St.-SE Yamhill St. Multnomah County	July 30, 1982
Gresham Paving, Inc. No. 9250	SE 257th Dr.-SE Division Dr. Multnomah County	August 3, 1982
Hansen Electric Co., Inc. No. 9207	Beaverton/Tualatin Hwy. @ SW Hunziker St. (Tigard) Washington County	August 3, 1982
G.S.Hulsey Crushing,Inc. No. 9447	Port Orford Rock Production Curry County	August 3, 1982

August 4, 1982

W. E. Schwartz, P.E., P.L.S.
Ass't. State Highway Engineer

9366

L.

FORM 734-3601

FIELD ENGINEER'S WEEKLY REPORT

OREGON STATE HIGHWAY DIVISION

FOR CONSTRUCTION PROJECTS ONLY
CONSTRUCTION AND BRIDGE SECTION

SECTION: Mt. Hood Hwy. @ Towle Ave.

WEEK ENDING: 4/24/82

SECTION PREFIX: 026-1018

HIGHWAY: Mt. Hood

COUNTY: Multnomah

NAME OF JOB:

KIND OF WORK: Signals

CONTRACTOR: W.R. Grasle Co.

CONTRACT NUMBER: 9366

FEDERAL AID PROJECT NUMBER: HES-24(28)

DATE OF CONTRACT: 9/29/81

DATE WORK STARTED: 1/25/82

ESTIMATED COMPLETION DATE:

AVERAGE FORCE ON PROJECT FOR THE WEEK

MEN 0 SUPERVISION

SPECIFIED WORK DAYS

SPECIFIED CALENDAR DAYS 200

SPECIFIED COMPLETION DATE

WORK DAYS USED

CALENDAR DAYS USED 172

PERCENT OF TIME ELAPSED 86

PROJECT AUTHORIZATION $73,586.86

EXCLUSIVE OF ENGINEERING $67,160.06

ESTIMATED COST OF COMPLETED PROJECT EXCLUSIVE OF ENGINEERING $61,514.32

ESTIMATED PERCENT ~~OVERRUN~~ UNDERRUN 8 %

ENGINEERING AUTHORIZATION $6,426.80

ENGINEERING COST TO DATE $5,800.00

PERCENT OF AUTHORIZATION 90 %

PERCENT OF CONTRACT COMPLETED BASED ON ESTIMATED COST 100

PERCENT OF CONTRACT COMPLETED BASED ON TOTAL AUTHORIZATION 100

DATE PROJECT WAS COMPLETED 4/1/82

ESTIMATED PERCENT COMPLETE (ROADWORK)

CLEARING	DRAINAGE	GRADING	BASE	OIL AND/OR PAVE	MAT'L PROD		

	GRADING	SURFACING	MAINTENANCE MATERIALS	OIL & BITUMINOUS MACADAM	PAVING
MILES IN PROJECT					
MILES PARTIALLY COMPLETED					
MILES COMPLETED					
TOTAL ESTIMATED QUANTITIES (CONTRACT)					
TOTAL QUANTITIES CORRECTED TO DATE					
ESTIMATED QUANTITIES MOVED OR PLACED TO DATE					
AVERAGE DAILY QUANTITIES					
AVERAGE DAILY QUANTITIES NECESSARY TO COMPLETE PROJECT ON TIME					
NUMBER OF SHIFTS PER DAY					
HOURS PER SHIFT					

EQUIPMENT USED DURING THE WEEK

ESTIMATED PERCENT COMPLETE (STRUCTURES)

BRIDGE NO				
PERCENT				

	WEATHER	WORK DAYS CHARGED	HOURS DELAY	CAUSE OF DELAY
SUNDAY	Showers	0		
MONDAY	Clear	0		
TUESDAY	Clear	0		
WEDNESDAY	Clear	0		
THURSDAY	Clear	0		
FRIDAY	Fair	0		
SATURDAY		0		

CE K RECEIVED OM
CAE CA
FOE Doe LS
QCS APR 23 1982 TC
SCS CONSTRUCTION FE
EEO SECTION CP

GENERAL DESCRIPTION OF ACTIVITIES FOR THE WEEK

SUNDAY	
MONDAY	
TUESDAY	
WEDNESDAY	
THURSDAY	
FRIDAY	
SATURDAY	

REMARKS

Office Working on Semi-Final

SIGNED WEHoffman LOCATION Portland

W.E. Hoffman Proj. Mgr.

PRIME RESIDENT SUBMIT 2 COPIES WHEN BRIDGES AND GRADING BOTH ARE INVOLVED SUBMIT 3 COPIES

9366

STATE COPY

TO BE COMPLETED BY FHWA 10-88	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL-AID PROJECT AGREEMENT 10-9-81	STATE Oregon COUNTY Multnomah PROJECT NO. HES-24(28)

The State, through its Highway Agency, having complied, or hereby agreeing to comply, with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) the Regulations issued pursuant thereto and, (3) the policies and procedures promulgated by the Federal Highway Administrator relative to the above designated project, and the Federal Highway Administration having authorized certain work to proceed as evidenced by the date entered opposite the specific item of work, Federal funds are obligated for the project not to exceed the amount shown herein, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends only to project costs incurred by the State after the Federal Highway Administration authorization to proceed with the project involving such costs.

PROJECT TERMINI

Mt. Hood Hwy. at Towle Ave. (Gresham)

PROJECT CLASSIFICATION OR PHASE OF WORK	EFFECTIVE DATE OF AUTHORIZATION	APPROXIMATE LENGTH *(Miles)*
HIGHWAY PLANNING AND RESEARCH (HP & R)		
PRELIMINARY ENGINEERING	10-29-80	0.00
RIGHTS-OF-WAY		
CONSTRUCTION	9-2-81	0.00

OTHER *(Specify)*

FUNDS PRO RATA 90%

ESTIMATED TOTAL COST OF PROJECT $ 81,955.00	FEDERAL FUNDS $ 73,759.00

The State further stipulates that as a condition to payment of the Federal funds obligated, it accepts and will comply with the applicable provisions set forth on the reverse hereof.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Exec. Asst. to State Hwy. Engr.
(Title)

XXX For: H.S. Coulter

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Date executed by Division Administrator OCT 9 1981

FORM PR-2 (REV. 10-75) PREVIOUS EDITIONS ARE OBSOLETE

AGREEMENT PROVISIONS

1. RESPONSIBILITY FOR WORK

a. Except for projects constructed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in compliance with the approved plans and specifications or project proposal which, by reference, are made a part hereof.

b. With regard to projects performed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in accordance with the terms of its approved Certification, or exceptions thereto as may have been approved by the Federal Highway Administration.

2. HIGHWAY PLANNING AND RESEARCH (HP&R) PROJECT. The State highway agency will (a) conduct or cause to be conducted, under its direct control, engineering and economic investigations of projects for future construction, together with highway research necessary in connection therewith, pursuant to the work program approved by the Federal Highway Administration and (b) prepare reports suitable for publication of the result of such investigations and research, but no report will be published without the prior approval of the Federal Highway Administration.

3. PROJECT FOR ADVANCE ACQUISITION OF RIGHTS-OF-WAY. In the event that actual construction of a road on this right-of-way is not undertaken by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

4. PRELIMINARY ENGINEERING PROJECT FOR PREPARATION OF RIGHT-OF-WAY PLANS OR FOR PREPARATION OF CONSTRUCTION PLANS, SPECIFICATIONS AND ESTIMATES. In the event that right-of-way acquisition for, or actual construction of the road for which this preliminary engineering is undertaken is not started by the close of the fifth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

5. INTERSTATE SYSTEM PROJECT. (a) The State highway agency will not add or permit to be added, without the prior approval of the Federal Highway Administration any points of access to, or exit from, the project in addition to those approved in the plans and specifications for the project. (b) The State highway agency will not permit automotive service stations, or other commercial establishments for serving motor vehicle users, to be constructed or located on the right-of-way of the interstate system. (c) The State highway agency will not after June 30, 1968, permit the construction of any portion of the Interstate Route on which this project is located, including spurs and loops, as a toll road without the written concurrence of the Secretary of Transportation or his officially designated representative. The term 'toll road' does not include toll bridges or toll tunnels.

6. PROJECT FOR CONSTRUCTION IN ADVANCE OF APPORTIONMENT. (a) This project authorized pursuant to 23 U.S.C. 115 as amended, will be subject to all procedures and requirements, and conform to the standards applicable to projects on the system on which located, financed with the aid of Federal funds. (b) No obligation of previously apportioned Federal funds is created by this agreement, its purpose and intent being to provide that, upon application by the State highway agency, and approval thereof by the Federal Highway Administration, any Federal-aid funds of the class designated by the project number prefix, apportioned to the State under 23 U.S.C. 104 subsequent to the date of this agreement, may be used to reimburse the State for the Federal share of the cost of work done on the project.

7. STAGE CONSTRUCTION. The State highway agency agrees that all stages of construction necessary to provide the initially planned complete facility, within the limits of this project, will conform to at least the minimum values set by approved AASHTO design standards applicable to this class of highways, even though such additional work is financed without Federal-aid participation..

8. BOND ISSUE PROJECT. Construction, inspection and maintenance of the project will be accomplished in the same manner as for regular Federal-aid projects. No present or immediate obligation is created by this Agreement against Federal funds, its purpose and intent being to provide aid to the State, as authorized by 23 U.S.C. 122, for retiring maturities of the principal indebtednesss of the bonds referred to below. When the State requests Federal reimbursement to aid in the retirement of such bonds, the request will be supported by the appropriate certification required by 23 CFR Part 140, Subpart F, and Volume 1, Chapter 4, Section 8 of the Federal-Aid Highway Program Manual or the alternative State procedure set forth in the State's Certificate, and payment of the authorized Federal share will be made from appropriate funds available. If in any year there is no unobligated balance of any apportioned Federal funds available from which payments hereunder may be made, there will be no obligation on the part of the Federal Government on account of bond maturities for that year. Funds available to the highway agency for this project are the proceeds of bonds issued by the governmental unit indicated on the attached tabulation, pursuant to the authority and in the amounts by date of issue and beginning date of maturities set forth therein.

9. SPECIAL HIGHWAY PLANNING AND RESEARCH PROJECT. The State Highway agency hereby authorizes the Federal Highway Administration to charge the State's pro rata share of costs incurred against funds apportioned to the State under 23 U.S.C. 307 (c), as amended. In the event a project is financed with both Federal-aid funds and State matching funds, the State agrees to advance to The Federal Highway Administration the State matching funds for its share of the estimated cost. For a National Pooled Fund study, the State hereby assigns its responsibility for the work to the Federal Highway Administration. For an Intra-Regional Cooperative Study, the State hereby assigns its responsibility for the work to the lead State for the study.

10. PARKING REGULATION AND TRAFFIC CONTROL. The State highway agency will not permit any changes to be made in the provisions for parking regulations and traffic control as contained in the agreement between the State and the local unit of Government referred to in the paragraph on "Additional Provisions," without the prior approval of the Federal Highway Administration, unless the State determines, and the Division Administrator concurs, that the local unit of Government has a functioning traffic engineering unit with the demonstrated ability to apply and maintain sound traffic operations and control.

Gen. F.10

Oregon State Highway Division
Salem, Oregon October 5, 1981

Federal Aid Project
No. HES-24(28)

Mt. Hood Hwy. at Towle Ave. (Gresham)
Mt. Hood Highway
Multnomah County

PROJECT AGREEMENT ESTIMATE

Type Code PE Preliminary Engineering		All Required	$ 9,800.00
Type Code Y031 Traffic Signal (M.P. 12.06)			
Temporary Protection and Direction of Traffic		All Required	$ 900.00
Temporary Signs	150 Sq. Ft.	6.00	900.00
Temporary Barricades	6 Each	75.00	450.00
Flagmen	40 Hour	18.00	720.00
Sidewalk Ramps	3 Each	117.00	351.00
Traffic Signal Installation, Complete		All Required	49,579.00
Fire Pre-emption System, Complete		All Required	4,068.00
			$56,968.00
Anticipated Items			
Permanent Pavement Striping		All Required	$ 2,000.00
Remove Pavement Striping		All Required	500.00
State Furnished Software		All Required	500.00
Signal Controller Testing		All Required	1,925.00
"Opticom" Testing		All Required	1,125.00
			$ 6,050.00
		SUBTOTAL	$63,018.00
		Engineering	9,137.00
		TOTAL	$72,155.00

Length of Project ------------ 0.00 mi.

Work Retained in Program Status Remove Extruded Curb (S.F.)	All Required	$ 1,250.00

SUMMARY OF FUNDS (90%)

Description	Total Cost	Federal Funds	State Funds
Preliminary Engineering	$ 9,800.00	$ 8,820.00	$ 980.00
Signals	72,155.00	64,939.00	7,216.00
TOTAL	$81,955.00	$73,759.00	$8,196.00

Group 1	100%
Contract No.	9366
Prefix	26-1932
Prefix	26-1018

936   L.

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

9-2-81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO.	HES-24(28)
2. STATE PROJECT NO.	See below
2A. COUNTY NAME	Multnomah
4. PROGRAM NO.	
5. ITEM NO.	10036

3. FROM

Dale E. Wilken, Division Administrator
FHWA - Oregon Division

6. TO

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE	8. FEDERAL ROUTE NUMBER	9. STATE ROUTE NUMBER
9/2/81	Primary 24	Primary 26

10. GENERAL LOCATION:

Mt. Hood Highway at Towle Avenue (Gresham)

11. GENERAL DESCRIPTION OF WORK

Traffic signal

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☒ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)*

Permanent Pavement Striping S.F. $2,000
Remove Pavement Striping S.F. $500
State Furnished Software $500
Signal Controller Testing $1,925
Opticom Testing $1,125

13. REMARKS

After concurrence in award you are authorized to proceed with those items listed above as shown in your Estimate.

Mr. Swan's August 31, 1981 request and certifying statements are accepted.

PS&E documents for the subject project have been reviewed and are approved at a total estimated cost of $101,163 Federal Funds $91,046.

A signed copy of the Title Sheet is returned herewith.

(This is a 20% limitation project)

RECEIVED
STATE HWY ENGR
SEP 3'81
REFER TO
Moehring
FOR

orig w/att
9-3-81

14. DATE	15. SIGNATURE OF APPROVING OFFICIAL	16. TITLE
9/2/81	G. K. Hosse	for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9366

2.

March 20, 1981

Multnomah County Engineer
2115 S. E. Morrison
Portland, OR 97214

AGR

City of Gresham
City Hall
Gresham, OR 97030

Attention: Maureen Swaney
City Recorder

MISC. CONTRACTS and
AGREEMENTS No. 7409

Gentlemen:

Attached for your records is a fully executed copy of an agreement with Multnomah County, City of Gresham, and the Highway Division covering installation of traffic signals on Powell Boulevard in Gresham at Towle Road.

We have retained a fully executed copy of this agreement for the Transportation Commission's files.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

fkn

Att.

bc Don Harwell (agree. att.)

STATE OF OREGON **INTEROFFICE MEMO**

Highway - Traffic

PRO 6

DATE: September 11, 1980

TO: H. S. Coulter
State Highway Engineer

FROM: L. E. George
Traffic Engineer

SUBJECT: Proposed Title II Hazard Elimination Project

A project has been requested to install a five-phase traffic signal on the Mt. Hood Highway at Towle Avenue in the City of Gresham.

Construction will be by contract with the State performing all phases of engineering. In summary:

Jurisdiction	Project Name	Total Cost	Federal Funds	State Funds
State	Mt. Hood Highway at Towle Avenue (Gresham)	$70,000	$63,000	$7,000

The project has been investigated and is eligible for funding under the Title II, Hazard Elimination Program. We recommend your approval and request that you authorize this project under delegated authority.

L E George
L. E. George
Traffic Engineer

RHB:ds
Attachment

9-15 to [illegible]
orig to George

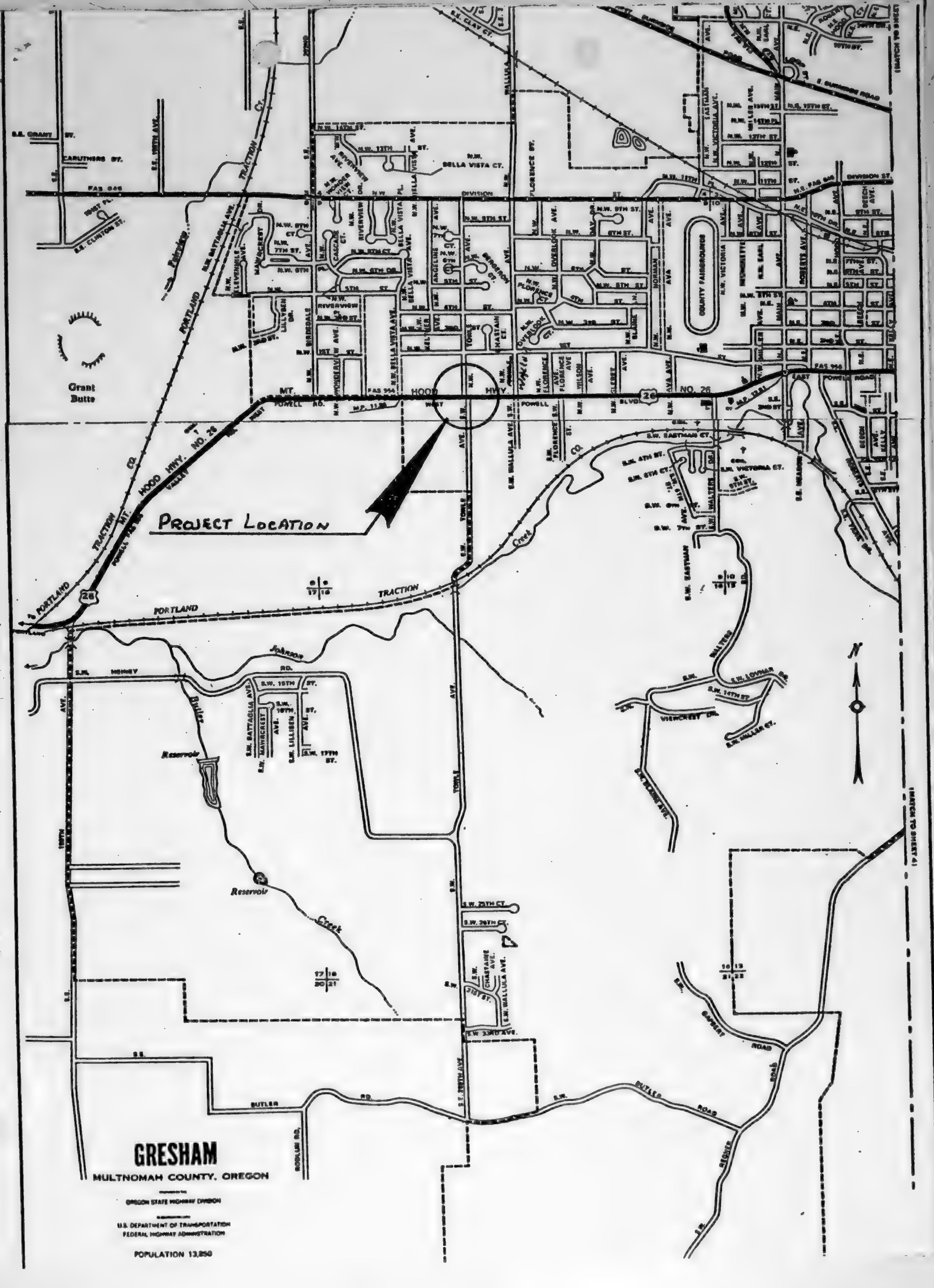
APPROVED:

H S Coulter
State Highway Engineer

DATE: 9/15/80

Contains Recycled Materials
81-125-1387

SP*75683-125


PROJECT LOCATION
(MATCH TO SHEET)
(MATCH TO SHEET 41)
N
Grant Butte
MT. HOOD HWY. NO. 26
POWELL BLVD.
PORTLAND TRACTION CO.
FAS 646
DIVISION ST.
COUNTY FAIRGROUNDS
TOWLE AVE.
WALLULA AVE.
FLORENCE AVE.
EASTMAN AVE.
VICTORIA AVE.
MAIN AVE.
ROBERTS AVE.
S.E. GRANT ST.
CARUTHERS ST.
S.E. CLINTON ST.
S.W. HENEY RD.
S.W. BATTAGLIA AVE.
S.W. MAWRCREST
S.W. LILLIBEN ST.
S.W. 15TH ST.
S.W. 17TH ST.
Johnson Creek
Butler Creek
Reservoir
Reservoir
S.W. 25TH CT.
S.W. 26TH CT.
CHASTAINE AVE.
S.W. WALLULA AVE.
S.W. 33RD AVE.
S.E. 190TH AVE.
S.E. 182ND AVE.
S.E. BUTLER RD.
S.W. BUTLER ROAD
GABBERT ROAD
REGNER RD.
S.W. WALTERS DR.
S.W. EASTMAN CT.
S.W. VICTORIA CT.
VIEWCREST DR.
S.W. 14TH ST.
S.W. HILLYARD ST.
S.W. BLAINE AVE.
S.W. LOVHAR DR.
BIRDSDALE AVE.
S.E. BURNSIDE ROAD
FAS 954
BOGLUM RD.
17 | 16
20 | 21
8 | 10
17 | 16
9 | 10
16 | 15
16 | 15
21 | 22

GRESHAM

MULTNOMAH COUNTY, OREGON

OREGON STATE HIGHWAY DIVISION

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

POPULATION 13,850

9366 11-18-80 26

LOCATION PROSPECTUS
OREGON DEPARTMENT OF TRANSPORTATION
LOCATION UNIT

NOTE: SHADED AREAS
TO BE COMPLETED
IN SALEM OFFICE

DATE

PREFIX

1 - IDENTIFICATION

PROJECT NAME: Mt. Hood Highway at Towle Road (Gresham)

HIGHWAY NAME: Mt. Hood

HIGHWAY NUMBER: 26

REGION: 1

ADMINISTRATIVE DISTRICT

COUNTY: Multnomah

CITY: Gresham

LENGTH

MILEPOST NUMBER: 12.02 TO

☐ RURAL ☒ URBAN

LOCAL GOVERNMENT PROJECT? ☐ YES ☒ NO

IF YES, UNIT OF GOVERNMENT

TYPE OF FUNDS: ☐ FAI ☐ FAP ☐ FAS ☐ STATE ☐ FAUS ☐ OTHER HES

METHOD OF CONSTRUCTION: ☒ CONTRACT ☐ STATE FORCE ☐ OTHER

TYPE OF WORK: ☐ GRADING ☐ PAVING ☐ STRUCTURE ☐ SIGN ☒ SIGNAL ☐ ILLUMINATION ☐ ROADSIDE IMPROVEMENT ☐ OTHER

PROJECT DESCRIPTION

Install a five-phase signal at the subject intersection.

1 Versteeg ✓
Anderson
2 Christensen Don
3 Olsen
Sullivan
Turpin
T[illegible]
4 Wakefield

RECEIVED
DEC 0 1 1980
ROAD DESIGN SECTION

Do Not File ☐
Return To
Filing ___/___
Action

2 - TRAFFIC DATA

EXISTING AVERAGE DAILY TRAFFIC (YEAR-VOLUME): 1979 - 15,300

PROJECTED AVERAGE DAILY TRAFFIC (YEAR-VOLUME)

LEVEL OF SERVICE		A	B	C	D	E	F
	EXISTING	☐	☐	☐	☐	☐	☐
	PROPOSED	☐	☐	☐	☐	☐	☐

DESIGN SPEED (MPH): N/A

DESIGN STANDARDS: N/A

TRAFFIC ANALYSIS: ☐ LIGHT ☐ MEDIUM ☐ HEAVY

APPROVED
Frank E. Turpin
Location Engineer
Date 11/18/80

FORM 734-1730 (12-78) Page 1

3 - FEATURES

	EXISTING NUMBER AND WIDTH	PROPOSED NUMBER AND WIDTH
TRAVEL LANES	2 - 12'	No Change
SHOULDERS	2 - 8'	" "
MEDIANS		" "
PARKING LANES		" "
SIDEWALKS		" "
BIKEWAYS		" "
INTERCHANGES		" "
OTHER:		

	YES	NO	MAYBE
Channelization	☐	☒	☐
Frontage Roads	☐	☒	☐
Traffic Signals	☒	☐	☐
Signing	☐	☒	☐
Illumination	☐	☐	☐
Structures	☐	☐	☐
Stage Construction	☐	☐	☐
Pedestrian Crossing	☐	☐	☐
Rest Area	☐	☐	☐
Truck Scale Site	☐	☐	☐
Landscaping	☐	☐	☐
Drainage	☐	☐	☐
River ______	☐	☐	☐
Stream ______	☐	☐	☐
Storm Sewer	☐	☐	☐
Sanitary Sewer	☐	☐	☐
Right of Way	☐	☐	☐
Simple Acquisition	☐	☐	☐
Complex Acquisition	☐	☐	☐
Relocations	☐	☒	☐

	YES	NO	MAYBE
Right of Way (cont.) Improvements	☐	☒	☐
Access Control	☐	☐	☐
Railroad Crossing	☐	☐	☐
At Grade	☐	☐	☐
Separated	☐	☐	☐
Railroad Encroachment	☐	☐	☐
Permits	☐	☐	☐
Conditional Use	☐	☐	☐
Flood Plain	☐	☐	☐
Irrigation District	☐	☐	☐
Water District	☐	☐	☐
Drainage District	☐	☐	☐
Div. of State Lands	☐	☐	☐
Dept. of Geology & Min. Ind.	☐	☐	☐
Corps of Engineers	☐	☐	☐
Coast Guard	☐	☐	☐
DEQ NPS Air Pollution	☐	☐	☐
DEQ NPS Water Pollution	☐	☐	☐
Building	☐	☐	☐
Fish & Wildlife Approval	☐	☒	☐

3 - FEATURES (cont.)

	YES	NO	MAYBE		YES	NO	MAYBE
Agreements (City-County Etc.)	☒	☐	☐	Hydraulics Study	☐	☒	☐
Environmental Assessment	☐	☒	☐	Soils Investigation	☐	◫	☐
Statewide Assessment	☒	☐	☐	Airport Clearance	☐	◫	☐
Negative Declaration	☐	☒	☐	Economic Analysis	☐	☒	☐
Environmental Impact Statement	☐	◫	☐	Requires Field Survey	☒	☐	☐
4-F Statement	☐	◫	☐	Old Survey Available	☐	☒	☐
Citizen Advisory Committee	☐	◫	☐	Requires Vicinity Map	☒	☐	☐
Public Hearing ______	☐	◫	☐	Requires Photogrammetry	☐	☒	☐
Borrow Source	☐	◫	☐	Requires Reconnaissance Survey	☐	◫	☐
Material Source	☐	◫	☐	Reconnaissance Available	☐	◫	☐
Utilities	☐	☒	☐	Design Review	☐	☒	☐

Type ______

4 - WORK ITEMS

		TO BE PERFORMED BY		
		APPLICANT	STATE	CONSULTANT
PRELIMINARY ENGINEERING		☐	☒	☐
RIGHT-OF-WAY	N/A	☐	☐	☐
CONSTRUCTION ENGINEERING		☐	☒	☐

5 - DURATION TIMES (MONTHS)

	FLOAT	ACTIVE
RECONNAISSANCE SURVEY	( )	N/A
DRAFT ENVIRONMENTAL IMPACT STATEMENT	( )	N/A
CORRIDOR APPROVAL	( )	N/A
FIELD SURVEY	( )	0.5
PRELIMINARY DESIGN	( )	N/A
DESIGN APPROVAL/FINAL EIS	( )	N/A
RIGHT-OF-WAY DESCRIPTIONS	( )	N/A
RIGHT-OF-WAY ACQUISITION	( )	N/A
P.S. & E. DOCUMENTS	( )	3
RECOMMENDED CONSTRUCTION DATE	______ (Region)	25 June '81 (Salem)

6 - SUGGESTED BASE DESIGN

ITEM	NEW WORK	OVER EXISTING
N/A		

7 - TYPICAL SECTION AND LOCATION

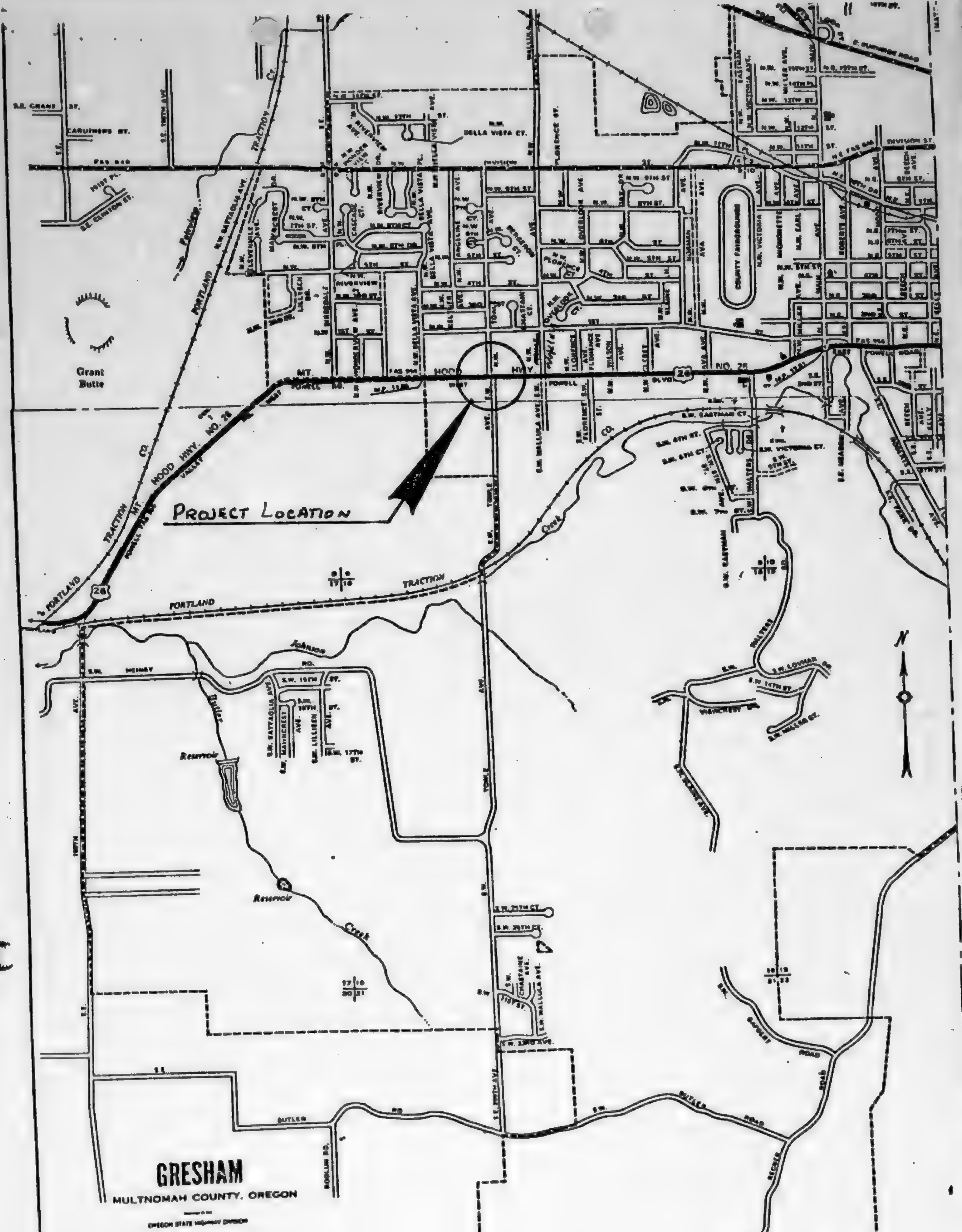
Attach 8½ x 11 inch sheets for general location map and typical section (roadway & structure).

8 - PROJECT COST ESTIMATES

	REGION	SALEM
PRELIMINARY ENGINEERING		9,800
RIGHT OF WAY		3,000
TRAFFIC CONTROL		
ILLUMINATION		
STRUCTURES		
RAILROAD		
ROADWAY		
OTHER		
ENGINEERING & CONTINGENCIES		
PROJECT TOTAL	70,000	

SUBMITTED BY L E George

L. E. George

 PROJECT LOCATION
GRESHAM
MULTNOMAH COUNTY, OREGON
OREGON STATE HIGHWAY DIVISION
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
Grant Butte
MT. HOOD HWY. NO. 26
POWELL BLVD.
DIVISION ST.
PORTLAND TRACTION CO.
COUNTY FAIRGROUNDS
Johnson Creek
Butler Creek
Reservoir
Reservoir
BUTLER ROAD
N

93

10-29-80

U. S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION **LETTER OF APPROVAL AND/OR AUTHORIZATION**	FEDERAL AID PROJECT NO. HES-24(28) STATE PROJECT NO. See below

FROM: G. L. Green, Division Administrator FHWA - Oregon Division, Salem, OR	PROGRAM NO. ITEM NO. 10036	COUNTY NAME Multnomah PROGRAM STAGE (Check) ☐ 1. ☐ 2.

TO:

Mr. H. S. Coulter
State Highway Engineer
Oregon State Highway Division
Salem, Oregon

11-4
[illegible]

RECEIVED
STATE HWY ENGR
NOV 4 - '80
REFER TO
[illegible]
FOR

Info	Inves	R/D	D/R	Sign	Act	File

DATE PS&E APPROVED	DATE AUTHORIZATION EFFECTIVE 10-29-80	FEDERAL ROUTE NUMBER Primary 24 STATE ROUTE NUMBER Primary 26

GENERAL LOCATION:

Mr. Hood Highway at Towle Avenue (Gresham)

GENERAL DESCRIPTION OF WORK:

Preliminary Engineering

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

PRELIMINARY ENGINEERING TO DETERMINE
☐ LOCATION ONLY
PRELIMINARY ENGINEERING FOR SURVEY AND PLAN
☒ PREPARATION — Including utility prepartory work.
☐ OTHER *(Specify)* — TEC $9,820 - Fed. Funds $8,820

☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION - ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of 10-15-80.

DATE 10-29-80	SIGNATURE OF APPROVING OFFICIAL G. K. [illegible]	TITLE for Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U. S. GOVERNMENT PRINTING OFFICE: 1978-031-898

9366

L

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6-2

October 15, 1980

TO: G. L. Green, Division Administrator
Federal Highway Administration

Original Signed By
D. E. Swan

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 10036
Project No. HES-24(28)
Mt. Hood Hwy. @ Towle Ave. (Gresham) Section
Multnomah County

Attached data consists of PR-1 forms with project maps, collision diagram, traffic signal warrant comparison, other traffic data and sketch map.

I request authorization to proceed with all phases of preliminary engineering including utility preparatory work necessary to obtain PS&E approval at an estimated total cost of $9,800 with an obligation of $8,820 in Federal funds.

DRH:bke
Attachments

cc: L.E. George
E.L. Hardt (Reg. 1)
R.N. Bothman (Metro)
Max Klotz (Metro)
Jon Rose (Metro)
Gen. Files

Form [illegible]

10-7-80

REPORT OF ACTION UNDER DELEGATED AUTHORITY

BY STATE HIGHWAY ENGINEER

On behalf of the Oregon Transportation Commission and under authority delegated to me to approve Title II projects, I approved the following:

SECTION	ESTIMATED TOTAL COST	FEDERAL FUNDS	STATE SHARE	LOCAL GOVT. FUNDS	APPROVAL DATE
*Harmony Road Guardrail Clackamas County	$39,205	$35,284	0	$3,921	9- 3-80
Mt. Hood Highway at Towle Road (Gresham) Multnomah County	70,000	63,000	$7,000	0	9-15-80
Pacific Highway East at Hayesville Drive NE (Salem) Marion County	65,000	58,500	7,500	0	9-23-80
Columbia River Highway at Umatilla-Stanfield Highway Umatilla County	90,000	81,000	9,000	0	9-17-80
Benton County Pavement Marking Project No. 2	60,000	60,000	0	0	9-30-80

*Project Cancellation

October 7, 1980

H. S. Coulter
State Highway Engineer

10-7-80
orig. to [illegible]
by George

9366

L.

June 30, 1980

TRA 7

Mr. Leo Hagstrom, Director
Department of Human Resources
318 Public Service Building
Salem, OR 97310

Dear Leo:

I apologize for taking so long to respond to you regarding the intersection of Powell Boulevard and Towle Street. Several agencies have been involved in this problem and it was necessary to work with them.

After reviewing both current and past problems at the intersection, it is believed that both pedestrians and vehicles can receive the best of safety benefits through the installation of a temporary traffic signal. The actual installation, however, will be contingent on obtaining Federal funding and on final approval by the City of Gresham.

[illegible] 21-10
[illegible]
JP

The City's intent is to improve 221st Avenue-223rd Avenue such that traffic patterns in the area will be altered to the degree that Towle will become a minor street. At that time, the signal would be relocated to the 221st-223rd project. Preliminary work involving project funding has been started; however, we will continue to work with the City on this project until the details are finalized.

Sincerely,

F. B. Klaboe
Director

cc: Bill Cameron, City Engineer
City of Gresham

LEG:ds jv

bc: H. S. Coulter
E. L. Hardt
R. N. Bothman
L. E. George

STATE OF OREGON

Highway - Traffic

INTEROFFICE MEMO

TRA 7

TO: H. S. Coulter
State Highway Engineer

DATE: June 25, 1980

FROM: L. E. George
Traffic Engineer

SUBJECT: S.E. Powell Boulevard at Towle Street
City of Gresham

Attached is a draft for Mr. Klaboe's use to respond to Leo Hegstrom concerning Towle Street and Powell Boulevard (US26).

In reviewing our file on this location, it is my opinion that the State has not really addressed some of the past traffic conditions for which we have received complaints.

A signal has been warranted for several years at this intersection and has been fairly high on the statewide priority list. The signal project was removed from the new Six-Year Program at the request of the City because they thought some street improvement in the area would eliminate the need for the signal. In the meantime, the City encountered project problems and the street work was delayed.

Considering the past accident history and the fact that many older people use the intersection for crossing, I have reinitiated a signal project for the intersection. An analysis indicates that at least a $150,000 project can qualify for Title II funding. This would allow a left-turn refuge to be constructed and a traffic signal to be installed on a temporary basis and moved later to coordinate with the City's street project.

The attached draft is based on that premise.

LE George

L. E. George
Traffic Engineer

RECEIVED
STATE HWY ENGR
JUN 26 '80
REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

LEG:ds
Attachment

cc: R. N. Bothman

looks right -
Bothman concurs
R

Contains Recycled Materials
81-125-1387

STATE OF OREGON

INTEROFFICE MEMO

DATE: May 12, 1980

TO: FRED KLABOE
Director of Transportation

FROM: RONALD W. FAILMEZGER
Region Traffic Engineer

SUBJECT: RESPONSE TO ROUGH DRAFT TO LEO. T. HEGSTROM
May 6, 1980
Concerning Adult Family Service Memo
April 4, 1980
Subject Jameson Vernon
File No. 4-3502-YIA758-3

INVESTIGATION REPORT
SE Powell Blvd. @ Towle St.
City of Gresham

RECEIVED
DOT DIRECTOR
MAY 13 '80
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

The SE Powell Blvd. and Towle Avenue intersection has been the subject of previous investigations. An investigation concluded in November of 1978, resulted in this location being placed on the Statewide Signal Priority list for a five phase full actuated traffic signal. The same report also recommended removing the parking on this section of Powell Blvd. and restriping the existing section to provide a left turn lane.

Response from adjoining property owners concerning the removal of the parking was not favorable. Consequently, the left turn lane restriping is dead in the water. A planned construction of the 221st-223rd project in the City of Gresham will relieve the volumes on Towle Street significantly. The City of Gresham has expressed that signalization of SE Towle is not a priority item with them.

The major pedestrian movement crossing Powell Blvd. at SE Towle is to and from the bus stop located on the north side of Powell Blvd. The sight distance for eastbound automobiles is limited to 400 feet because of the crest of a vertical curve immediately west of the Towle intersection. Dave Rouse, Chairman of the Gresham Traffic Control Board, has recommended to Tri-Met that the bus stop at Towle Street be eliminated and that pedestrian traffic be channeled to the bus stop at Wallula, one block east of SE Towle. There is a striped and signed crosswalk at Wallula. There is no sight distance restrictions for pedestrians crossing at this location. It is felt that the safety of the crossing at the Wallula location outweighs the inconvenience associated with walking on block further to catch the Tri-Met bus, and that the residents of the Hood View Home Residential Care Home should be encouraged to do so.

Contains
Recycled
Materials
81-125-1387

Eliminating the bus stop at Towle Street will not eliminate all pedestrian movement crossing Powell Blvd. at this location, therefore, we are proceeding to install the standard pedestrian warning type signing for eastbound traffic west of the Towle Street intersection.

Attached are copies of a letter to the City of Gresham following our investigation in 1978, excerpts from the Summary of the Gresham Six Year meeting November 20, 1979, and part of a memorandum from the Gresham City Council to the Department of Transportation concerning projects for the Six Year Highway Improvement Program. There is also a letter from the Manager of the Hood View Residential Care Home received during this investigation concerning the same subject. I would suggest a similar response to both parties concerned.

A rough draft for your consideration is attached.

LHG/gw
Attachment
cc: Ed Hardt
Harry Woodward: Will you see that the special 48" Pedestrian warning symbol sign W11-2 is installed 450± feet west of Towle Street.

city of Gresham

CITY OF GRESHAM
1333 N.W. Eastman • Gresham, Oregon 97030
Telephone: (503) 661-3000
Engineering Division

May 1, 1980

Mr. Ken Stanley
Tri-Met
4012 S.E. 17th
Portland, Oregon 97202

Dear Mr. Stanley:

This letter is a follow-up to our conversation, on April 28th, concerning a pedestrian crossing problem at the intersection of Highway 26 and Towle Road. Automobiles heading East-bound on Highway 26 approach the crest of a hill at this location, creating a sight distance problem for pedestrians crossing Highway 26. We have had one fatal accident at this intersection in the last year, as well as other injury accidents involving pedestrains.

It is recommended that the Tri-Met bus stop, located at this intersection, be eliminated and pedestrian traffic channeled down to the bus stop at Wallula, where a crosswalk is striped. There is no sight distance problems for pedestrians crossing Wallula on Highway 26. We feel that the inconvenience associated with walking one block further to catch a Tri-Met bus is outweighed by the safety standpoint of crossing at a safer location.

Lee Gunderson, of the State Highway, and myself reviewed this site and made this joint recommendation. Your prompt attention to this matter would be appreciated

Sincerely,

David S. Rouse

David S. Rouse, Chairman
Gresham Traffic Control Board

DSR/mm

cc: [redacted]

OE RE RME RCE BE
TE RECEIVED RSM
UE MAY - 6 1980 RSC
SO REGION I RBI
TO

November 1, 1978

Bill Cameron
City Engineer
City of Gresham
City Hall
Gresham, OR 97030

REGION I

RE RME RCE OE TE
UE SO RSM RSC
RBI BE TO

Re: Traffic Conditions
SE Powell Blvd.
Birdsdale to Wallula Ave.
City of Gresham
US 26, Hwy. No. 26

Dear Bill:

In my meeting with yourself, John Lictnhelb, Lt. Vicars, and Rich Walker, on September 3, we discussed traffic matters on the subject section. You will recall there is a concern for both vehicular traffic entering and exiting the highway as well as pedestrians crossing the highway. The latest request concerning pedestrian activities was from J. Bryce Strang who operates the MeRe Activity Center on Wallula Avenue.

I think it is recognized that there is a difficulty of both pedestrians and vehicular traffic negotiating the high volume traffic on SE Powell Blvd. through this section. Our September 3rd meeting included only traffic conditions at Towle Road and Wallula Avenue. It was felt desirable to include the intersection of Birdsdale in the study for traffic signals. This study has been completed and I can now share the results of that and also review traffic conditions at the other two intersections.

Birdsdale Avenue forms a "T" type intersection with SE Powell Blvd. There is construction underway to the south to make it a cross type intersection. The existing traffic volumes meet minimum requirements for traffic signals. The reported accident record shows a pattern of accidents involving left turn movements from Powell Blvd. to Birdsdale Avenue. There were not accidents of type preventable by signalization during the study period. This intersection could be signalized, but it would be very difficult to provide a left turn lane without obtaining right of way and involving major construction.costs.

The intersection of Towle Road forms an offset cross type intersection with SE Powell Blvd. There is a curbed bikepath on the south side and sidewalks and curbs on the north side of the roadway. The existing traffic volumes on the south approach of Towee Road meets minimum requirements for traffic signals. The reported accident record shows a pattern of accidents involving left turn movements from SE Powell Blvd. to south on Towee Road. There is also a pattern of reported accidents preventable by signalization. This location could be restriped to channelize for left turn movements from SE Powell Blvd. by the removal of existing curb parking. If this were done, future signalization would include a phase for the left turn movement.

The intersection of Wallula Avenue with SE Powell Blvd. forms a cross type intersection. There is a curbed bikepath on the south side with sidewalks and curbs on the north side. The existing side street traffic volumes do not meet the minimum requirements for signalization. The reported accident record shows a pattern of accidents involving left turn movements from Powell Blvd. to Wallula Avenue. There were no reported accidents of the type preventable by signalization during the study period.

As a result of this review of traffic conditions, the intersections of Birdsdale and Towle Road with SE Powell Blvd. will be placed on the statewide Traffic Signal Priority Listing. This is a listing of locations on the state highway system that are known to meet the minimum requirements for traffic signals, which are installed as funds become available. The removal of parking on the north side of SE Powell Blvd. from a point 400 feet west of Towle Road to a point 500 feet east of Wallula Avenue would allow for the striping of a left turn lane for both Towle Road and Wallula Avenue. The parking removal is under the jurisdiction of the City of Gresham. If the City is willing to remove the parking full time on this section of roadway, the State Highway Division would be willing to restripe the 39 foot cross section to provide left turn lanes at these two intersections.

It is realized that this is not a complete solution to traffic problems in the area and does not address, directly, the pedestrian difficulty in getting across the highway, but this improvement deals with an existing accident problem and is within the capabilities of the Highway Division financially at this time. If the City is willing to remove the parking the restriping could be done in the near future. Please advise of your desires in this matter.

Sincerely yours,

Ronald W. Failmezger
Region Traffic Engineer

RWF/gw
cc: R. N. Bothman
L. E. George: Please place on the Priotity listing Birdsdale Ave. as a 5 phase actuated at $55,000 with a left turn lane at $40,000 & Towle Avenue at a 5 phase actuated at $55,000 with curb radii improvement at $5,000.
Ed Hardt
Harry Woodward

3. U.S. 26/MT. HOOD HIGHWAY AT TOWLE SIGNALIZATION PROJECT--5-PHASE SIGNAL

The Traffic Control Board is recommending deletion of this project from the listing for the following reasons:

- S.W. Towle is improved to a standard which would preclude a collector street status, and with 221st/223rd Street project, will be by-passed as a collector street. North/south traffic intersection with Powell will become a minor neighborhood connection.
- The intersection occurs at a vertical curve in Hwy. 26 with inadequate sight distance to preclude a high accident frequency on an eastbound movement along Highway 26.
- There exists a horizontal separation between Towle north and Towle south of Powell which would render the connection to Powell difficult to signalize and may generate a high accident rate through its locational problems. The addition of pre-warning lights will not preclude the horizontal and vertical alignment problems of this intersection.
- Interruption in the flow in the Powell traffic caused by 221st/223rd/Powell intersection signalization, and Birdsdale/Powell intersection will improve the opportunity for connection to Powell for the decreased traffic load from the immediate neighborhood. Peak hour traffic will have the option of Bridsdale connection westbound/223rd connection eastbound for north/south traffic should Powell become congested.
- Signalization may encourage north/south traffic connections to Powell.
- North of Powell Boulevard Towle Avenue connects to a residential district, intersects with Division Street at a difficult location without a signal, and does not provide north/south movement beyond Division Street.

MEMORANDUM

TO: The Oregon Department of Transportation

FROM: Gresham City Council

DATE: November 28, 1979

SUBJECT: Recommended Projects for Oregon's Six-Year Highway Improvement Program

---

It is our understanding that the Oregon Department of Transportation is in the process of updating their priority improvements for the state road system. Approximately $56 Million has been set aside for the final two years of the program and, at this point in time, it is not yet committed to any specific projects. Projects included in this program are directed toward permanent improvements and do not preclude other local improvements that may be financed by other than state monies.

Having reviewed the projects that are currently listed in the Six-Year Highway Improvement Program that fall within Gresham's city limits, and assessing the street improvements that need to be made along the U.S. 26 route as it runs through Gresham, the Gresham City Council recommends the following improvements be included in the Oregon Department of Transportation's Highway Improvement Program.

The Gresham City Council is recommending these projects for inclusion on the Oregon Six-Year Highway Improvement Program as follows:

A. US 26 & Birdsdale (202nd)
B. US 26 & Hogan/242nd
C. US 26 & Burnside
D. US 26 & Palmquist Rd.
E. US 26 & Towle
F. US 26 & 190th Avenue

Attached please find accident reports from the Gresham Police Department. We consider the 182nd Avenue and Powell, and the Palmquist and Highway 26 intersection signalization projects of greater importance for long term installation and financing under the 6-year program, and the reduction in priority of Powell/Towle and the 190th and Powell intersection signalization projects to be of benefit to the City long term and keeping with the comprehensive planning efforts for ultimate development and carrying capacities for permanent traffic/transportation installations.

As identified in the report, the Towle and Powell intersection will be bypassed. The Powell and 190th intersection will ultimately be bypassed. Signalization of intersections which will not benefit the traffic capacities of the arterial street system of Gresham in the future should not be funded on the 6-year program, and any attempt to fund intermediate solutions for temporary signalization should be a separate issue than long term funding from the Oregon Department of Transportation Highway Program.

GRESHAM SIX YEAR PROGRAM MEETING

November 28, 1979
7:30 P.M.

50 people attended

Representing the State were Ed Hardt, Larry Rulien, Bob Bothman and Peter Brix.

1. Stan Morris, City Council, Chairman East Multnomah County Transportation Committee. Requested signalization at Palmquist Road and U.S. 26 (submitted resolution); signalization at Birdsdale on 202nd and U.S. 26 and that this project be accelerated; suggested full signalization at Hogan and Powell Boulevard; said that the Graham Road structure should be widened to four-lanes and connect with 257th Street

2. Dennis Scott, Deputy Sheriff, Multnomah County. He said that the curve at 190th just west of Birdsdale needs to be realigned and repaved. He also said that the bikelane on Powell Boulevard should be discontinued because of lack of use.

3. Paula Bentley, Gresham City Council. Said that CRAG, ODOT, City of Gresham were all working together to find funding for 190th and Powell which would cost about $2.1 million. She suggested a five phase signal be installed at Powell and Birdsdale Avenue. She also requested that this be made a top priority in exchange for the light at Powell and Towle Road. In addition, she requested that full signalization and an eight phase signal at U.S. 26 and 242nd be installed. Also requested was a signal at U.S. 26 and Palmquist. She noted that a developer will put in a road between 182nd and 190th to bypass 190th and Powell. Bentley requested that 190th and Powell be given a lower priority.

4. George Walker. He discussed the hazardous conditions in the Hoodland corridor on U.S. 26. He cited the section on U.S. 26 between Brightwood and Government Camp as extremely dangerous. He said that Brightwood to Rhododendron is a mixed two-and-four lane facility, and that it is very dangerous. Also suggested signals for these intersections on Wemme and Arrah Wanna Road, Welches Road to Bowmans and Zigzag. Walker also said that the entrance to Salmon River Road should be widened because of increased traffic from Bowmans. Also mentioned was the development of the new Rippling River Complex at Welches, which would significantly impact traffic on U.S. 26. He also said there were many accidents with increases in week-end population.

5. Lowell Njust, Attorney. He gave many statistics on the hazards on U.S. 26. compiled by the Hoodland Fire Department. He requested that funds for the Mt. Hood Freeway be transferred for improvements to U.S. 26.

   Njust also mentioned that the school board adopted a policy that school children should not be allowed to cross U.S. 26. Thus in many cases, children are bused only one block to cross U.S. 26 to school.

9366

GENERAL FILES

2.

May 12, 1980

OORA-71-2

Mr. Leo Hegstrom
Director
Department of Human Resources
318 Public Service Building
Salem, Oregon 97310

Dear Leo:

S. E. Powell Boulevard-Towle Street
City of Gresham

In response to your April 4 inquiry concerning the need for special signing at this intersection with regard to aged and infirmed pedestrians, an investigation is being made of the conditions at this location in cooperation with the City of Gresham.

I understand that contact has been made with Bill Cameron, City Engineer, and with Sue Chewning. When this investigation is completed, I will advise you of the results.

Sincerely,

F. B. Klaboe
Director

bc H. S. Coulter
L. E. George
Ed Hardt

RWF:gw fn

RECEIVED
OFFICE OF
DISTRICT ENGINEER
DISTRICT NO. 2C

APR 9 1980

HOODVIEW RESIDENTIAL CARE HOME
1450 W. POWELL
P. O. BOX 582
GRESHAM, OREGON 97030
PHONE: 665-5193

OE RE RME RCE PE
TE RECEIVED RSM
UE APR [illegible] 1980 RSC

REPLY
To serve you more promptly and economically, we are replying to your letter with marginal notations on the letter itself.

4.8.80

Mr. Harry Woodward
9002 SE McLoughlin
Portland, OR. 97222

An investigation of the subject location is being made. We will inform you of the results when said investigation is complete.

Asst. Region Traffic Engr.

Mr. Woodward:

As you suggested in our phone conversation of March 27, 1980, this letter brings to your attention the near fatal traffic accident at the intersection of West Powell Blvd. and Towle Rd.

On March 15, 1980, one of the residents of Hoodview, Vernon Jameson, attempted to cross Powell, from South to North, to catch a bus. For his efforts, he suffered head injuries and a broken left leg.

A controlled intersection at this location would nearly eliminate judgmental decisions, for both

STATE OF OREGON

ROUTE SLIP

TO: Lee ~~RON [illegible]~~ Date 4-22-80

REGION 1 TRAFFIC

FROM: WOODWARD

CHECK

___ Approval

___ Necessary Action

___ Prepare Reply

___ For My Signature

___ Your Signature

✓ Comment

___ Initial and Return

___ Investigate

___ Confer

___ Per Telephone Conversation

___ For Your Information

___ As Requested

___ Note and File

___ Return With More Details

COMMENTS:

WOULD LIKE TO DISCUSS @ OUR NEXT MEETING

THANKS

HARRY

81-125-1509

driver and pedestrian.

And this is a pedestrian intersection. The bus stop on the North side of Powell draws many commuters from the Hollybrook sub-division who are going into Portland.

The residents of Hoodview are very mobile. The ages vary from 21 to 98. Hoodview is not a nursing home, but as the letterhead implies, we offer "residential care." These people are not "old folks, to be locked up and kept safe and out of sight", as many would like to have it. We are integral members of the community.

I live at 1405 W. Powell; across the street from Hoodview. I cross Powell many times daily. If my life insurance company hears about this situation, its actuaries would insure me

HOODVIEW RESIDENTIAL CARE HOME
1450 W. POWELL
P. O. BOX 582
GRESHAM, OREGON 97030
PHONE: 665-5193

under the high risk category of "race car driver."

And "race car driver" is too mild a term to describe the mentality of the drivers as they crest the hill at Towle. Why is a 40 m.p.h. speed limit allowed? (Which means traffic is moving at 45 m.p.h., in both directions on Powell!)

I see traffic lights going up all over the city. (ie. Killingsworth - Sandy Blvd, where there are three new lights in a two mile distance) Your emphasis seems to be treating symptoms instead of causes. (Pedestrians getting to buses eliminating cars and alleviating traffic.) By the same token, I understand the automobile traffic on Towle is phenominal. Either way,

how about a traffic light?

Dennis Murphy

STATE OF OREG

INTERO CE MEMO

TO: Don Stroup, Manager
Estate Administration, Salem

DATE: April 4, 1980

FROM: Sue Chewning, ASW
Gresham, AFS

SUBJECT: Jameson, Vernon (4-3502-YIA758-3)

RE RME RCE CE
TE RECEIVED RSM
UE [illegible] 1980 RSC
SO REGION I RSI
TO

On March 14, 1980, Mr. Jameson was struck by a car at the intersection of Powell and Towle in Gresham. Mr. Jameson was fortunate in that he suffered only a broken leg and multiple minor lesions and contusions. The above named intersection is where Hoodview Home for the Aged is located. Hoodview is where Mr. Jameson lives as he is mentally retarded and is subject to seizures. He also has a deformed left arm and foot and requires a structured environment.

Mr. Jameson is the second resident of Hoodview to be struck by a car in that intersection. The first was John Wahlgren who eventually died possibly as a result of his accident.

The intersection in question (Powell and Towle, Gresham) is a busy intersection as Powell is Highway 26 going to Mt. Hood. Towle is one of the main streets going north/south connecting Gresham with Boring and Estacada. There are also many housing developments in this area. Currently there is only a stop sign on Towle. There are no cross walks, street lights or even a caution sign warning of aged and infirmed pedestrians on either Powell or Towle. The average speed in this intersection is 35-40 miles per hour. When I obtained the information for the attached report, the officer who did the investigation stated that during the week of Mr. Jameson's accident, there had been several other accidents that he had investigated in the same intersection. When asked if a stop light and a cross walk could be put at the intersection, the policeman informed me that Powell was a state road and therefore it was up to the state to decide.

I am writing this memo in the hopes that something can be done to protect our AFS clients at Hoodview. A stop light with a cross walk is needed but if not possible I would suggest that there be at least caution signs on both Powell and Towle warning of aged and infirmed pedestrians ahead.

SC:cd

Ron —

PLEASE INVESTIGATE AND
ROUGH DRAFT A REPLY

Dave Rouse

81-123-1387

from LEO F. HEGSTROM APR 10 1980

Fred Klaboe -

Is there anything you can do about this?

I realize this is the second request to you in a week — but I won't keep up the pace.

Thanks.

Leo

RECEIVED
DOT DIRECTOR
APR 11 '80
REFER TO Coulter
FOR

Info	Inves	P/D	D/R	Sign	Act	File
		/				

4-17
ay

RECEIVED
STATE HWY ENGR
APR 15 '80
REFER TO Harold R
FOR

Info	Inves	P/D	D/R	Sign	Act	File
	X	X				

R

1981 NW Kings Blvd.-Highland 9367
Dr. (Corvallis) Sec. of Walnut
Dr. (grad, pav, & sig.) #2

Cda 5312   5/16/75; 2/25/76; 4/4/79; 9/16/80

9367

Oregon Department of Transportation
HIGHWAY DIVISION

HIGHWAY DIVISION INVOICE

		AGENCY 02	CURRENT DOCUMENT NUMBER 145171
YOUR ORDER NUMBER	BILLING REQ. NUMBER CA 5597	DATE 4/16/87	VENDOR NUMBER 0001021831-00

City of Corvallis
501 S.W. Madison Ave
P.O. Box 1083
Corvallis OR 97330

SEND REMITTANCE TO:
OREGON STATE HIGHWAY DIVISION
434 TRANSPORTATION BUILDING
SALEM OR 97310-0780

T.C.	E.A. SUB JOB	SPECD	ORG. UNIT	OBJ DTL	ACT.	REVENUE SOURCE	AGY. SRC.	AMOUNT
617	C3021939-011	L03	7144			844010	02	$2,900.00

PROG	APP SYM	FUND CODE	FUND DETAIL	FUND SOURCE

DESCRIPTION: Supplemental Final Billing

N.W. Kings Blvd.-Highland DR., Walnut Blvd. M2120 (3)
Contract 9367
Preliminary Engineering advance deposit of 4/29/75 included in error on itemized statement of 12/12/86.
Deposit applied to costs in account 7823 and balance of $1,428.33 refunded city on 5/27/76 check #001825. See attached documentation.

Amount billed invoice 144833 of 2/12/87	$25,898.96
Revised amount due	28,798.96

Additional amount due this invoice **$2,900.00**

GL 1140

SPECIAL INSTRUCTIONS (FOR ACCOUNTING USE ONLY)

TOTAL PRICE

TOTAL AMOUNT DUE $2,900.00

IF YOU HAVE QUESTIONS ABOUT THIS INVOICE PLEASE CONTACT: Anne Hernandez (INVOICE PREPARER) PH. 378-5034

734-1150 (11-86)

PROGRAM SECTION
MANAGER ___ RESOURCE UNIT ___
FA UNIT ___ PROGRAM UNIT ___
APR 17 1987
REFER TO ___
R/D ___ ACT ___ REPLY ___
DISC ___ INFO ___ FILE ___

145171

OREGON STATE HIGHWAY DIVISION

Revised 4-13-87

ITEMIZED STATEMENT OF FINAL COSTS DATE: December 12, 1986

CITY: Corvallis AGREEMENT NO: 5312 PROJECT NO: M-2120(1)(2)(3)

CONTRACT NO: 9367 SECTION: NW Kings Blvd.-NW Highland Dr., Walnut Blvd.

PRELIMINARY ENGINEERING (Prefix No. 302-1939):

Project Manager	$ 7,703.62
Citizens Involvement	93.77
Payment for Work by City	22,443.82
Consultant Fees	53,385.68
Final Design	16,763.09
Preliminary Design	4,122.72
Right-of-Way Descriptions	2,010.50
Region Geology	1,191.66
Traffic Section	4,902.25
Landscape Section	32.90
Right-of-Way Liaison	558.85
Region Utility Liaison	164.72
Audit Expense	511.54
Location	535.38
Program Section	249.52
Specifications	1,683.94
Administrative Services	30.26
Environmental Services	15,515.03
Training Courses	311.07
Public Hearing Charges	1,503.93
TOTAL P.E. COST	$133,714.25

RIGHT-OF-WAY (Prefix No. 302-2508):

Net Cost of Land	$ 10,800.00
Severance & Consequential Damages (Non-Partic.)	2,200.00
Appraisals, Witness Fees, Etc.	1,640.32
Title Costs & Recording Fees	215.55
Negotiation Expense	164.93
Appraisal Review	339.35
Program Section	15.23
Right-of-Way Office Expense	351.69
TOTAL R/W COST	$ 15,727.07

CONSTRUCTION (Prefix No. 302-1003):

Payments to Contractor ($25,697.32 Non-Partic.)	$779,887.86
Interest on Final Payment (Non-Partic.)	388.15
SFO #1 Permanent Striping	2,309.47
SFO #2 Adjust Water Facilities	6,768.06
SFO #4 Restore Underground Service	11,956.91
SFO #5 Move Loops (Non-Partic.)	1,842.59
Construction Engineering ($154.62 Non-Partic.)	72,300.84
Audit Services	788.08
Program Section	114.45
Salem Lab	5,568.83
Portland Lab	6.18
Eugene Lab	69.10
Technical Services	348.70
Construction Section	3,411.98
Region Office Charges	5,569.05
Training Courses	336.70
Administrative Leave	93.18
TOTAL CONSTRUCTION COST	$891,760.13

SUMMARY

Total P.E. Cost	$ 133,714.25
Total R/W Cost	15,727.07
Total Const. Cost	891,760.13
TOTAL PROJECT COST	$1,041,201.45
Less Federal Funds: P.E. $104,551.17 R/W 11,928.17 Const. 706,747.26	(823,226.60)
BALANCE	$ 216,974.85
Less State Share:	
$\frac{104{,}551.17}{78.19\%} \times 10.905\% + \frac{11{,}928.17}{88.18\%} \times 5.91\% + \frac{706{,}747.26}{81.83\%} \times 9.085\% =$	$ (93,846.09)
CITY SHARE	$ 123,128.76
Credit for P.E. by City	(1,329.80)
Less P.E. Advance Deposit 4-29-75	(2,900.00) disallowed
Less Const. Advance Deposits 10-8-81 & 12-22-82	(93,000.00)
BALANCE DUE FROM CITY	$ 25,898.96
add PE cost advance disallowed	2900.00
Revised amount due	28798.96

GEZ:me
cc: J. Henry
R. Sjolander
LPG Files

ORGON STATE HIGHWAY DIVISION

Form 81-734-1191

Request for Outside Bill

(Or Advice of Cash Transaction)

Address invoice to: City of Corvallis
℅ City Manager
City Hall
~~Attention of~~ Corvallis, OR - 97330

Request No. (assigned by staff engineer or head of section) CA 2213
Date May 4, 1976
Payer's Order No. (if any) -
Highway Div. Order No. (if any) ORS 2-162
(Number of "Order to Render Service")

Description and Authority: (Describe the service rendered, stating kind of service, location, etc. Also refer to agreements, letters and orders by which payer authorized the service.)

Preliminary engineering for the construction of Walnut Blvd. (FAU 2120) between Kings Blvd. & Highland Dr. per Agreement dated 3/21/75.
First & final billing.

Itemized Statement: Advance deposit $2,900.00 ✓

Quantity	Unit	Description	Unit Price	Amount
		Salaries & wages	897.31	
		Subsistence	40.25	
		Environmental section service	126.72	
		Equipment rental	243.50	
		Laboratory	164.00	
		Project costs - To HWY FUND		1,471.78
		Refund due City		1,428.22

If payer has made payment for this service, indicate the amount of payment. $

If payer has made a deposit with the Highway Division to guarantee payment, indicate the amount of the deposit. $2,900.00

Is this a partial or final request for billing? FINAL

If there have been any previous requests for billing in connection with this same service, indicate the total amount of all previous requests. $ -

Give the number of the last previous request in connection with this same service. -

Credit distribution:
7823-594 ⑥③② $1,471.78 ~~[illegible]~~

Submitted by:
D. W. Jones

Approved:
R. J. Hack
Regional Engineer

Approved:
Section Head or Staff Engineer

Instructions: The original and duplicate copies shall be forwarded through the regional engineer to the staff engineer or section head. Staff engineer or section head will forward original copy to the Accounting Section. Additional copies may be prepared for and retained by the region office and other field offices concerned. If the request is to be accompanied by a payment, an additional copy shall be submitted for the use of the Accounting Section.

9367

HIGHWAY DIVIS

HIGHWAY DIVISION INVOICE

		AGE 02	CURRENT DOCUMENT NUMBER 144833
YOUR ORDER NUMBER	BILLING REQ NUMBER CA 5481	DATE 2/12/87	VENDOR NUMBER 0001021831-00

City of Corvallis
501 S.W. Madison Avenue
P.O. Box 1083
Corvallis, OR 97330

SEND REMITTANCE TO:
OREGON STATE HIGHWAY DIVISION
434 TRANSPORTATION BUILDING
SALEM OR 97310-0780

T.C.	E.A. SUB JOB	SPECD	ORG UNIT	OBJ DTL	ACT.	REVENUE SOURCE	AGY SRC.	AMOUNT
617	C09367-011	L03	8016			844010	02	$25,898.96

PROG	APP SYM	FUND CODE	FUND DETAIL	FUND SOURCE

DESCRIPTION:	TOTAL PRICE
Final Billing N.W. Kings Blvd. - Highland Drive, Walnut Blvd. M2120(3) - Contract 9367 See attached itemized statement. GL 1140	
SPECIAL INSTRUCTIONS (FOR ACCOUNTING USE ONLY) — TOTAL AMOUNT DUE	$25,898.96

Gary Zehner 378-6011

IF YOU HAVE QUESTIONS ABOUT THIS INVOICE PLEASE CONTACT: Anne Hernandez PH. 378-5034
(INVOICE PREPARER)

734-1150 (11-86)

9367

OREGON STATE HIGHWAY DIVISION

ITEMIZED STATEMENT OF FINAL COSTS DATE: December 12, 1986

CITY: Corvallis AGREEMENT NO: 5312 PROJECT NO: M-2120(1)(2)(3)

CONTRACT NO: 9367 SECTION: NW Kings Blvd.-NW Highland Dr., Walnut Blvd.

PRELIMINARY ENGINEERING (Prefix No. 302-1939):

Project Manager	$ 7,703.62
Citizens Involvement	93.77
Payment for Work by City	22,443.82
Consultant Fees	53,385.68
Final Design	16,763.09
Preliminary Design	4,122.72
Right-of-Way Descriptions	2,010.50
Region Geology	1,191.66
Traffic Section	4,902.25
Landscape Section	32.90
Right-of-Way Liaison	558.85
Region Utility Liaison	164.72
Audit Expense	511.54
Location	535.38
Program Section	249.52
Specifications	1,683.94
Administrative Services	30.26
Environmental Services	15,515.03
Training Courses	311.07
Public Hearing Charges	1,503.93
TOTAL P.E. COST	$133,714.25

RIGHT-OF-WAY (Prefix No. 302-2508):

Net Cost of Land	$ 10,800.00
Severance & Consequential Damages (Non-Partic.)	2,200.00
Appraisals, Witness Fees, Etc.	1,640.32
Title Costs & Recording Fees	215.55
Negotiation Expense	164.93
Appraisal Review	339.35
Program Section	15.23
Right-of-Way Office Expense	351.69
TOTAL R/W COST	$ 15,727.07

CONSTRUCTION (Prefix No. 302-1003):

Payments to Contractor ($25,697.32 Non-Partic.)	$779,887.86
Interest on Final Payment (Non-Partic.)	388.15
SFO #1 Permanent Striping	2,309.47
SFO #2 Adjust Water Facilities	6,768.06
SFO #4 Restore Underground Service	11,956.91
SFO #5 Move Loops (Non-Partic.)	1,842.59
Construction Engineering ($154.62 Non-Partic.)	72,300.84
Audit Services	788.08
Program Section	114.45
Salem Lab	5,568.83
Portland Lab	6.18
Eugene Lab	69.10
Technical Services	348.70
Construction Section	3,411.98
Region Office Charges	5,569.05
Training Courses	336.70
Administrative Leave	93.18
TOTAL CONSTRUCTION COST	$891,760.13

SUMMARY

Total P.E. Cost		$ 133,714.25
Total R/W Cost		15,727.07
Total Const. Cost		891,760.13
TOTAL PROJECT COST		$1,041,201.45
Less Federal Funds:		
P.E.	$104,551.17	
R/W	11,928.17	
Const.	706,747.26	(823,226.60)
BALANCE		$ 216,974.85

Less State Share:

$$\frac{104{,}551.17}{78.19\%} \times 10.905\% + \frac{11{,}928.17}{88.18\%} \times 5.91\% +$$

$$\frac{706{,}747.26}{81.83\%} \times 9.085\% = \qquad \$\ (93{,}846.09)$$

CITY SHARE	$ 123,128.76
Credit for P.E. by City	(1,329.80)
Less P.E. Advance Deposit 4-29-75	(2,900.00)
Less Const. Advance Deposits 10-8-81 & 12-22-82	(93,000.00)
BALANCE DUE FROM CITY	$ 25,898.96

GEZ:me
cc: J. Henry
R. Sjolander
LPG Files

9367

302-1003

(ORIGINAL)

FORM APPROVED BY
COMPTROLLER GENERAL,
U.S. MAY 12, 1966

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

10-8-86

VOUCHER FOR WORK PERFORMED UNDER PROVISIONS OF THE FEDERAL AID AND FEDERAL HIGHWAY ACTS, AS AMENDED

STATE VOUCHER NO.

FHWA VOUCHER NO.

FHWA SCHEDULE NO.

APPROPRIATION

THE UNITED STATES, DR., TO *(Insert official or depositary named in project agreement)*
Treasurer of the State of Oregon

ADDRESS
Capitol Building
Salem, OR 97310

PAID BY
(For use of Paying Office)

STATE
Oregon

VOUCHER TYPE *(Check Appropriate Block)*
☐ CURRENT BILLING
☐ OTHER PROGRESS
☒ FINAL VOUCHER (*)

VOUCHER PERIOD
FROM 9/02/81
TO 2/11/86

FEDERAL AID PROJECT NO.
M-2120(3)

(*) Use Form FHWA-1447 for Final Voucher for a project constructed under certification acceptance or secondary road procedures (23 U.S.C. 117).

TOTAL ACTUAL COST	TOTAL PARTICIPATING COST	PRO-RATA OF PARTICIPATING COST CLAIMED FROM U.S.	TOTAL AMOUNT CLAIMED FROM U.S.	LESS PREVIOUS PAYMENTS	NET AMOUNT CLAIMED
70,503.04	70,446.64	.8183	57,646.49	57,646.49	-0-
821,257.09	793,230.81	.8183	649,100.77	649,100.77	-0-
891,760.13	863,677.45	.8183	706,747.26	706,747.26	-0-

I certify that the costs shown in this voucher have been incurred in accordance with terms of project agreements; applicable State and Federal laws or regulations; and that no claim has previously been submitted for costs claimed.

STATE HIGHWAY AGENCY
Oregon

DATE
10/08/86

SIGNATURE OF AUTHORIZED OFFICIAL
Controller

I certify that supporting records for costs claimed, and the referenced project (if applicable), have been subjected to required reviews, approvals and inspections by the Federal Highway Administration and that the amount approved is justly due.

AMOUNT SUBMITTED
0.00

ADJUSTMENTS

AMOUNT APPROVED

SIGNATURE OF FHWA REPRESENTATIVE
(SIGN ORIGINAL ONLY)

DATE APPROVED

FORM PR-20
(Rev. 5-78)

PREVIOUS EDITIONS ARE OBSOLETE

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (Payee must not use this column)
	N.W. KINGS BLVD.-HIGHLAND DR. (CORVALLIS) SECTION FAU 2120 (WALNUT BLVD.) BENTON COUNTY					
	Construction Type Code 6204/7205 Roadway (Sta. 32+42 to Sta. 79.75)					
	Final Contract Payment Summary	Lump Sum			$670,294.54	
	Permanent Pavement striping (State)	All Required			2,309.47	
	Adjust water facilities (City of Corvllis)	All Required			6,768.06	
	Restore underground service and perform second adjustment of facilities (Consumer Power Inc.)	All Required			11,956.91	
	TOTAL PARTICIPATING TYPE CODE 6204/7205				$691.328.98	
	Type Code Y031 Traffic Signal					
	Final Contract Payment Summary	Lump Sum			$ 83,896.00	
	Furnished traffic signal control program for Contract	All Required			500.00	
	TOTAL PARTICIPATING TYPE CODE Y031				$ 84,396.00	
	TOTAL PARTICIPATING CONSTRUCTION COST				$775,724.98	
	Construction Engineering					
	State	All Required			$ 87,164.39	
	Misc. Project Cost					
	Audit Expense	All Required			$ 788.08	
	TOTAL PARTICIPATING PROJECT COST				$863,677.45	
	Non Participating Project Cost					
	Final Contract Payment Summary	Lump Sum			$ 25,697.32	
	Interest on Final Payments	All Required			388.15	
	Move loops (State)	All Required			1,842.59	
	Construction Engineering	All Required			154.62	
	TOTAL NON PARTICIPATING PROJECT COST				$ 28,082.68	
	TOTAL PROJECT COST				$891,760.13	
	Prepared based on Participating cost as shown on the Federal Billing as of 10/02/86.					
	AMOUNT CARRIED FORWARD					

ACCOUNT SUMMARY - EXPENDITURES & LEDGERS

JUNE 1985

DESCRIPTION	PREFIX	FUNCTION	SUB	F.	GR	CURRENT MONTH	FISCAL YEAR TO DATE	GRAND TOTAL TO DATE	ACTIVE YRS BEG	END
	236	1095	946	00	P 1	145.22	539.75	539.75	85	85
	236	1095	948	00	P 1	85.96	85.96	85.96	85	85
			TOT		P1	46,968.78	56,689.83	56,689.83		
			TOT		N1		14.36	14.36		
			** JOB TOTALS **			46,968.78 **	56,704.19 **	56,704.19 **		
AUB-BROAD&DEWEY-BROAD(BA)	CONT NO 9323 * FA PROJ NOS H 0000032 96							H 0000032 04 STATE		
	301	1009	201	00	P 1			220,113.35	81	82
	301	1009	201	00	P 8			7,156.18	81	82
	301	1009	206	00	N 1			27.36	82	82
	301	1009	206	00	N 8			1.14	82	82
	301	1009	210	01	P 1			28,938.07	82	83
	301	1009	210	01	P 8			1,205.75	83	83
	301	1009	294	01	N 1			1,781.50CR	82	82
	301	1009	295	00	N 9			14,454.81	82	83
	301	1009	296	00	N 9			256,108.87CR	81	83
	301	1009	298	00	N 9			241,654.06	81	83
	301	1009	900	00	P 1			3,780.66	81	83
	301	1009	900	00	P 8			154.89	81	82
	301	1009	900	00	N 1			22.43	81	81
	301	1009	900	00	N 8			.93	81	81
	301	1009	900	02	P 1			9,600.00	82	83
	301	1009	900	02	P 8			400.00	83	83
	301	1009	915	01	P 1			194.01	82	82
	301	1009	915	01	P 8			8.09	82	82
	301	1009	915	02	P 1			207.87	82	82
	301	1009	915	02	P 8			8.68	82	82
	301	1009	920	00	P 1			34.30	81	82
	301	1009	920	00	P 8			.73	81	52
	301	1009	940	00	P 1			645.81	81	82
	301	1009	940	00	P 8			26.91	81	82
	301	1009	944	00	P 1			157.06	81	82
	301	1009	944	00	P 8			4.05	81	82
	301	1009	945	00	P 1			518.42	81	83
	301	1009	945	00	P 8			21.60	81	83
	301	1009	946	00	P 1			822.62	81	82
	301	1009	946	00	P 8			34.70	81	82
	301	1009	948	00	P 1			12.98	82	82
			TOT		P1			265,025.15		
			TOT		P8			9,321.18		
			TOT		N1			1,731.71CR		
			TOT		N8			2.07		
			** JOB TOTALS **			**	**	272,316.69 **		
NW KINGS BLVD-HIGHLAND DR	CONT NO 9367 FA PROJ NOS H 2120003 90 H 2120003							691,925.19 H 2120003 10 STATE		
	302	1003	201	00	P 1	Pay Contractor	279.67CR	~~698,995.82~~	81	84
	302	1003	201	00	P 2	" "	310.77	0 ~~2,965.37~~	84	84

ACCOUNT SUMMARY - EXPENDITURES & LEDGERS

DESCRIPTION	PREFIX	FUNCTION	SUB F.	GR	CURRENT MONTH	FISCAL YEAR TO DATE 62,265.35	GRAND TOTAL TO DATE	ACTIVE YRS BEG	END
Pay Contractor	302	1003	201	00	P 8		31.10CR	~~62,085.35~~	82	84
" "	302	1003	201	00	N 1		25,692.32	~~19,141.32~~	82	83
Cr. Liq. dam.	302	1003	203	00	P 1			~~3,480.00CR~~	83	83
" " "	302	1003	203	00	P 8			~~180.00~~	83	83
Retained Percentage Credits	302	1003	204	00	P 1			914.01CR	81	84
" " "	302	1003	206 204	00	P 8		INTEREST	85.99CR	82	84
SFO#1 Permanent Striping	302	1003	270	01	P 1			2,309.47	82	83
SFO#5 Move Loops	302	1003	270	05	P 1		210.00	~~210.00~~	84	84
" "	302	1003	270	05	N 1	5.90CR	1,632.59 1842.59	~~1,632.59~~	85	85
SFO#2 Adjust Water Facilities	302	1003	285	02	P 1			6,768.06	82	83
SFO#4 Restore Underground Service	302	1003	285	04	P 1			11,956.91	83	83
Tr. City	302	1003	295	00	N 9			93,000.00	81	84
" St	302	1003	296	00	N 9	13.69CR	23.08	799,976.92CR	81	85
" Fed	302	1003	298	00	N 9	13.69	23.08CR	706,976.92	81	85
Const. Engr.	302	1003	900	00	P 1	1.47CR	960.11CR	62,621.52	81	85
" "	302	1003	900	00	P 2		1,319.49	1,735.20	84	85
" "	302	1003	900	00	P 8	.17CR	3.84 6,545.97	6,559.98	81	85
" "	302	1003	900	00	N 1			139.16	81	83
" "	302	1003	900	00	N 8			15.46	81	83
Audit Services	302	1003	915	00	P 1			746.44	82	84
" "	302	1003	915	00	P 8			41.64	82	84
Prog. Sec.	302	1003	920	00	P 1			103.01	81	83
" "	302	1003	920	00	P 8			11.44	81	83
Admin. of Retainage	302	1003	928	00	N 1			19.10	83	83
" " "	302	1003	928	00	N 8			2.13	83	83
Salem Lab	302	1003	940	00	P 1		627.17CR [illegible]	4,384.85	81	85
" "	302	1003	940	00	P 2		627.17	627.17	85	85
" "	302	1003	940	00	P 8			556.81	81	84
Portland Lab	302	1003	941	00	P 1			5.56	82	83
" "	302	1003	941	00	P 8			.62	82	83
Eugene Lab	302	1003	942	00	P 1			62.20	82	83
" "	302	1003	942	00	P 8			6.90	82	83
Technical Services	302	1003	944	00	P 1			313.83	81	84
" "	302	1003	944	00	P 8			34.87	81	83
Const. Sec.	302	1003	945	00	P 1	7.26CR	1,609.81	3,070.81	81	85
" "	302	1003	945	00	P 8	81CR	178.87	341.17	81	85
Region Office charges	302	1003	946	00	P 1			5,024.76	81	84
" " "	302	1003	946	00	P 8			544.29	81	84
Gen. Const. Engr.	302	1003	948	00	P 1			1,188.93	82	84
" " "	302	1003	948	00	P 8			40.59	32	84
Training Courses	302	1003	950	00	P 1			303.04	82	82
" "	302	1003	950	00	P 8			33.66	82	82
Administrative Leave	302	1003	961	00	P 1			83.86	82	83
" "	302	1003	961	00	P 8			9.32	82	83
			TOT		P1	8.73CR	47.14CR	793,755.06		
			TOT		P2		2,257.43	5,327.74		
			TOT		P8	98CR	151.61	70,360.65		
			TOT		N1	5.90CR	1,632.59	20,932.17		
			TOT		N8			17.59		
			** JOB TOTALS **			15.61CR**	3,994.49 **	890,393.21 **		

REPORT NO: FMBL003-1
SEQ: FEDERAL APPROPRIATION, FEDERAL
PROJECT, AGREEMENT, EA-SUBJOB

OREGON DEPARTMENT OF TRANSPORTATION
FINANCIAL MANAGEMENT SYSTEM
OREGON STATE HIGHWAY DIVISION
FHWA BILLING VOUCHER

FEDERAL APPROPRIATION: W32

AGREEMENT EA/SUBJOB	TOTAL COSTS TO DATE	AMOUNT PREV CLAIMED	--PARTICIPATION-- AMOUNT	PERCENT	AGREEMENT AMOUNT	FEDERAL SHARE	-ADJUSTMENT- AMOUNT	CODE	VOUCHER AMOUNT
FEDERAL PROJECT: M -2120-001									
F01847									
C3021939-010	.00	.00	.00						
C3021939-011	133,714.25	104,551.17	133,714.25						
AGREEMENT TOTALS	133,714.25	104,551.17	133,714.25	78.19	104,551.17	104,551.17	.00		.00
FED PROJ TOTALS	133,714.25	104,551.17	133,714.25		104,551.17	104,551.17	.00		.00
EDERAL PROJECT: M -2120-002									
F01857									
C3022508-010	2,200.00	.00	.00						
C3022508-011	13,527.07	11,928.17	13,527.07						
AGREEMENT TOTALS	15,727.07	11,928.17	13,527.07	88.18	11,928.17	11,928.17	.00		.00
FED PROJ TOTALS	15,727.07	11,928.17	13,527.07		11,928.17	11,928.17	.00		.00
FEDERAL PROJECT: M -2120-003									
F01834									
C09367 -000	900.00	.00	900.00						
C09367 -001	349.34	.00	.00						
C09367 -010	27,679.07	.00	.00						
C09367 -011	792,330.81	649,100.77	792,330.81						
AGREEMENT TOTALS	821,259.22	649,100.77	793,230.81	81.83	649,100.77	649,100.77	.00		.00
F01835									
C09367 -021	.00	.00	.00						
AGREEMENT TOTALS	AGREEMENT WAS NOT PROCESSED - SEE ERROR LISTING ON CONTROL REPORT								
F01836									
C09367 -000	100.00	.10	100.00						
C09367 -001	38.81	.00	.00						
C09367 -080	15.46	.00	.00						
C09367 -081	70,346.64	57,646.39	70,346.64						
AGREEMENT TOTALS	70,500.91	57,646.49	70,446.64	81.83	57,646.49	57,646.49	.00		.00
FED PROJ TOTALS	891,760.13	706,747.26	863,677.45		706,747.26	706,747.26	.00		.00
FEDERAL PROJECT: M -2346-001									
F02988									

11/08/86

JOB COST SUMMARY
EA/ JOB/ACTIVITY/OBJ-DETAIL CREW-NUMBER
PAYROLL CHARGES ARE LOADED

EA	SUBJOB	ACTIVITY	OBJ-DETAIL	CREW NUMBER	MSA FIELD	CURR MON
C09367	001		349	0521		
C09367	001 NP		349	0521		
C09367	001	INTEREST	349			
C09367	001	206				
C09367	001					
C09367	010		300	0100		
C09367	010	NP	300	0100		
C09367	010	CONTRACT	300	0521		
C09367	010	PAYMENT 201	300	0521		
C09367	010		300			
C09367	010	CREDIT	306	0521		
C09367	010	928 NP	306	0521		
C09367	010		306			
C09367	010					
C09367	010	144	598	0521	SF05	
C09367	010	144	598	0521		
C09367	010 18	144	598			
C09367	010	144 270				
C09367	010					
C09367	011 18		300	0521		
C09367	011	CONTRACT	300	0521		
C09367	011	PAYMENTS 201	300			
C09367	011	CREDIT	304	0521		
C09367	011	LIQ. DAM.	304	0521		
C09367	011	203	304			
C09367	011		490	0521		
C09367	011		490	0521	SF03	
C09367	011	0	490	0521		
C09367	011		490			

JOB COST SUMMARY
B/ACTIVITY/OBJ-DETAIL CREW-NUMBER
AYROLL CHARGES ARE LOADED

CREW NUMBER	MSA FIELD	CURRENT MONTH	CURRENT BALANCE
0521		.00	388.15
0521		.00	388.15
		.00	388.15
		.00	388.15
		.00	388.15
0100		.00	.00
0100		.00	.00
0521		.00	6,556.00
0521		.00	6,556.00
		.00	6,556.00
0521		.00	19.10-
0521		.00	19.10-
		.00	19.10-
		.00	6,536.90
0521	SF05	.00	210.00
0521		.00	210.00
		.00	210.00
		.00	210.00
		.00	6,746.90
0521		.00	7,070.63-
0521		.00	7,070.63-
		.00	7,070.63-
0521		.00	3,480.00
0521		.00	3,480.00
		.00	3,480.00
0521		.00	450.00-
0521	SF03	.00	450.00
0521		.00	.00
		.00	.00

11/08/86

JOB COST SUMMARY
EA/S[illegible]JOB/ACTIVITY/OBJ-DETAIL CREW-NUMBER
PAYROLL CHARGES ARE LOADED

	EA	SUBJOB	ACTIVITY	OBJ-DETAIL	CREW NUMBER	MSA FIELD	CURRE MONT
✓	C09367	011		598	0521		
Const. Engr.	C09367	011		598	0521		
	C09367	011		598			
	C09367	011					
✓	C09367	011	144	598	0521	SF05	
	C09367	011	144	598	0521		
CREDIT	C09367	011	144	598			
	C09367	011	144				
✓	C09367	011	900	598	0521		
	C09367	011	900	598	0521		
	C09367	011	900	598			
	C09367	011	900				
✓	C09367	011	940	598	0521		
	C09367	011	940	598	0521		
	C09367	011	940	598			
	C09367	011	940				
	C09367	011					
✓	C09367	021		300	0521		
CREDIT 201	C09367	021		300	0521		
	C09367	021		300			
contract payment	C09367	021					
	C09367	021	900	598	0521		
	C09367	021	900	598	0521		
CREDIT	C09367	021	900	598			
	C09367	021	900				
	C09367	021	940	598	0521		
	C09367	021	940	598	0521		
	C09367	021	940	598			

CREDIT

COST SUMMARY
TY/OBJ-DETAIL CREW-NUMBER
HARGES ARE LOADED

MSA FIELD	CURRENT MONTH	CURRENT BALANCE	
	.00	14.01	
	.00	14.01	✓
	.00	14.01	
	.00	3,576.62-	
SF05	.00	210.00-	
	.00	210.00-	✓
	.00	210.00-	
	.00	210.00-	
	.00	1,735.20	
	.00	1,735.20	✓
	.00	1,735.20	
	.00	1,735.20	
	.00	627.17	
	.00	627.17	✓
	.00	627.17	
	.00	627.17	
	.00	1,424.25-	
	.00	2,965.37-	
	.00	2,965.37-	✓
	.00	2,965.37-	
	.00	2,965.37-	
	.00	1,735.20-	
	.00	1,735.20-	✓
	.00	1,735.20-	
	.00	1,735.20-	
	.00	627.17-	
	.00	627.17-	
	.00	627.17-	✓

11/08/86

JOB COST SUMMARY
EA/SUBJOB/ACTIVITY/OBJ-DETAIL CREW-NUMBE
PAYROLL CHARGES ARE LOADED

EA	SUBJOB	ACTIVITY	OBJ-DETAIL	CREW NUMBER	MSA FIELD	CUR MO
C09367	021	940				
C09367	021					
C09367	080		306	0521		
C09367	080		306	0521		
C09367	080		306			
C09367	080					
C09367	080					
C09367	081		300	0521		
C09367	081		300	0521		
C09367	081		300			
C09367	081		304	0521		
C09367	081		304	0521		
C09367	081		304			
C09367	081		490	0521		
C09367	081		490	0521	SF03	
C09367	081		490	0521		
C09367	081		490			
C09367	081		598	0521		
C09367	081		598	0521		
C09367	081		598			
C09367	081					
C09367	081					
C09367						

✓

CREDIT
928

✓

0

✓

0

✓

JOB COST SUMMARY
OB/ACTIVITY/OBJ-DETAIL CREW-NUMBER
AYROLL CHARGES ARE LOADED

CREW NUMBER	MSA FIELD	CURRENT MONTH	CURRENT BALANCE
		.00	627.17-
		.00	5,327.74-
0521		.00	2.13-
0521		.00	2.13-
		.00	2.13-
		.00	2.13-
		.00	2.13-
0521		.00	180.00
0521		.00	180.00
		.00	180.00
0521		.00	180.00-
0521		.00	180.00-
		.00	180.00-
0521		.00	50.00-
0521	SF03	.00	50.00
0521		.00	.00
		.00	.00
0521		.00	14.01-
0521		.00	14.01-
		.00	14.01-
		.00	14.01-
		.00	14.01-
		.00	366.92

9367

STATE COPY N

U.S. Department of Transportation
Federal Highway Administration

FINAL ACCEPTANCE REPORT

REGION NO. 10	REPORT NO. 2	COUNTY BENTON	DIVISION OREGON
DATE OF REPORT 4/21/83	REPORT MADE BY 2-11-86 WILLIAM KAPPUS, AREA ENGINEER		PROJECT NO. M-2120(3)
COMPLETION DATE (Actual) 4/21/83	ACCEPTANCE DATE BY CONRTACT AGENCY 7/25/85	TIME ELAPSED 100 %	CONTRACT TIME 409 CD

LOCATION
SEE BELOW

The FHWA-47, Statement of Materials and Labor Used by Contractors on Highway Construction Involving Federal Funds, has been submitted. (Projects over $500,000)
A copy of the State's materials certificate is attached to the Division office copy of this report.
There is compliance with section 1.23 of the Regulations pertaining to encroachments on the right-of-way.

REMARKS: *The project has been completed in reasonably close conformity with the approved plans and specifications including authorized changes and extra work.*

N. W. KINGS BLVD - HIGHLAND DRIVE
WALNUT BOULEVARD (CORVALLIS)
Grading, Paving, and Signals

This project provided for the construction of a four-lane facility on new alignment adding a major section to an urban arterial street.

The contract work was awarded to Green & White Rock Productions, Inc. on October 9, 1981. Work started on October 29, 1981 and was completed on November 17, 1982. There were no major overruns or underruns and no contract claims are anticipated. The finished surface of the PCC pavement exceeded the specified profile index rate of seven inches per mile. A penalty of $6,556.00 has been assessed due to non-compliance with contract profile specifications.

A final inspection of the completed project was made April 22, 1985.

RECEIVED
STAT. HWY ENGR
FEB 11 '86
REFER TO
Fredrickson
FOR
Info | Inves | R/D | J/R | ign | ict | File

NOTED
W. E. SCHWARTZ
Cy 2/13

ACCEPTANCE OF PROJECT IS RECOMMENDED		ACCEPTED BY FEDERAL HIGHWAY ADMINISTRATION	
SIGNATURE Original Signed By WILLIAM H. KAPPUS Area Engineer		SIGNATURE Original Signed By G. K. HOSSNER Field Operations Engineer	
TITLE AREA ENGINEER	DATE FEB 7 1986	TITLE FIELD OPERATIONS ENGINEER	DATE FEB 11 1986

#9367 8-7-85

file

REPORT OF ACTION UNDER DELEGATED AUTHORITY BY
ASSISTANT STATE HIGHWAY ENGINEER

On behalf of the Commission and under delegated authority, the following contracts were accepted as being completed according to specifications:

Contractor and Contract No.	Section and County	Acceptance Date
Oregon Asphaltic Paving Co. Contract No. 9577	SE Stark St.-SE Division St. Multnomah County	7-05-85
Ross Bros. Const., Inc. Contract No. 9373	Pudding River Bridge Marion County	7-09-85
Porter W. Yett Co. Contract No. 9741	Wilsonville-Hubbard Hwy. @ NE Arndt Rd. Clackamas & Marion Counties	7-09-85
Copeland Paving, Inc. Contract No. 9796	Ferris Gulch-Long Gulch Jackson County	7-09-85
Oregon Asphaltic Paving Co. Contract No. 9811	Portland Ave. @ Abernethy Ave. (Gladstone) Clackamas County	7-10-85
L T Contractors, Inc. Contract No. 9383	Sunny Valley Intch.-Jumpoff Joe Cr. Josephine County	7-10-85
Tice Electric Co. Contract No. 9828	NE 47th Ave. @ NE Oregon St. Multnomah County	7-11-85
H & H Electric, Inc. Contract No. 9895	Mt. Hood Hwy. @ Industrial Way (Sandy) Clackamas County	7-12-85
F. Kelly Somers Const. Inc. & F.L.Somers Co.,Inc., J.V. Contract No. 9601	Thornton Creek Lincoln County	7-12-85
Peter Kiewit Sons Co. Contract No. 9037	Martin Cr.-Anlauf Intch. Douglas & Lane Counties	7-15-85
Elte, Inc. Contract No. 9728	Chapman Slide Columbia County	7-16-85
Ken Leahy Construction, Inc. Contract No. 9876	Helvetia Road Intch. Washington County	7-16-85

Contractor and Contract No.	Section and County	Acceptance Date
J. C. Compton Co. Contract No. 9485	Vail Cr.-Nylund Rd. Linn County	7-25-85
Green & White Rock Products, Inc. Contract No. 9367	NW Kings Blvd.-Highland Dr. (Corvallis Benton County	7-25-85
Wildish-Corvallis Const. Co. Contract No. 9419	NW 9th St.-SPRR (Corvallis) Benton County	7-25-85
Mocon Corp. Contract No. 9403	W. Burnside St. @ SW Tichner Dr. Multnomah County	7-25-85
Abhe & Svoboda, Inc. Contract No. 9825	Salmon Creek Bridge Lane County	7-25-85
Stach Construction Co., Inc. Contract No. 9838	Umpqua River (Reedsport) Br. & Cape Creek Br. Douglas & Lane Counties	7-25-85
Eugene Sand & Gravel, Inc. Contract No. 9776	"Q" St.-S. "A" St. (Springfield) Lane County	7-25-85
Comco dba Salem Road & Driveway Contract No. 9802	Mt. Angel-Abiqua Creek Marion County	7-25-85
Roseburg Paving Co. Contract No. 9794	NE Garden Valley Blvd.-NE Diamond Lake Blvd. Douglas County	7-25-85
S. J. Groves & Sons Co. Contract No. 9668	L.R.T. O'Xing. of UPRR (Holladay St.) Multnomah County	7-30-85
Bend Aggregate & Paving Co. Contract No. 9956	Bend Rock Production Deschutes County	7-30-85
Wildish-Corvallis Const. Co. Contract No. 9605	Rice Hill-Metz Hill Intch. Douglas County	7-30-85
Fabricators, Inc. Contract No. 9640	Manbrin Dr. N.-Stark St. N. Marion County	7-31-85

Contractor and Contract No.	Section and County	Acceptance Date
C. C. Meisel Co., Inc. Contract No. 9659	East McMinnville Intch. Yamhill County	7-31-85
F. Hodgson & Sons Contract No. 9742	NW Hoge Ave.-NW Harbor Blvd. (Ptld.) Multnomah County	8-01-85
Linnco Electric Co. Contract No. 9842	Hillsboro-Silverton Hwy. @ Boones Ferry Rd. Marion County	8-01-85

EXPENDITURE RECAP

	ABOVE PROJECTS	FY TO DATE
Original Authorization	$ 62,073,774.32	$ 62,073,774.32
Anticipated Costs	$ 69,167,764.28	$ 69,167,764.28
% Overrun (Underrun)	+11.43%	+11.43%

August 8, 1985

W. E. Schwartz, P.E.
Asst. State Highway Engineer

9367

August 3, 1983

The Travelers Indemnity Co.
Surety Department
707 S.W. Washington Street
Portland, OR 97205

CON 3
#9367

Contract No. 9367 awarded to Green & White Rock Products, Inc. for work on the N.W. Kings Blvd.-Highland Dr. Section of FAU 2120 in Benton County was completed on May 18, 1983 and accepted by the State Highway Division on July 25, 1983.

Final payment will be released to the contractor as soon as payment processing can be completed, but not before August 12, 1983.

No claims for labor or material have been filed with us against the performance bond on this contract.

Robert W. Gormsen
COMMISSION SERVICES

ss

cc: Green & White Rock Products, Inc.
P.O. Box 866
Corvallis, OR 97339

Corroon & Black of Oregon
P.O. Box 8699
Portland, OR 97207

bc: C.O. Fredrickson
Walt Hart
V. E. Skoog Attn: Frank Griffin
Bill Anhorn

STATE OF OREGON

Contract Payments 378-6594

INTEROFFICE MEMO

FILE: CON 5

TO: Robert Gormsen
Manager, Commission Services

DATE: July 25, 1985

Wendell E. Schwartz

FROM: W. E. Schwartz, P.E., P.L.S.
Ass't. State Highway Engineer

SUBJECT: Highway Contract Acceptance

The contractor has completed all work according to specifications and I hereby accept the following contract as of this date.

Contract 9367, On Site Work Substantially Completed April 21, 1983

All Work Completed May 18, 1983

Project NW Kings Blvd.-Highland Dr. (Corvallis)

Highway FAU 2120 (Walnut Blvd.)

County Benton

Type of Work Grading, Paving & Signals

Contractor Green & White Rock Products, Inc.

WES:BMW:mk

cc: C. O. Fredrickson
B. M. Walton

CPC/FM2

noted R. Gormsen

8/5/85 - Surety letter written.

RECEIVED
AUG 1 1985
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

81-125-1367

STATE OF OREGON **INTEROFFICE MEMO**

Highway Construction 378-6318

FILE: CON 5

TO: W. E. Schwartz
Ass't. State Highway Engineer

DATE: April 26, 1985

FROM: Gerald Wimer Gerald Wimer
Construction Operations Engineer

SUBJECT:
NW Kings Blvd.-Highland Dr.
Walnut Blvd. (Corvallis)
Contract No. 9367

NW 9th St.-SPRR
Circle Blvd. (Corvallis)
Contract No. 9419

RECEIVED
STATE HWY ENGR
APR 29 '85
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	[illegible]	File

NOTED
W. E. SCHWARTZ

These two FAU projects in Corvallis were constructed in 1981-82 by Green & White Rock Products Inc. and Wildish Corvallis Construction Co. respectively. Both projects included AC or PCC surfacing alternates. Both contractors chose PCC.

Following completion of the surfacing, the roughness was ground to the straight edge surface tolerance as directed by the Project Manager (PM) and reviewed by myself representing the Region.

After the contractor removed the grinding equipment, it came to the PM's attention that the surfacing was also subject to the 7-inches per mile profilograph requirement. The City and State agreed that it wasn't necessary to direct return of the grinder. This meant the contractor was deprived of the opportunity to timely grind to reduce penalties relating to the profilograph results. Based on these facts and review, the contractors were released without monetary penalty. That decision was concurred by the Construction Office prior to my promotion here. See the attached Job Control Certifications.

Duane Christensen and I met with Glenn Hossner and Bill Kappus April 6, 1983. They agreed the 7-inches per mile wasn't a practical Urban Area specification. They would accept conforming to a new Urban Area specification, yet to be developed at that time. They also agreed to a rerun and projection of 10 per cent of the profilograph taken on each project. This showed that a considerable amount of the non-conformance was due to the surface texture rapidly losing its rough edges and bringing the profilograph reading closer to specification.

The attached results of the rerun profilographs were reviewed with Glenn Hossner and Bill Kappus April 22, 1985. We also discussed our current Urban specifications and those of California, Washington and the American Concrete Pavement Association (ACPA). California and Washington limit their profilograph data to high speed highways. The ACPA recommends 30-inches per mile. Our new 1984 Standard Specifications exclude "City or County streets and roads unless otherwise specified in the Special Provisions".

Orig. to Wimer
Cy Files
5/1/85

Approved –

Contains Recycled Materials

Based on these four standards, there should be no further price adjustment in this matter. However, Mr. Hossner concluded he would insist on a Special Provision coverage on future projects.

To conclude the matter he offered, and I agreed, to reduce the nonparticipation to 12-inches per mile standard on the rerun profilographs. The ACPA recognizes 12-inches for Rural Interstate and Primary Highways. This means $6,556.00 and $5,130.00 respectively or $11,686.00 total.

The two agreements with the City of Corvallis state: "City shall contribute 100 per cent of the cost of any portion of the project in which federal funds do not participate". I do not believe it appropriate to bill the City of Corvallis for this non-participation on a specification matter over which they had no control. Therefore, I recommend the $11,686.00 of non-participation be excluded from the final project costs and these costs be paid 100 per cent by the State.

GW:mk

Attach.

04262M

HIGHWAY DIVISION

FIELD JOB CONTROL CERTIFICATION

PROJECT NAME (Section) N W Kings Blvd-Highland Dr.(Corvallis)		CONTRACT NO. 9367
HIGHWAY FAU 2120 (Walnut Blvd.)	COUNTY Benton	PREFIX 302-1003
		F.A. PROJECT NO. M-2120(3)

This is to certify that:

1. The sampling, testing and inspection of all materials substantially complied with the state's established policies and procedures. Reports and certifications were submitted to the Materials Section and others as required. Exceptions are summarized below.
2. The results of the sampling, testing and inspection indicate that the materials and construction work substantially conformed to the contract requirements. Exceptions, corrective actions and price adjustments are summarized below.

Kenneth D. Karnosh
Kenneth D Karnosh
By Project Manager

10/10/83
Date

Reviewed by Region Engineer

12-9-83
Date

Item Nos.	Item descriptions and summaries of exceptions, corrective actions and price adjustments.
39	Plain Concrete Pavement Rough Ride: Apparently a price reduction will be figured from profilograph results, but will not be assessed to the contractor. No other corrective actions if Dave Glenn's group agrees with my October 26 letter on slab thickness.

2-2-84

Ken- Neither city or contractor to be held responsible for price reductions due to profilograph results. FHWA & State to settle between selves.

HIGHWAY DIVISION

FIELD JOB CONTROL CERTIFICATION

PROJECT NAME (Section) NW 9th St.-SPRR(Corvallis)		CONTRACT NO. 9419
HIGHWAY FAU 2110(Circle Blvd.)	COUNTY Benton	PREFIX 302-1005
		F.A. PROJECT NO. M-2110(4)

This is to certify that:

1. The sampling, testing and inspection of all materials substantially complied with the state's established policies and procedures. Reports and certifications were submitted to the Materials Section and others as required. Exceptions are summarized below.
2. The results of the sampling, testing and inspection indicate that the materials and construction work substantially conformed to the contract requirements. Exceptions, corrective actions and price adjustments are summarized below.

Kenneth D Karnosh
By Project Manager

10/10/83
Date

Reviewed by Region Engineer

12-9-83
Date

Item Nos.	Item descriptions and summaries of exceptions, corrective actions and price adjustments.
50	Plain Concrete Pavement Rough ride: Apparently a price reduction will be figured from profilograph results, but will not be assessed to the contractor. No other corrective actions.

2-2-84

Ken- Neither contractor or city to be held responsible for any price reductions due to profilograph results. State and FHWA to settle between themselves.

☐ Continued on attached sheets

Form 734-3049 (Rev. 2-79)
OREGON DEPARTMENT
OF TRANSPORTATION

TABULATION SHEE

SHEET .... OF .... SHEET

Price Adjustment using
7"/mile 12"/mile & Prorating the 10%
for Kings-Highland (Walnut Blvd) 7"/mile 12"/m

Price for	-	7"/mile		12"/mile		Prorating the 10%		Prorating the 10%
		$ 24,104.50		$ 15,254.50		$ 13,904.10		$ 6556.0

for Circle Blvd
NW 9th St. SPRR (Corvallis)

7"/mile	12"/mile	7"/mile Prorating 10%	12"/mile Prorating 10
$20,094.00	$16,294.00	$8930.00	$5130.0

9 [illegible]

AGENDA
FEB 26 1985

Fran:

There will be three more Project Overruns coming on Friday. They are:

Burns Junction Truck Scale 1A-3(e)
I.O.N. Highway, Malhuer County
Contract No. 9769
Net Increase: $14,200.00 or 17 percent

McKay Creek Bridge
FAS A685 (Shadybrook Road), Washington County 1A-3(f
Contract No. 9735
Net Increase: $12,100.00 or 6 percent

N. W. Kings Boulevard - Highland Drive 1A-3(g)
Walnut Boulevard (Corvallis), Benton County
Contract No. 9367
Net Increase: $43,000.00 or 5 percent

DATE: February 19, 1985

TO: Oregon Transportation Commission

CON

FROM: H. S. Coulter
State Highway Engineer

SUBJECT: Request for Increase in Project Authorization
NW Kings Blvd. - Highland Drive (Corvallis) Section
FAU 2120 (Walnut Blvd.) Highway, Benton County
Contract No. 9367

This federal-aid grading, paving and signal installation project has been completed and it is now apparent that the final cost will exceed the project authorization by $43,000 or five percent. The authorization was previously increased by action of the Commission at its meeting of November 16, 1982, based on extra work required to improve the gradeline on the project, revise signal mounting from span wires to mast arms for conformance to city standards, and to provide for wiring for future illumination.

A significant change in design was required when the engineering firm of CH2M Hill located their facility adjacent to the project, necessitating the addition of a left-turn refuge. One consequence of this addition which was not covered in the previous authorization increase request was the need to readjust utilities on the project which had been adjusted prior to construction work and before the redesign. This readjustment of utilities added more than $11,900 to the cost of the project.

During the course of construction, the loop detectors installed at the intersection of Walnut Boulevard and Highland Drive were found to have been located too far from the center of their respective lanes to be effective. It was necessary to reinstall these loops at an additional cost of $1,800 in order to permit proper operation of the signal system.

The balance of the overrun consists primarily of added costs of construction engineering which were incurred by reason of extensive redesign work involved in the addition of the left-turn refuge and numerous revisions necessary to accommodate changed conditions encountered on the project, and the cost to properly monitor, inspect and document the added work items.

The Department will be reimbursed for a portion of the project costs through the City of Corvallis. This reimbursement is for construction of the left-turn refuge mentioned above and is expected to be approximately $15,600.

There are sufficient funds available in the categoy of work and all the increase is eligible for federal participation.

I recommend that the authorization be increased by $43,000 to a new total of $890,000. This matter will be on the consent calendar for the February 26 meeting.

cc Fred D. Miller
R. W. Gormsen
C. O. Fredrickson
V. E. Skoog
W. G. Anhorn
George Bell

STATE OF OREGON
Highway Construction 378-6318

INTEROFFICE MEMO

FILE: CON 5

TO: W. E. Schwartz
Ass't. State Highway Engineer

DATE: February 13, 1985

FROM: O. B. Jackmond
O. B. Jackmond
Contract Administration Engineer

NOTED
W. E. SCHWARTZ

SUBJECT: Request for Increase in Project Authorization
NW Kings Blvd - Highland Drive (Corvallis) Section
FAU 2120 (Walnut Blvd) Highway, Benton County
Contract No. 9367

This federal aid grading, paving and signal installation project has been completed and it is now apparent that the final cost will exceed the project authorization by $43,000.00 or five percent. The authorization was previously increased by action of the Commission at its meeting of November 16, 1982, based on extra work required to improve the gradeline on the project, revise signal mounting from span wires to mast arms for conformance to city standards, and to provide for wiring for future illumination.

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During the course of construction the loop detectors installed at the intersection of Walnut Blvd and Highland Drive were found to have been located too far from the center of their respective lanes to be effective. It was necessary to reinstall these loops at an additional cost of $1,800.00 in order to permit proper operation of the signal system.

The balance of the overruns consists primarily of added costs of construction engineering which were incurred by reason of extensive redesign work involved in the addition of the left turn refuge and numerous revisions necessary to accommodate changed conditions encountered on the project, and the cost to properly monitor, inspect and document the added work items.

The Department will be reimbursed for a portion of the project costs through the City of Corvallis. This reimbursement is for construction of the left turn refuge mentioned above and is expected to be approximately $15,600.

There are sufficient funds available in the category of work and all the increase is eligible for federal participation.

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Attached is a rough draft letter to the Transportation Commission requesting an increase of $43,000. Also attached is a copy of the Expected Overrun of Project Authorization form.

OBJ:HHP:lf

Attach.

cc: W. G. Anhorn A. D. Vohland B. M. Walton W. F. Cobine

9367

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OREGON DIVISION
The Equitable Center, Suite 100
530 Center Street NE
Salem, OR 97301

November 8, 1984
IN REPLY REFER TO
HFO.2-OR

Mr. H. S. Coulter
State Highway Engineer
102 Transportation Building
Salem, Oregon 97310

Dear Mr. Coulter:

Oregon Project M-2120(3)
NW Kings Blvd - Highland Drive
FAU 2120 (Walnut Blvd)
Order for Force Work No. 5

We have reviewed Mr. C. O. Fredrickson's October 22, 1984 request for change order approval (force work No. 5) on the subject project.

Based on the information presented, the work performed on the loops at the Walnut/Highland intersection appears unrelated to un-acceptable contract work. In fact, work performed by the City of Corvallis after the contract work had been completed (and accepted) appears to have created the need for these changes. Providing for these chnages are, therefore, not considered a contract/project responsibility.

The subject order for force work is returned unapproved.

Sincerely yours,

G. K.
for Dale E. Wilken
Division Administrator

cc:
OSHD (C O Fredrickson)w/att
OSHD (G Potter)

RECEIVED
STATE HWY ENGR
NOV 13 '84
REFER TO
Fredrickson
FOR

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WGG
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Orig.
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9367

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TO BE COMPLETED BY FHWA

MONTHLY TRANSACTION NUMBER 2-149

PROJECT REPORT NUMBER

MODIFICATION NUMBER 2

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT

2-17-84

State OREGON

County BENTON

Project Number M-2120(3)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15 , 19 81 , is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 825,000.00	$ 863,987.00
Federal funds	$ 727,482.00	$ 707,000.00
Other revisions		

This modification is made for the following reasons: To include increase in total costs, and to reflect reduction in federal funds using Clause "A" pro-rata of 81.83%, per City of Corvallis request.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 17th day of February , 1984 .

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Manager, Program Section
(Title)

~~By~~ FOR: H. S. Coulter

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen Files

OREGON STATE HIGHWAY DIVISION
SALEM, OREGON FEBRUARY 9, 1984

FEDERAL AID PROJECT NO. M-2120(3)

N.W. KINGS BLVD.-HIGHLAND DR. (CORVALLIS) SECTION
FAU 2120 (WALNUT BLVD.)
BENTON COUNTY

REVISED PROJECT AGREEMENT ESTIMATE

TYPE CODE 6204/7205
ROADWAY (Sta. 32+42 to Sta. 79+75)

Total the same as previous estimate of December 7, 1982	$679,429.60
SUBTOTAL	$679,429.60
Engineering	93,569.40
TOTAL	$772,999.00

TYPE CODE Y031
TRAFFIC SIGNAL

Subtotal of previous estimate of October 12, 1981	$ 52,466.00

PREVIOUS ESTIMATE

Traffic Signal Complete	All Required	$ 47,488.00
Fire-Preemption System Complete	All Required	4,978.00
		$ 52,466.00

REVISED ESTIMATE

Traffic Signal Complete (PA #1)	All Required	$ 78,693.00
Fire Preemption System Complete (PA #1)	All Required	5,203.00
		$ 83,896.00

Increase	$ 31,430.00
SUBTOTAL	83,896.00
Engineering	4,742.00
Signal Control Testing	1,400.00
Opticom Testing	950.00
TOTAL	$ 90,988.00

Length of Roadway ------------	0.896 mi.
Cost of Roadway Per Mile -----	$862,722.09

SUMMARY OF FUNDS

DESCRIPTION	TOTAL FUNDS	FEDERAL FUNDS	STATE FUNDS	CITY FUNDS
Roadway	$772,999.00	$632,545.00	$70,227.00	$70,227.00
Traffic Signal	90,988.00	74,455.00	8,266.00	8,267.00
	$863,987.00	$707,000.00	$78,493.00	$78,494.00

Group 1: 90%; Group 8: 10%
Contract No. 9367
Prefix: 302-1939
Prefix: 302-1003

RHZ:pf

9367

STATE COPY

B

TO BE COMPLETED BY FHWA

MONTHLY TRANSACTION NUMBER 12.128

PROJECT REPORT NUMBER

MODIFICATION NUMBER 1

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT

12-13-82

State Oregon

County Benton

Project Number M-2120(3)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15, 1981, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 733,152.00	$ 825,000.00
Federal funds	$ 646,492.00	$ 727,482.00
Other revisions		

This modification is made for the following reasons: to include increase in construction costs and construction engineering costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 13th day of December, 1982.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Program Management Engineer
(Title)

XX~~By~~ For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen. File

Oregon State Highway Division
Salem, Oregon December 7, 1982

Federal-Aid Project
No. M-2120(3)

N.W. Kings Blvd.-Highland Dr. (Corvallis) Section
FAU 2120 (Walnut Blvd.)
Benton County

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6204/7205
Roadway (Sta. 32+42 to Sta. 79+75)

Subtotal of previous estimate of October 12, 1981	$593,484.20

Previous Estimate

1"-0 Aggregate Base	1,300 Ton	5.00	$ 6,500.00
12-Inch Sewer Pipe	954 Lin. Ft.	12.50	11,925.00
General Excavation	21,900 Cu. Yd.	2.70	59,130.00
Trench Excavation	375 Cu. Yd.	5.00	1,875.00
Lime Treated Subgrade	28,000 Sq. Yd.	9.00	25,200.00
Plain Concrete Pavement	23,500 Sq. Yd.	8.50	199,750.00
			$304,380.00

Revised Estimate

1"-0 Aggregate Base	2,320 Ton	5.00	$ 11,600.00
12-Inch Sewer Pipe	1,052 Lin. Ft.	12.50	13,150.00
General Excavation	23,877 Cu. Yd.	2.70	64,467.90
Trench Excavation	576 Cu. Yd.	5.00	2,880.00
Lime Treated Subgrade	32,060 Sq. Yd.	0.90	28,854.00
Plain Concrete Pavement	27,850 Sq. Yd.	8.50	236,725.00
Pipe Underdrain (P.A. #5)	779 Lin. Ft.	6.50	5,063.50
12" Sanitary Sewer (P.A. #6)	50 Lin. Ft.	57.00	2,850.00
15" Storm Drain (P.A. #6)	52 Lin. Ft.	40.00	2,080.00
Finish Roadbed & Slopes (P.A. #7)		All Required	1,500.00
Extra for Pavement Removal (P.A. #7)	2,020 Sq. Yd.	1.75	3,535.00
Haul Excavated Material (P.A. #7)	3,340 Cu. Yd.	1.15	3,841.00
Extra for AC Areas (P.A. #7)	794 Ton	3.50	2,779.00
Trench Excavation & Backfill & Elec. Work (E.W.O. #1)		All Required	11,000.00
			$390,325.40
		Increase	85,945.40
		SUBTOTAL	$679,429.60
		Engineering	86,022.40
			$765,452.00

Type Code Y031
Traffic Signal

Total the same as previous estimate of Oct. 12, 1981 $ 59,548.00

Length of Roadway --------------- 0.896 mile
Cost of Roadway Per Mile---------$854,299.11

SUMMARY OF FUNDS (88.18)

Description	Total Cost	Federal Funds	State Funds	City Funds
Roadway	$765,452.00	$674,974.00	$45,239.00	$45,239.00
Traffic Signal	59,548.00	52,508.00	3,520.00	3,520.00
TOTAL	$825,000.00	$727,482.00	$48,759.00	$48,759.00

Group 1 90%; Group 8 10%
Contract No. 9367
Prefix: 302-1939
Prefix: 302-1003

9367

STATE COPY

TO BE COMPLETED BY FHWA		
10-94	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL-AID PROJECT AGREEMENT 10/15/81	STATE Oregon COUNTY Benton PROJECT NO. M-2120(3)

The State, through its Highway Agency, having complied, or hereby agreeing to comply, with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) the Regulations issued pursuant thereto and, (3) the policies and procedures promulgated by the Federal Highway Administrator relative to the above designated project, and the Federal Highway Administration having authorized certain work to proceed as evidenced by the date entered opposite the specific item of work, Federal funds are obligated for the project not to exceed the amount shown herein, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends only to project costs incurred by the State after the Federal Highway Administration authorization to proceed with the project involving such costs.

PROJECT TERMINI

N.W. Kings Blvd.-Highland Dr. (Corvallis)

PROJECT CLASSIFICATION OR PHASE OF WORK	EFFECTIVE DATE OF AUTHORIZATION	APPROXIMATE LENGTH *(Miles)*
HIGHWAY PLANNING AND RESEARCH (HP & R)		
PRELIMINARY ENGINEERING		
RIGHTS-OF-WAY		
CONSTRUCTION	9-2-81	0.896
OTHER *(Specify)*		

FUNDS PRO RATA 88.18%

ESTIMATED TOTAL COST OF PROJECT	FEDERAL FUNDS
$ 733,152.00	$ 646,492.00

The State further stipulates that as a condition to payment of the Federal funds obligated, it accepts and will comply with the applicable provisions set forth on the reverse hereof.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Asst. State Hwy. Engr.
(Title)

XXX For: H.S. Coulter

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Date executed by Division Administrator OCT 15 1981

FORM PR-2 (REV. 10-75) PREVIOUS EDITIONS ARE OBSOLETE

AGREEMENT PROVISIONS

1. RESPONSIBILITY FOR WORK

a. Except for projects constructed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in compliance with the approved plans and specifications or project proposal which, by reference, are made a part hereof.

b. With regard to projects performed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in accordance with the terms of its approved Certification, or exceptions thereto as may have been approved by the Federal Highway Administration.

2. HIGHWAY PLANNING AND RESEARCH (HP&R) PROJECT. The State highway agency will (a) conduct or cause to be conducted, under its direct control, engineering and economic investigations of projects for future construction, together with highway research necessary in connection therewith, pursuant to the work program approved by the Federal Highway Administration and (b) prepare reports suitable for publication of the result of such investigations and research, but no report will be published without the prior approval of the Federal Highway Administration.

3. PROJECT FOR ADVANCE ACQUISITION OF RIGHTS-OF-WAY. In the event that actual construction of a road on this right-of-way is not undertaken by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

4. PRELIMINARY ENGINEERING PROJECT FOR PREPARATION OF RIGHT-OF-WAY PLANS OR FOR PREPARATION OF CONSTRUCTION PLANS, SPECIFICATIONS AND ESTIMATES. In the event that right-of-way acquisition for, or actual construction of the road for which this preliminary engineering is undertaken is not started by the close of the fifth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

5. INTERSTATE SYSTEM PROJECT. (a) The State highway agency will not add or permit to be added, without the prior approval of the Federal Highway Administration any points of access to, or exit from, the project in addition to those approved in the plans and specifications for the project. (b) The State highway agency will not permit automotive service stations, or other commercial establishments for serving motor vehicle users, to be constructed or located on the right-of-way of the interstate system. (c) The State highway agency will not after June 30, 1968, permit the construction of any portion of the Interstate Route on which this project is located, including spurs and loops, as a toll road without the written concurrence of the Secretary of Transportation or his officially designated representative. The term 'toll road' does not include toll bridges or toll tunnels.

6. PROJECT FOR CONSTRUCTION IN ADVANCE OF APPORTIONMENT. (a) This project authorized pursuant to 23 U.S.C. 115 as amended, will be subject to all procedures and requirements, and conform to the standards applicable to projects on the system on which located, financed with the aid of Federal funds. (b) No obligation of previously apportioned Federal funds is created by this agreement, its purpose and intent being to provide that, upon application by the State highway agency, and approval thereof by the Federal Highway Administration, any Federal-aid funds of the class designated by the project number prefix, apportioned to the State under 23 U.S.C. 104 subsequent to the date of this agreement, may be used to reimburse the State for the Federal share of the cost of work done on the project.

7. STAGE CONSTRUCTION. The State highway agency agrees that all stages of construction necessary to provide the initially planned complete facility, within the limits of this project, will conform to at least the minimum values set by approved AASHTO design standards applicable to this class of highways, even though such additional work is financed without Federal-aid participation..

8. BOND ISSUE PROJECT. Construction, inspection and maintenance of the project will be accomplished in the same manner as for regular Federal-aid projects. No present or immediate obligation is created by this Agreement against Federal funds, its purpose and intent being to provide aid to the State, as authorized by 23 U.S.C. 122, for retiring maturities of the principal indebtednesss of the bonds referred to below. When the State requests Federal reimbursement to aid in the retirement of such bonds, the request will be supported by the appropriate certification required by 23 CFR Part 140, Subpart F, and Volume 1, Chapter 4, Section 8 of the Federal-Aid Highway Program Manual or the alternative State procedure set forth in the State's Certificate, and payment of the authorized Federal share will be made from appropriate funds available. If in any year there is no unobligated balance of any apportioned Federal funds available from which payments hereunder may be made, there will be no obligation on the part of the Federal Government on account of bond maturities for that year. Funds available to the highway agency for this project are the proceeds of bonds issued by the governmental unit indicated on the attached tabulation, pursuant to the authority and in the amounts by date of issue and beginning date of maturities set forth therein.

9. SPECIAL HIGHWAY PLANNING AND RESEARCH PROJECT. The State Highway agency hereby authorizes the Federal Highway Administration to charge the State's pro rata share of costs incurred against funds apportioned to the State under 23 U.S.C. 307 (c), as amended. In the event a project is financed with both Federal-aid funds and State matching funds, the State agrees to advance to The Federal Highway Administration the State matching funds for its share of the estimated cost. For a National Pooled Fund study, the State hereby assigns its responsibility for the work to the Federal Highway Administration. For an Intra-Regional Cooperative Study, the State hereby assigns its responsibility for the work to the lead State for the study.

10. PARKING REGULATION AND TRAFFIC CONTROL. The State highway agency will not permit any changes to be made in the provisions for parking regulations and traffic control as contained in the agreement between the State and the local unit of Government referred to in the paragraph on "Additional Provisions," without the prior approval of the Federal Highway Administration, unless the State determines, and the Division Administrator concurs, that the local unit of Government has a functioning traffic engineering unit with the demonstrated ability to apply and maintain sound traffic operations and control.

6-Files

Oregon State Highway Division
Salem, Oregon October 12, 1981

Federal Aid Project
No. M-2120(3)

N.W. Kings Blvd.-Highland Dr. (Corvallis) Section
FAU 2120 (Walnut Blvd.)
Benton County

PROJECT AGREEMENT ESTIMATE

Type Code 6204/7205
Roadway (Sta. 32+42 to Sta. 79.75)

Mobilization		All Required	$ 54,000.00
Temporary Protection and Direction of Traffic		All Required	5,500.00
Temporary Signs	307 Sq. Ft.	4.00	1,128.00
Temporary Barricades	10 Each	40.00	400.00
Temporary Continuous Rail Traffic Barriers, Reflectorized	125 Lin. Ft.	4.00	500.00
Flagmen	240 Hour	20.00	4,800.00
Clearing and Grubbing		All Required	15,000.00
Removal of Structures and Obstructions		All Required	6,000.00
Finishing Roadbed and Slopes		All Required	10,000.00
Furnishing and Placing Topsoil	480 Cu. Yd.	5.00	2,400.00
1"-0 Aggregate Base	1,300 Ton	5.00	6,500.00
10-inch Sewer Pipe	6 Lin. Ft.	12.00	72.00
12-inch Sewer Pipe	954 Lin. Ft.	12.50	11,925.00
Extra for Pipe Under Pavement	40 Lin. Ft.	10.00	400.00
Concrete Manholes	1 Each	1,200.00	1,200.00
Concrete Inlets, Type D	1 Each	500.00	500.00
Concrete Curb Inlets	26 Each	375.00	9,750.00
Guard Rail, Type 1	88 Lin. Ft.	10.00	880.00
Rail End Pieces, Type B	2 Each	50.00	100.00
Concrete Walks	5,200 Sq. Yd.	5.50	28,600.00
Concrete Curbs	1,060 Cu. Yd.	55.00	58,300.00
Extra for Asphalt Approaches	6 Each	500.00	3,000.00
Adjusting Manholes	14 Each	50.00	700.00
Reconstructing Concrete Manholes	11 Each	450.00	4,950.00
Roadside Seeding and Mulching	2 Acre	660.00	1,320.00

Alternate "B"

General Excavation	21,900 Cu. Yd.	2.70	59,130.00
Trench Excavation	375 Cu. Yd.	5.00	1,875.00
Watering	90 M-Gal.	6.00	540.00
Lime Treated Subgrade	28,000 Sq. Yd.	0.90	25,200.00
Lime for Treated Subgrade	315 Ton	85.00	26,775.00
Class "B" or Class "C" Asphalt Concrete Mixture	1,300 Ton	30.75	39,975.00
Plain Concrete Pavement	23,500 Sq. Yd.	8.50	199,750.00
Removal of Existing Sign Installations		All Required	350.00
Sign Support Footings		All Required	1,300.00
Pipe Sign Posts		All Required	3,300.00
Type "C" and "D" Signs in Place	12 Sq. Ft.	6.00	72.00
Type "EE" Signs in Place	50 Sq. Ft.	9.40	470.00
Type "T" Signs in Place	33 Sq. Ft.	9.40	310.20
Type "U" Signs in Place	3 Sq. Ft.	4.00	12.00
Move and Reinstall Existing Signs		All Required	1,900.00
		Subtotal Alternate "B"	$588,984.20

Anticipated Items

Permanent Pavement Striping	All Required	$ 4,500.00
	SUBTOTAL	$593,484.20
	Engineering	80,119.80
	TOTAL	$673,604.00

Type Co[illegible] Y031
Traffic Signal

Traffic Signal, Complete	All Required	$ 47,488.00
Fire Pre-emption System, Complete	All Required	4,978.00
	SUBTOTAL	$ 52,466.00
	Engineering	4,732.00
Signal Controller Testing (Engineering) -------------------		1,400.00
"OPTICOM" Testing (Engineering) ---------------------------		950.00
	TOTAL	$ 59,548.00

Length of Roadway ------------------------- 0.896 mile
Cost of Roadway Per Mile -----------------$751,791.29

Work Retained in Program Status

Bikeway Signs	All Required	$ 1,500.00
City of Corvallis (Water)	All Required	4,000.00
Consumers Power Inc.	All Required	2,000.00
	TOTAL	$ 7,500.00

SUMMARY OF FUNDS (88.18%)

Description	Total Funds	Federal Funds	State Funds	City Funds
Roadway	$673,604.00	$593,984.00	$39,810.00	$39,810.00
Traffic Signal	59,548.00	52,508.00	3,520.00	3,520.00
TOTAL	$733,152.00	$646,492.00	$43,330.00	$43,330.00

Group 1-90%; Group 8-10%
Contract No. 9367
Prefix: 302-1939 (PE)
302-1003 (Constr.)

9367　　　　　　　　　　　　302-1939

(ORIGINAL)

FORM APPROVED BY COMPTROLLER GENERAL, U.S. MAY 12, 1966

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

10-21-83

VOUCHER FOR WORK PERFORMED UNDER PROVISIONS OF THE FEDERAL AID AND FEDERAL HIGHWAY ACTS, AS AMENDED

STATE VOUCHER NO.

FHWA VOUCHER NO.

FHWA SCHEDULE NO.

APPROPRIATION

THE UNITED STATES, DR., TO *(Insert official or depositary named in project agreement)*
TREASURER OF THE STATE OF OREGON

ADDRESS
Capitol Bldg.
Salem, OR 97310

PAID BY
(For use of Paying Office)

STATE
Oregon

VOUCHER TYPE *(Check Appropriate Block)*
☐ CURRENT BILLING
☐ OTHER PROGRESS
☒ FINAL VOUCHER (*)

VOUCHER PERIOD
FROM 2/26/76
TO 9/1/81

FEDERAL AID PROJECT NO.
M-2120(1)

(*) Use Form FHWA-1447 for Final Voucher for a project constructed under certification acceptance or secondary road procedures (23 U.S.C. 117).

TOTAL ACTUAL COST	TOTAL PARTICIPATING COST	PRO-RATA OF PARTICIPATING COST CLAIMED FROM U.S.	TOTAL AMOUNT CLAIMED FROM U.S.	LESS PREVIOUS PAYMENTS	NET AMOUNT CLAIMED
$132,384.45	$133,714.25	78.19%	$104,551.17	$104,551.17	$ 0.00

I certify that the costs shown in this voucher have been incurred in accordance with terms of project agreements; applicable State and Federal laws or regulations; and that no claim has previously been submitted for costs claimed.

STATE HIGHWAY AGENCY	DATE	SIGNATURE OF AUTHORIZED OFFICIAL
Oregon	10/21/83	Controller

I certify that supporting records for costs claimed, and the referenced project (if applicable), have been subjected to required reviews, approvals and inspections by the Federal Highway Administration and that the amount approved is justly due.

AMOUNT SUBMITTED $ 0.00

ADJUSTMENTS

AMOUNT APPROVED

SIGNATURE OF FHWA REPRESENTATIVE
(SIGN ORIGINAL ONLY)

DATE APPROVED

FORM PR-20
(Rev. 5-78)

PREVIOUS EDITIONS ARE OBSOLETE

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (Payee must not use this column)
	N.W. King Blvd.-N.W. Highland Dr. (Corvallis) Section City Street in Benton County					
	Preliminary Engineering					
	Type Code P.E.					
	Work by City of Corvallis	All Required			$ 22,443.82	
	Wilbur Smith & Associates	All Required			53,172.01	
	State	All Required			56,629.20	
	Total Participating Preliminary Engineering				$132,245.03	
	Type Code Y070					
	Archeological Salvage	All Required			744.01	
	Misc. Project Cost					
	Audit Expense	All Required			511.54	
	Audit Expense (Defense Contract Audit Agency)	All Required			213.67	
	Total Participating Misc. Project Cost				$ 725.21	
	Total Participating Project Cost				$133,714.25	
	Nonparticipating Project Cost					
	City of Corvallis Share of Project Cost	All Required			(1,329.80)	
	Total Project Cost				$132,384.45	
	Prepared based on Participating Costs as shown on FEderal Billing as of 10/13/83.					
	AMOUNT CARRIED FORWARD.....					

			TOT	N1				1,428.31CR
			** JOB TOTALS **			288.40CR**	288.40CR**	146,932.68 **

HIGHLAND DR-KINGS BLVD CONT NO * FA PROJ NOS M 2120001 100 STATE

CONT NO	PREFIX	FUNCTION	SUB	F GR	DESCRIPTION	CURRENT MONTH	FISCAL YEAR TO DATE	GRAND TOTAL TO DATE
302	1939	294	00	N 1	Loc. Match			1,329.80CR
302	1939	296	00	N 9		3,558.73CR	3,558.73CR	101,822.73CR
302	1939	298	00	N 9		3,558.73	3,558.73	101,822.73
302	1939	901	00	P 1	Proj. Mgr.			7,703.62
302	1939	902	00	P 1	Citizens Involvement			93.77
302	1939	903	00	P 1	Pay City	51.08CR	51.08CR	22,443.82
302	1939	904	00	P 1	Consultant Fees			53,385.68
302	1939	905	00	P 1	Final Des.			16,763.09
302	1939	907	00	P 1	Prel. Des.			4,122.72
302	1939	909	00	P 1	R/W Desc.			2,010.50
302	1939	910	00	P 1	Region Geol.			1,191.66
302	1939	911	00	P 1	Traffic Sec			4,902.25
302	1939	912	00	P 1	Landscape Sec.			32.90
302	1939	913	00	P 1	R/W Liais.			558.85
302	1939	914	00	P 1	Reg. Ut. Liais.			164.72
302	1939	915	00	P 1	Audit			511.54

DESCRIPTION	PREFIX	FUNCTION	SUB F.	GR		CURRENT MONTH	FISCAL YEAR TO DATE	GRAND TOTAL TO DATE
302	1939	918	00 P	1	Location			535.38
302	1939	920	00 P	1	Prog. Sec			249.52
302	1939	921	00 P	1	Specs.			1,683.94
302	1939	922	00 P	1	Adm. Serv.			30.26
302	1939	923	00 P	1	Env. Sec.	51.08	51.08	15,515.03
302	1939	950	00 P	1	Training Courses			311.07
302	1939	980	00 P	1	Public Hearing Charges			1,503.93
		TOT	P1					133,714.25
		TOT	N1					1,329.80CR
		** JOB TOTALS **				**	**	132,384.45 **

9TH ST-SPRRXING CORVALLIS CONT NO * FA PROJ NOS M 210002 100 STATE

CONT NO	PREFIX	FUNCTION	SUB	F GR	CURRENT MONTH	FISCAL YEAR TO DATE	GRAND TOTAL TO DATE
302	1941	294	00	N 1			1,276.37CR
302	1941	296	00	N 9	1,661.26CR	1,661.26CR	68,851.13CR
302	1941	298	00	N 9	1,661.26	1,661.26	68,851.13
302	1941	901	00	P 1			10,939.04
302	1941	903	00	P 1			21,542.05
302	1941	905	00	P 1			25,109.74
302	1941	907	00	P 1			96.36
302	1941	909	00	P 1			3,094.22
302	1941	910	00	P 1			1,921.93
302	1941	911	00	P 1			10,764.54
302	1941	913	00	P 1			945.39
302	1941	914	00	P 1			1,248.85

801
BILLING NUMBER 19

OREGON STATE HIGHWAY DEPARTMENT
FHWA BILLING VOUCHER

12/01/83

PREFIX	GRP FL	FED AID PROJ APPR	AGREEMENT AMOUNT	TOTAL COSTS TO DATE	PARTIC. AMOUNT	% OF PARTIC.	FEDERAL SHARE	AMOUNT PREV. CLAIMED	ADJUSTMENT AND CODE	AMOUNT OF THIS VOUCHER
234-1916	1	RRS -9031-001 APPR-138	1,800.00	17.40	17.40	90.00	15.66	15.66		
234-1917	1	RRS -9276-001 APPR-138	1,800.00	17.40	17.40	90.00	15.66	15.66		
234-1918	1	BROS-3400-010 APPR-117				80.00				
234-1941	1	RRS -9189-001 APPR-138	675.00	817.93	817.93	90.00	736.14	675.00	61.14 B	
234-1955	1	M -0000-004 APPR-W36	66,063.00	76,353.88	75,341.85	85.80	64,643.31	64,643.31		
234-1956	1#	M -9207-001 APPR-W36	76,980.78	90,851.85	89,721.19	85.80	76,980.78	76,980.78		
234-1959	1	M -9282-002 APPR-W36	172,785.00	264,650.25	261.927.41	85.80	224,733.72	172,785.00	51,948.72 B	
234-1961	1	RRS -9186-001 APPR-138	450.00	571.38	571.38	90.00	514.24	450.00	64.24 B	
234-1992	1	RRS -8670-001 APPR-138	1,800.00	566.38	256.13	90.00	230.52	230.52		
236-1954	1#	RRO -000S-037 APPR-685	6,271.20	7,215.95	6,968.00	90.00	6,271.20	6,271.20		
236-1964	1	SOS -3600-001 APPR-680	22,729.00	30,192.49	30,192.49	85.77	25,896.10	22,729.00	3,167.10 B	
301-1961	1#	M -4950-001 APPR-W32	1,130.55	1,381.58	1,381.58	81.83	1,130.55	1,130.55		
301-1967	1#	M -0000-032 APPR-W32	1,488.91	1,688.49	1,688.49	88.18	1,488.91	1,488.91		
302-1938	1	M -2110-001 APPR-W32	116,003.46	146,932.68	148,360.99	78.19	116,003.46	116,003.46		
302-1939	1#	M -2120-001 APPR-W32	104,551.17	132,384.45	133,714.25	78.19	104,551.17	104,551.17		
302-1941	1#	M -2110-002 APPR-W32	68,851.13	86,779.82	88,056.19	78.19	68,851.13	68,851.13		
302-1959	1	RRS -2070-002 APPR-138	1,800.00	607.53	533.75	90.00	480.38	480.38		
302-1960	1	PMS -000S-093 APPR-140	700.00	103.01	103.01	100.00	103.01	103.01		
303-1901	1	XI -9665-003 APPR-823	92.22	108.49	108.49	85.00	92.22	92.22		
303-1903	1#	XI -9659-003 APPR-823	7,101.38	8,514.69	8,354.56	85.00	7,101.38	7,101.38		
	2#	X10 -9659-003 APPR-772	22,278.00	26,209.41	26,209.41	85.00	22,278.00	22,278.00		
	3#	X10 -9659-003 APPR-580	6,970.00	8,200.00	8,200.00	85.00	6,970.00	6,970.00		
303-1903		PREFIX TOTALS	36,349.38	42,924.10	42,763.97		36,349.38	36,349.38		
303-1904	1	X10 -9718-001 APPR-772	21,845.00	77,479.14	77,409.39	85.00	65,797.98	21,845.00	43,952.98 B	
	2	M -9718-001 APPR-W36	73,616.00	87,056.09	85,697.60	85.80	73,528.54	73,528.54		
	3	X10 -9718-001 APPR-580	58,310.00			85.00				
303-1904		PREFIX TOTALS	153,771.00	164,535.23	163,106.99		139,326.52	95,373.54	43,952.98	

9367

5

rll

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. M-21-20(3)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Benton

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 10077

6. TO

9-7-83

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 9/7/83

8. FEDERAL ROUTE NUMBER FAU 2120

9. STATE ROUTE NUMBER City Street

10. GENERAL LOCATION:

NW Kings Blvd. - NW Highland Drive (Corvallis)

11. GENERAL DESCRIPTION OF WORK

Revised utililty costs

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY

☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION

☐ ACQUISITION OF RIGHT-OF-WAY

☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS

☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

☒ XX OTHER *(Specify)* See below

13. REMARKS

As requsted by Mr. Potter's letter of 8/9/83 I approve the revised utility costs for adjustment of Consumers Power, Inc., arerial line to a TEC of $11,958 Federal Funds $10,545 contingent upon modification of Project Agreement if additional funds are required.

(Increase TEC $8,561 Federal Funds $7,550)

The above approval for increase of funds is subject to audit of billings submitted by Consumers Power, Inc.

RECEIVED
STATE HWY ENGR
SEP 13 '83
REFER TO Potter
FOR
Info Inves R/D D/R ... Act File

Orig to 9/13

14. DATE 9/7/83

15. SIGNATURE OF APPROVING OFFICIAL G K Hossner

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-75) PREVIOUS EDITIONS MAY BE USED

9267

NOTED
E. S. HUNTER

RECEIVED
TECHNICAL SERVICES
AUG 11 '83
REFER TO
FOR

Info	Invest	R/D	D/R	Sign	Act	File

August 9, 1983

TO: D. E. Wilken, Division Administrator
Federal Highway Administration

FROM: Gary A. Potter
Manager, Program Section

SUBJECT: Aerial Power Line Relocation
Consumers Power, Inc.
N.W. Kings Blvd.-N.W. Highland Dr. (Corvallis) Sec.
FAU 2120 (Walnut Blvd.)
Benton County
Project No. M-2120(3)

Here are copies of final billings of cost for the additional relocation of Consumers Power, Inc.'s (CPI) aerial power line facilities previously relocated. The adjustments were requested to accommodate safety features added to the project by highway plan revisions.

One of the additional relocations was covered in D. E. Swan's letter of February 8, 1983 and approved by your PR-1240 dated February 24, 1983. The estimated cost of this work was $3,397. The final actual cost of the work is $8,049.05.

The second additional relocation was necessitated by the extenstion of a left turn refuge westerly of Kings Blvd. This work was done at the City of Corvallis' request. The City was not aware that the cost of additional relocation of utilities was reimbursable when the work was requested by the project manager as a result of a plan change. Therefore, advanced authorization was not requested.

The work was not originally anticipated. CPI responded promptly, upon request, in accomplishing the requested additional work. The change in plans and CPI's additional relocation work will result in additional safety for the traveling public and is in the public's best interest.

The State is not entitled to a credit for expired service life under the provisions of Paragraph 9b (1) (b) as the work involved a segment of facilities less than one mile in length. There will be no betterment derived from the relocation work.

Your approval for federal participation in the cost of the additional relocation work accomplished by CPI is requested. The cost of the first part of the work at the S.E. corner of N.W. Walnut Blvd. and N.W. 25th St. is $6,393. The cost of the second part of the work on Walnut Blvd. between N.W. 25th St. and N.W. Kings Blvd. is $5,565. Total cost of additional relocation work is $11,958.

JMC/GAP/llr
Attachment
cc: E. S. Hunter
Jack M. Cartwright
Jerry Miller

9367

b

April 26, 1983

CON

Green & White Rock Products, Inc.
P. O. Box 886
Corvallis, OR 97330

Time Extension Request
NW Kings Blvd.-Highland Drive
(Corvallis)
Contract No. 9367
FAP No. M-2120(3)

Your request for additional contract time in which to complete the above project has been carefully considered. A contract time extension of 59 additional calendar days is granted due to the performance of extra and additional work. The revised adjusted time for completion of this contract is 431 calendar days.

This will eliminate all liquidated damages under this contract.

/s/ R. L. Schroeder

W. E. Schwartz, P.E.
Assistant State Highway Engineer
for Operations

OBJ:mk st

NOTED
W. E. SCHWARTZ

bc C. T. Keasey
C. O. Fredrickson w/att.
Ken Karnosh w/att.
FHWA w/att.
Rob Church

STATE OF OREGON
Highway Division - Region 2

302-1003
INTEROFFICE MEMO
378-2626

DATE: April 20, 1983

TO: C. T. Keasey
CONSTRUCTION ENGINEER

FROM: Gerald W. Wimer
REGION 2 CONSTRUCTION ENGINEER

SUBJECT: Second Time Extension Request
NW Kings Blvd.-Highland Dr.
Walnut Blvd. (Corvallis)
Contract 9367

Attached is another time extension request from Green and White Rock Products, Inc., in which they ask for another 30 calendar days (cd) to be added to the previously authorized 372 cd making a new total of 402 cd.

The basic contract work was completed within the previous 22 day extension to 372 cd. Additional drainage and bicycle detector loops necessitate not only the currently requested 30 cd but will justify another 30 cd or longer, if the weather does not continue to stay favorable. The contractor is submitting another request that will contain the consent of the surety. In the meantime, we should process the current request and not continue to hold additional liquidated damages for any longer than necessary.

4-21-83

W. E. Schwartz -

This extra work was ordered after completion of original contract work and has now been completed using a total of an additional 59 calendar days. I recommend a time extension of 59 calendar days, eliminating all liquidated damages.

OM Johnson

attch.
GW/rgb

cc: Ken Karnosh

RECEIVED
APR 21 1983
CONSTRUCTION SECTION
CE
CAE
FOE
OCS
SCS
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OM
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TC
FE
CP

5-1387

Contains Recycled Materials

2-24-83

B

9367

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. M-2120(3)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Benton

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division, Salem, OR

4. PROGRAM NO.

5. ITEM NO. 10077

6. TO
Mr. H. S. Coulter
State Highway Engineer
Oregon State Highway Division
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 12-8-82

8. FEDERAL ROUTE NUMBER FAU 2120

9. STATE ROUTE NUMBER City Street

10. GENERAL LOCATION:
N. W. Kings Boulevard - Highland Drive (Corvallis)

11. GENERAL DESCRIPTION OF WORK
Utility Adjustment

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* Utility Adjustment

13. REMARKS

As requested by Mr. Swan's letter of 2-8-83, this will confirm the advance approval date of 12-8-82 to proceed with the actual adjustments to Consumers Power, Inc., power pole relocation under the provisions of FHPM 1-4-4 (PPM 30-4) par 9C(1) on an actual cost basis estimated to be $3,397, Federal funds $2,995.47.

Approval and participation for the eligible portion of the work authorized above is subject to the provisions of the Federal-aid Program Manual.

RECEIVED
STATE HWY ENGR
MAR 2 '83
REFER TO Swan
FOR
Info | Inves | R/D | D/R | Sign | Act | File

Orig to 3/8

14. DATE 2-24-83

15. SIGNATURE OF APPROVING OFFICIAL

16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9367

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

2-24-83

B

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. M-2120(3)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Benton

3. FROM
Dale E. Wilken, Division Administrator
FHWA- Oregon Division, Salem, OR

4. PROGRAM NO.

5. ITEM NO. 10077

6. TO

Mr. H. S. Coulter
State Highway Engineer
Oregon State Highway Division
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 2-24-83

8. FEDERAL ROUTE NUMBER FAU 2120

9. STATE ROUTE NUMBER City Street

10. GENERAL LOCATION:
N. W. Kings Blvd. - Highland Drive (Corvallis)

11. GENERAL DESCRIPTION OF WORK
Revised Utility Costs

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* Revise Utility Costs

13. REMARKS

As requested by Mr. Swan's letter of 2-11-83, I approve the revised utility costs for the adjustment to the City of Corvallis' water facilities relocation to a TEC of $6,768.06, Federal funds $5,968.06.

(Increase TEC $739.27 - Feceral funds $651.87)

RECEIVED
STATE HWY ENGR
MAR 2 '83
REFER TO Swan
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Orig to
3/2

14. DATE 2-24-83

15. SIGNATURE OF APPROVING OFFICIAL G K Hessner

16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9367

D

February 8, 1983

TO: D. E. Wilken, Division Administrator
Federal Highway Administration

FROM: D. E. Swan
Program Control Engineer

E. S. HUNTER

SUBJECT: Power Pole Relocation
Consumers Power, Inc.
N.W. Kings Blvd.-N.W. Highland Dr. (Corvallis) Sec.
FAU 2120 (Walnut Blvd.)
Benton County
Project No. M-2120(3)

Here is a copy of an estimate of cost, dated December 27, 1982, for the second relocation of Consumers Power, Inc.'s (CPI) power pole at the S.E. corner of N.W. Walnut Blvd. and N.W. 25th St. which is in conflict with the completed street construction. The relocation is being made at State's and FHWA's request.

The conflict was not originally anticipated, therefore, CPI was advised verbally of the conflict as soon as it was known. The relocation agreement will, therefore, consist of verbal notification of conflict, the estimate and sketch submitted herewith and our letter authorizing them to proceed with the work.

An appropriate permit for the utility's proposed relocation will be issued as required by the City.

The State is not entitled to a credit for expired service life under the provisions of Paragraph 9b (1) (b) of PPM 30-4, as the relocation involves a segment of facilities less than one mile in length.

There will beno betterment derived from the proposed adjustment of the CPI's facilities.

Your approval of the actual cost agreement, as evidenced above, and confirmation of your advanced authorization to proceed with the work as of December 8, 1982 under the provisions of PPM 30-4 and 30-4.1 is requested. Estimated cost to the State is $3,397.

JMC/DES/llr
Enclosure
cc: E. S Hunter
Jack M. Cartwright
Don Bedford

RECEIVED
TECHNICAL SERVICES
FEB 9 '83
REFER TO
FOR
File
Act
Sign
D/R
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Info

9367

FORM 81-734-3001

OREGON STATE HIGHWAY DIVISION

FIELD ENGINEER'S WEEKLY REPORT

FOR CONSTRUCTION PROJECTS ONLY
CONSTRUCTION AND BRIDGE SECTION

SECTION: N W Kings Blvd.-Highland DR.(Corvallis)

WEEK ENDING: Dec 18, 1982

SECTION PREFIX: 302-1003

HIGHWAY: FAU 2120 (Walnut Blvd)

COUNTY: Benton

AME OF JOB: N W Kings Blvd.-Highland DR.(Corvallis)

KIND OF WORK: grading, paving and signals

ONTRACTOR: Green & White Rock Products, Inc.

CONTRACT NUMBER: 9367

FEDERAL AID PROJECT NUMBER: M-2120(3)

ATE OF CONTRACT: Oct. 9, 1981

DATE WORK STARTED: 10/29/81

ESTIMATED COMPLETION DATE: 11/17/82 [illegible]

ERAGE FORCE ON PROJECT FOR THE WEEK:

EN SUPERVISION:

SPECIFIED WORK DAYS

WORK DAYS USED

SPECIFIED CALENDAR DAYS ~~[illegible]~~ 372

CALENDAR DAYS USED 372

SPECIFIED COMPLETION DATE

PERCENT OF TIME ELAPSED 100

OJECT AUTHORIZATION: 847,000 $ [illegible]

XCLUSIVE OF ENGINEERING: 787,978 $ [illegible]

PERCENT OF CONTRACT COMPLETED BASED ON ESTIMATED COST 100

ENGINEERING AUTHORIZATION $ 59,022.02

STIMATED COST OF COMPLETED ROJECT. EXCLUSIVE OF NGINEERING 780,000 [illegible] $

ENGINEERING COST TO DATE $ 59,500

PERCENT OF CONTRACT COMPLETED BASED ON TOTAL AUTHORIZATION 99

STIMATED PERCENT: OVERRUN UNDERRUN - 1 [illegible] %

this week PERCENT OF AUTHORIZATION 101 %

DATE PROJECT WAS COMPLETED: 11/17/82

ESTIMATED PERCENT COMPLETE (ROADWORK)

LEARING	DRAINAGE	GRADING	BASE	OIL AND/OR PAVE.	MAT'L. PROD.	traffic signals	
100	100	100	100			100	

	GRADING	SURFACING	MAINTENANCE MATERIALS	OIL & BITUMINOUS MACADAM	concrete PAVING
ILES IN PROJECT	0.90	0.90			0.90
ILES PARTIALLY COMPLETED					
ILES COMPLETED	0.9	0.9			0.9
OTAL ESTIMATED QUANTITIES (CONTRACT)	21,900 cy	1,300 ton			23,500 sq yd
OTAL QUANTITIES CORRECTED TO DATE	[illegible]	[illegible]			[illegible]
STIMATED QUANTITIES MOVED OR PLACED TO DATE	24,380	2321			28,711
VERAGE DAILY QUANTITIES this week					
VERAGE DAILY QUANTITIES NECESSARY TO OMPLETE PROJECT ON TIME					
UMBER OF SHIFTS PER DAY					
OURS PER SHIFT					

QUIPMENT USED DURING THE WEEK: dozer____, loader____, blade____, scraper____, backhoe____, roller____, paver____, dump truck____, mixer truck____, lime tiller____, concrete finisher machine____, curb machine____, tack xcart____, water wagon____, flat bed truck____, pkup____, compressor____,

ESTIMATED PERCENT COMPLETE (STRUCTURES)

BRIDGE NO.								
PERCENT								

	WEATHER	WORK DAYS CHARGED	HOURS DELAY	CAUSE OF DELAY
SUNDAY				
MONDAY				
TUESDAY				
WEDNESDAY				
THURSDAY				
FRIDAY				
SATURDAY				

K

CE CAE FOE QCS SCS REO

RECEIVED
DEC 20 1982
CONSTRUCTION SECTION

OM CA LS TC FE CP

GENERAL DESCRIPTION OF ACTIVITIES FOR THE WEEK

SUNDAY	
MONDAY Dec. 13, 1982	
TUESDAY	
WEDNESDAY	
THURSDAY	
FRIDAY	
SATURDAY	

REMARKS

Semi-final estimate submitted to Region Office on Wed.

Project Completed

Final Report

NEXT WEEK:

SIGNED Kenneth D. Karnosh LOCATION Albany

Kenneth D Karnosh, Resident Engineer

PRIME RESIDENT SUBMIT 2 COPIES WHEN BRIDGES AND GRADING BOTH ARE INVOLVED. SUBMIT 3 COPIES

9367

December 8, 1982

Mr. A. Gordon Wyatt
Principal Engineer
501 S.W. Madison Avenue
P.O. Box 1083
Corvallis, Oregon 97330

Dear Gordon:

The contract work on the N.W. Kings Blvd.-Highland Dr. Section of Walnut Blvd. is 96 percent complete and estimates indicate that the final cost will exceed the project authorization.

The main contributors to the overruns are, (1) changing the mounting system for signal heads from span wire to mast arms-$31,430, (2) eliminate sharp vertical curve near west end of the project - $33,000, (3) provide wiring for future illumination-$16,000, (4) left-turn refuge/widening for CH2M-Hill access-$18,500, and (5) incidental overruns in numerous bid items-$3,770.

The City share of the overrun is as follows:

Total Estimated Overrun	$102,700
Less non-participating costs	-18,500
Total subject to Federal participation	$ 84,200
Less Federal Funds (82%)	-69,044
Less State Share (9%)	- 7,578
City Share Federal Participating Costs	$ 7,578

Total City Share: $18,500 + $7,578 = $ 26,078

Please supplement your local government Investment Pool Account #4766 by depositing $26,000 with the State Treasurer for this overrun.

Very truly yours,

ORIGINAL SIGNED BY
D. E. SWAN

D. E. Swan, P.E.
Program Control Engineer

Rec'd 12-22-82
LGIP

GEZ:pf

bcc w/AD # 82-106: Phil Stearns, Region 2
Vern Skoog - Please return completed AD # 82-106 when deposit is made.

9367

CON

1A-5(a)

DATE: November 8, 1982

TO: Oregon Transportation Commission

FROM: H. S. Coulter
State Highway Engineer

SUBJECT: Request for Increase in Project Authorization, NW Kings Blvd.-Highland Dr. (Corvallis) Section
FAU 2120 (Walnut Blvd.), Benton County
Contract No. 9367

This urban system project is 96 percent complete and current estimates indicate that the final cost will exceed the project authorization by $102,666.77 or 13.8 percent.

Major items of additional work which contributed to the overrun include the changing of the mounting system for the signal heads from span wires to mast arms. This was done at the request of the City of Corvallis in order to conform to city standards and added $31,430 to the project cost. In addition, a sharp vertical curve was eliminated near the west end of the project adding $33,000 to the cost of the project, and provision of wiring for future illumination cost $16,000 extra. Incidental overruns in numerous other bid items make up the remaining $22,270 of the request.

There are sufficient funds available in the category of work and all the increase is eligible for federal participation.

I recommend that the authorization be increased by $102,666.77 to a new total of $847.000. This matter will be on the consent calendar for the November 16 meeting.

OBJ:mk st

bc Fred D. Miller
R. W. Gormsen
C. T. Keasey
V. E. Skoog
C. O. Fredrickson
George Bell

STATE OF OREGON **INTEROFFICE MEMO**

Highway Construction 378-6318 FILE: CON 5

TO: W. E. Schwartz, P.E., P.L.S.
Ass't. State Highway Engineer

DATE: October 18, 1982

O. B. Jackmond

FROM: O. B. Jackmond, P.E., P.L.S.
Contract Administration Engineer

SUBJECT: Request for Increase in Project Authorization
NW Kings Blvd.-Highland Dr. (Corvallis) Section
FAU 2120 (Walnut Blvd.), Benton County
Contract No. 9367

This urban system project is 96% complete and current estimates indicate that the final cost will exceed the project authorization by $102,666.77 or 13.8 percent.

Major items of additional work which contributed to the overrun include the changing of the mounting system for the signal heads from span wires to mast arms. This was done at the request of the City of Corvallis in order to conform to city standards and added $31,430 to the project cost. In addition, a sharp vertical curve was eliminated near the west end of the project adding $33,000 to the cost of the project, and provision of wiring for future illumination cost $16,000 extra. Incidental overruns in numerous other bid items make up the remaining $22,270 of the request.

There are sufficient funds available in the category of work and all the increase is eligible for federal participation. PCRB approval is not required.

Attached is a rough draft letter to the Transportation Commission requesting an increase of $102,666.77. Also attached is a copy of the Expected Overrun of Project Authorization form.

OBJ:HHP:mk

Attach.

cc: C. O. Fredrickson
K. D. Karnosh
R. D. Church
D. E. Swan

NOTED
W. E. SCHWARTZ

RECEIVED
STATE HWY ENGR
NOV 3 '82
REFER TO
FOR

Info	Invest	R/D	D/R	Sign	Act	File

81-125-1387

9367

L.

CON

October 28, 1982

Green & White Rock Products, Inc.
P. O. Box 886 Hwy. 99W
Corvallis, OR 97330

Time Extension Request
NW Kings Blvd.-Highland
  Drive (Corvallis)
Contract No. 9367
FAP No. M-2120(3)

Your request for additional contract time in which to complete the above project has been carefully reviewed. A contract time extension of 22 calendar days is granted due to work done resulting from a grade change and for the installation of illumination conduits.

The revised completion time for this contract is 372 calendar days.

W. E. Schwartz, P.E.
Assistant State Highway Engineer
  for Operations

OBJ:mk st

bc H. S. Coulter
  C. T. Keasey
  C. O. Fredrickson w/att.
  Ken Karnosh w/att.
  FHWA w/att.
  Bob Church

302-1003

STATE OF OREGON
Highway Division - Region 2

INTEROFFICE MEMO
378-2626

TO: C. T. Keasey
CONSTRUCTION ENGINEER

DATE: October 20, 1982

FROM: Gerald Wimer Gerald Wimer
REGION 2 CONSTRUCTION ENGINEER

SUBJECT: Time Extension Request
NW Kings Blvd. - Highland Dr.
Walnut Blvd. (Corvallis)
Contract 9367

RECEIVED
OCT 21 1982
CONSTRUCTION SECTION
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CP

Green and White Rock Products, Inc., by the attached formal request asks that the originally authorized calendar days (cd) be increased by 20 working days, to a new total of 370 cd. Actually, they mean 378 cd. Their formal request contains the consent of their surety. The additional attachment lists the three reasons they give in making the request. These consist of: 1) grade change, 2) installation of illumination conduits on force account, and 3) curing soft subgrade.

Project Manager Kenneth D. Karnosh analyzes each of these items in detail and my supplementary comments follow:

1. Grade change. This grade change was commenced June 11 and completed June 28, effectively adding 18 cd to the overall completion of the project.

2. Installation of illumination conduits. This was done at basically the same time as the grade change and is, therefore, not a basis for additional time. However, the junction boxes were not installed until October; this required four cd. However, these junction boxes could have been installed during the grade change. Even though they weren't, they were not in the critical path of completing the project. Therefore, Region recommends no additional days for this particular item, even though the Project Manager recommends four extra days.

3. Curing soft subgrade. This was done, in part, while the grade change was being made and is, therefore, not a basis for additional time. However, additional soft subgrade correction had to be done from July 21 to July 26, holding up concrete pavement placement, which was on the critical path, in effect, adding six cd recommended by both the Project Manager and this office.

In summary, the Project Manager recommends 28 cd, the same amount as requested by the contractor, although arrived at in a slightly different manner. This office can only justify 24 cd and so recommends. This should be ample, as the contractor currently plans to seed and mulch the project Thursday, October 21, on the 366th calendar day. If he doesn't complete the seeding and mulching at that time and takes an additional week and a day, he will still be done within the time recommended by this office.

GW/rgb
cc: Ken Karnosh

10-25-82
W.E.Schwartz:
I recommend an extension of 22 C.D. = 18 for item 1 and 4 for item 2. No time for item 3 since this was probably contractor responsibility.

61-125-1387

9367 L.

ROW 18-4

September 21, 1982

TO: D. E. Wilken, Division Administrator
Federal Highway Administration

ATTENTION: Ernest J. Valach
Program Development Engineer

FROM: Jack M. Cartwright
Jack M. Cartwright
Utility Relocation Coordinator

NOTED
E. S. HUNTER

SUBJECT: Federal Participation Eligibility Date
Water Vault Adjustment
City of Corvallis
N.W. Kings Blvd.-N.W. Highland Dr. (Corvallis) Sec.
FAU 2120 (Walnut Blvd.)
Benton County
Project No. M-2120(3)

Dear Mr. Valach:

Confirmation of your verbal authorization for the City of Corvallis to proceed with the adjustment of their water vault at N.W. 13th and N.W. Walnut Blvd which is in conflict with this project as of September 15, 1982 is requested. An estimate of cost will not be submitted by the City as the work was done on an emergency basis. The conflict was not anticipated. The City provided a verbal estimate of $800. The billing for the work, upon receipt, will be forwarded for your review and approval by separate letter. Federal participation in the cost of the relocation work is subject to FHWA's review and approval of the final cost billing.

Advanced authorization date of
September 15, 1982 is approved

for William H. Kappus
Ernest J. Valach
Program Development Engineer

RECEIVED
TECHNICAL SERVICE
SEP 27 '82
REFER TO
FOR
Info Inves R/D [illegible] Sign Ret File

RECEIVED
SEP 27 1982
RR & UTILITY UNIT

JMC/llr
cc: E. S. Hunter
D. E. Swan
C. O. Fredrickson
Don Bedford
Pete Gonzalez

9367 L.

U. S. DEPARTMENT OF TRANSPORT ION
FEDERAL HIGHWAY ADMINISTRATION

9-8-82

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. M-2120(3)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Benton

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 10077

6. TO

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 7/21/82

8. FEDERAL ROUTE NUMBER FAU 2120

9. STATE ROUTE NUMBER City Street

10. GENERAL LOCATION:
NW Kings Blvd. - Highland Drive (Corvallis)

11. GENERAL DESCRIPTION OF WORK
Furnish traffic signal software

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED ON XXXXXXXXXXXXXXXXXXX FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

I approve the advance authorization date of 7/21/82 as requested in Mr. Keasey's letter of 9/1/82 as being in the public interest for the use of State Forces to proceed with the above work. State Force Order No. 3 is approved for a TEC of $500 Federal Funds $441.

RECEIVED
STATE HWY ENGR
SEP 13 '82
REFER TO Moelkreng
FOR

Info	Inves	R/D	D/R	Sign	Act	File

14. DATE 9/8/82

15. SIGNATURE OF APPROVING OFFICIAL G.K. Hossner

16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

rn 9367 8-9-82

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. M-2120(3)
2. STATE PROJECT NO. See below
2A. COUNTY NAME Benton

3. FROM Dale E. Wilken, Division Administrator
FHWA, Oregon Division

4. PROGRAM NO.
5. ITEM NO. 10077

6. TO

Mr. H. S. Coulter
State Highway Engineer
Oregon State Highway Division
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 8/9/82
8. FEDERAL ROUTE NUMBER FAU 2120
9. STATE ROUTE NUMBER City Street

10. GENERAL LOCATION:

N. W. Kings Blvd. - Highland Drive (Corvallis)

11. GENERAL DESCRIPTION OF WORK

Revised Utility Costs

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* Revise Utility Costs.

13. REMARKS

As requested by Mr. Swan's letter of 7/29/82, I approve the revised utility costs for the adjustment to the City of Corvallis' water facilities relocation to a TEC of $6,028.79 - Federal funds $5,316.19.
(Increase TEC $2,558.79 - Federal funds $2,256.19.)

RECEIVED
STATE HWY ENGR
AUG 19 '82
REFER TO Moehring
FOR
Info | Inv | R/D | D R | Sign | Act | File

Orig
8 17 82

14. DATE 8-9-82
15. SIGNATURE OF APPROVING OFFICIAL G. K. Hossner
16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9367

2

NOTED
E. S. HUNTER

ROW 18-4

RECEIVED
TECHNICAL SERVICES
AUG 2 '82
REFER TO
FOR
Info	Inves	R/D	D/R	Sign	Act	File

July 29, 1982

TO: D. E. Wilken
Division Administrator
Federal Highway Administration

FROM: D. E. Swan
Program Control Engineer

SUBJECT: Cost Overrun
Water Facilities Relocation
City of Corvallis
N.W. Kings Blvd.-N.W. Highland Dr. (Corvallis) Sec.
FAU 2120 (Walnut Blvd.)
Benton County
Project No. M-2120(3)

Reference is made to my letter of August 4, 1981 requesting and your Letter of Authorization and/or Approval, dated September 2, 1981 granting approval of the City of Corvallis' relocation estimate in the amount of $3,470. Copies of the City's estimate, my letter of September 2, 1981 and your PR-1240 are attached.

The water facility relocation work has been completed and a final billing received from the City. The total cost billed for the anticipated work is $3,761.54. The cost billed for additional work that was not anticipated is $2,288.81. Total cost billed for the City's relocation work is $6,050.35. The final billing has been audited by our Accounting Section resulting in a net reduction of $21.56 for a final audited cost of $6,028.79. This is an overrun of $2,558.79 or 73.74%.

The cost of equipment rental and materials for the fire hydrant relocation work ran considerably more than estimated. The cost overrun was due to the relocation work being more estensive than anticipated which required more materials and additional equipment rental. A tabulation of costs as billed is attached for your information.

The final cost of the air release valve relocation work underran the estimated cost.

Additional unanticipated water facility relocation work was required to accommodate the street construction. A Final Report for Work Completed by Utilities prepared by Kenneth Karnosh, Project Manager, outlines the additional work, a copy of which is attached.

Your approval of federal participation in the final cost, $6,028.79, for the water facility relocation work is requested.

JMC/DES/llr
Attachments
cc: E. S. Hunter ✓
Jack M. Cartwright
Don Bedford
Pete Gonzalez

9367

Form E-[illegible]72 [illegible] 12-70)

OREGON STATE HIGHWAY DIVISION

Expected Overrun of Project Authorization

Project N.W. Kings Boulevard-Highland Drive Date July 9, 1982

Highway Walnut Boulevard(Corvallis) Contract No. 9367

County Benton Kind of Work G, P, Sig. Contractor Green & White Rock Produ

	Authorized	Estimated
Contract Amount	$ 641,450.20	650,000
Anticipated Items	14,350.00	18,000
Contingency (4½%)	29,511.01	120,000
Engineering	59,022.02	59,000
Credits	-	-
PROJECT COST	744,333.23	847,000

NET INCREASE $ 102,666.77 OR 13.8

MAJOR OVERRUNS AND UNDERRUNS (Describe Briefly)

(Indicate whether contract (C), anticipated (A), or unanticipated (U). (List all unanticipated items)	Expected Amount	Net Cha
Change traffic signals to mast arm installation	83,896	+ 31,430
* Left turn refuge/widening for CH2M-Hill acess	18,500	18,500
Install pipe underdrains	5,100	+ 5,100
Additional pipe extensions	4,900	+ 4,900
Revise vertical curve & surfacing at west end	33,000	+ 33,000
Illumination wiring	16,000	+ 16,000
		+ 108,930

102,700
~~18,500 NP~~
~~84,200 FA~~

* All of this item will be paid by CH2M-Hill through the City of Corvallis

APPROVED BY
OREGON TRANSPORTATION COMMISSION
DATE NOV 10 '82

Principal reasons for overruns (Continue on reverse side): Revising of traffic signals from span wire to mast arm installations, modification of an existing substandard vertical curve, and installation of wiring and conduit for future illumination.

INSTRUCTIONS: A report on this form is to be submitted if and when it becomes evident that the project cost will exceed the original project authorization by more than five per cent and again if and when it becomes evident that the project cost will exceed by more than five per cent a subsequently approved increased project authorization. Submit five copies to Salem. After having been noted by the Deputy or Assistant State Highway Engineer, one copy will be sent to the Regional Engineer and one copy to the Resident Engineer.

Submitted by Kenneth D. Karnosh
Kenneth D. Karnosh
Resident Engineer

Noted by D. B. Jackmond For
Construction ~~or [illegible]~~ Engineer

Confirmed by
Regional Engineer

Noted by
Deputy or State Highway Engineer

Form 734-3106

Job No. ....

Sheet .... of .... Sheets

OREGON STATE HIGHWAY DIVISION

Calculations for ....

Made by ...., 19....... Checked by ...., 19....... Backchecked by ...., 19.......

		FF. OBL.	SPENT		
WITHAM HILLDR - NW LANTANA DR					
CIRCLE BLVD.					
M-2110(1) PE	78.19%	114,528	*116,914		
M-2110(5) CONST.	88.18%	323,402✓	306,806	*300,737	82%
		437,930			
KINGS - HIGHLAND					
WALNUT					
M-2120(1) PE	78.19%	98,264	*103,757		
M-2120(2) R/W	88.18%	11,928	11,928✓	*11,092	82%
M-2120(3) CONST.	88.18%	646,492	669,525✓	*622,602	82%
		756,684			
9TH ST. - S.P.R.R.					
CIRCLE BLVD					
M-2110 (2)	78.19%	67,190	*67,190		
M-2110 (3)	88.15%	166,707✓	151,095	*155,076	82%
M-2110 (4)	88.15%	831,088✓	631,496	*773,105	82%
		1,064,985			
		2,259,599		TOT. - *2,046,716	

9367 (MEMORANDUM) 302-2508

FORM APPROVED BY
COMPTROLLER GENERAL,
U.S. MAY 12, 1966

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

VOUCHER FOR WORK PERFORMED UNDER PROVISIONS OF THE FEDERAL AID AND FEDERAL HIGHWAY ACTS, AS AMENDED

STATE VOUCHER NO.

FHWA VOUCHER NO.

APPROPRIATION 3-26-82

FHWA SCHEDULE NO.

THE UNITED STATES, DR., TO *(Insert official or depositary named in project agreement)*

Treasurer of the State of Oregon

ADDRESS

Capitol Bldg.
Salem, OR 97310

PAID BY

(For use of Paying Office)

STATE

Oregon

VOUCHER TYPE *(Check Appropriate Block)*

☐ CURRENT BILLING

☐ OTHER PROGRESS

☒ FINAL VOUCHER (*)

VOUCHER PERIOD

FROM 12/11/80

TO 1/31/82

FEDERAL AID PROJECT NO.

M-2120(2)

(*) Use Form FHWA-1447 for Final Voucher for a project constructed under certification acceptance or secondary road procedures (23 U.S.C. 117).

TOTAL ACTUAL COST	TOTAL PARTICIPATING COST	PRO-RATA OF PARTICIPATING COST CLAIMED FROM U.S.	TOTAL AMOUNT CLAIMED FROM U.S.	LESS PREVIOUS PAYMENTS	NET AMOUNT CLAIMED
$15,727.07	$13,527.07	88.18%	$11,928.17	$11,928.17	$ 0.00

RECEIVED DIVISION OFFICE		DIVISION OFFICE REVIEW MADE		PASSED FOR PAYMENT	
BY	DATE	BY	DATE	BY	DATE

REMARKS

Oregon 3/26/82 V.L. Skoog, Controller

R/W N.W. Kings - Highland Dr.
CORVALLIS

$ 0.00

FORM PR-20A
(Rev. 5-78)

PREVIOUS EDITIONS ARE OBSOLETE

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (Payee must not use this column)
	N.W. Kings Blvd.-Highland Dr. (Corvallis) Benton County					
	Type Code R.O.W.					
	Right of Way (Sta. 32+00 To Sta. 80+00)					
	Right of Way	All	Required		$10,800.00	
	Total R.O.W. Costs				$10,800.00	
	Acquisition Expense					
	State	All	Required		2,727.07	
	Total Participating Costs				$13,527.07	
	Nonparticipating Costs					
	Right of Way	All	Required		$ 2,200.00	
	Total Cost				$15,727.07	

Participating costs are for right of way actually incorporated into the final project and all costs have been previously certified by the Right of Way Engineer.

Right of way plans were approved by FHWA 3/17/81.

No. revisions were necessary

Prepared based on Participating costs as shown on Federal Billing as of 3/25/82.

AMOUNT CARRIED FORWARD . . . . .

```
                                                                        FEBRUARY 1982       PAGE  820
TOTAL TO DATE JOB COST SUMMARY
                                                                            FISCAL          GRAND TOTAL
DESCRIPTION OF JOB OR DEPARTMENT     PREFIX      FUNCTION  GR  CURRENT MONTH   YEAR TO DATE      TO DATE
                                                                               148,917.16       152,774.30
                                                 TOT     P1          651.05    134,517.71       134,517.71
                                                 TOT     N1                    283,434.87  **   287,292.01  **
                                               ** JOB TOTALS **      651.05  **

                                                                                                          STATE
                                             FA PROJ NOS M   120002 100        10,320.97CR      11,924.11CR
NW KING BLVD-HIGHLD DR(CURV)  CONT NO
                                  302   2508   296     00 N 9  Tr. St.         10,320.97        11,924.11
                                  302   2508   298     00 N 9  " Fed           10,800.00        10,800.00
                                  302   2508   401     00 P 1  Net Cost of Land  2,200.00        2,200.00
                                  302   2508   405     00 N 1  severance & Consequential Dam   36.75    1 640.32
                                  302   2508   407     00 P 1  Appraisal, witness Fees etc  163.62   215.55
                                  302   2508   412     00 P 1  Title Costs & Recording Fees  151.51   164.93
                                  302   2508   414     00 P 1  Negotiation Exp.                       339.35
                                  302   2508   430     00 P 1  Appraisal Review                        15.23
                                  302   2508   920     00 P 1  Progr Sec.             184.79         351.69
                                  302   2508   930     00 P 1  R/W office Exp.     11,336.67      13,527.07
                                               TOT     P1                       2,200.00        2,200.00
                                               TC      N1                 **   13,536.67  **   15,727.07  **
                                            **  OB TOTALS **

                                                                                                          STATE
                          CONT NO            FA PROJ NOS X1  665008 100         2,750.00         2,750.00
OATFIELD RD-LAKE RD                303   2528   295     00 N 9    174.34CR     20,907.97CR      27,671.72CR
                                   303   2528   296     00 N 9    174.34       18,157.97        24,921.72
                                   303   2528   298     00 N 9                  9,100.00         9,100.00
                                   303   2528   401     00 P 1                  5,200.00         5,200.00
                                   303   2528   403     00 P 1                  4,000.00         4,000.00
                                   303   2528   405     00 P 1     38.62        1,192.68         6,714.24
                                   303   2528   407     00 P 1                    100.00           100.00
                                   303   2528   409     00 P 1                    189.15           316.68
                                   303   2528   412     00 P 1    348.54          543.88         1,974.87
                                   303   2528   414     00 P 1                                       1.67
                                   303   2528   415     00 P 1                    530.80           577.10
                                   303   2528   426     00 P 1                     91.68            91.68
                                   303   2528   426     00 N 1     62.05          335.42           907.57
                                   303   2528   430     00 P 1                     34.48            79.88
                                   303   2528   920     00 P 1                    421.59           793.57
                                   303   2528   930     00 P 1    449.21       21,648.00        29,765.58
                                                TOT     P1                         91.68            91.68
                                                TOT     N1        449.21  **   21,739.68  **    29,857.26  **
                                             ** JOB TOTALS **

                                                                                                          STATE
                                           * FA PROJ NOS X10 714005 100         7,000.00         7,000.00
CLACK HWY-SE 32ND AV (:.LWK)  CONT NO
                                   303   2531   295     00 N 9  2,023.69CR     23,805.00CR      25,060.03CR
                                   303   2531   296     00 N 9  2,023.69       16,805.00        18,060.03
                                   303   2531   298     00 N 9  6,380.00CR      3,224.00         3,224.00
                                   303   2531   401     00 P 1  2,170.00CR        526.00           526.00
                                   303   2531   403     00 P 1
```

B01

OREGON STATE HIGHWAY DEPARTMENT
FHWA BILLING VOUCHER

04/01/82

PREFIX	GRP	FL	FED AID PROJ APPR	AGREEMENT AMOUNT	TOTAL COSTS TO DATE	PARTIC. AMOUNT	% OF PARTIC	FEDERAL SHARE	AMOUNT PREV CLAIMED	ADJUSTMENT AND CODE	AMOUNT OF THIS VOUCHER
302-2507	1	M	-2110-003 APPR-W32	124,378.00	286,658.82	152,141.11	88.15	134,112.39	124,378.00	9,734.39 B	
302-2508	1*	M	-2120-002 APPR-W32	11,928.17	15,727.07	13,527.07	88.18	11,928.17	11,928.17		
303-2528	1	XI	-9665-008 APPR-823	24,918.91	29,864.01	29,772.33	85.00	25,306.48	24,918.91	387.57 B	
303-2531	1	X10	-9714-005 APPR-772	43,350.00	9,856.51	9,838.06	85.00	8,362.35	7,410.11		952.24
303-2532	1	X10	-9665-009 APPR-772	34,000.00	42,858.29	42,858.29	85.00	36,429.55	34,000.00	2,429.55 B	
303-2534	1	X10	-9659-009 APPR-772	7,990.00	21,849.55	21,849.55	85.00	18,572.12	7,990.00	10,582.12 B	
	2	XI	-9659-009 APPR-823	12,155.00			85.00				
[illegible] 2534	PREFIX TOTALS			20,145.00	21,849.55	21,849.55		18,572.12	7,990.00	10,582.12	
3[illegible]-2537	1	X10	-9473-003 APPR-772		3,272.30	3,272.30	85.00	2,781.46		2,781.46 A	
306-2513	1	M	-2691-002 APPR-W32	84,998.00	97,955.00	91,814.49	85.77	78,749.29	78,749.29		
309-2507	1	M	-3225-003 APPR-W32		56,770.30	56,770.30	88.18	50,060.05		50,060.05 A	
315-2519	1	M	-3920-002 APPR-W32	11,154.00	13,680.37	13,637.09	85.80	11,700.62	11,154.00	546.62 B	
315-2523	1	M	-3920-004 APPR-W32	142,800.00	146,996.39	146,306.55	88.15	128,969.22	128,526.93		442.29
315-2524	1	RS	-A368-002 APPR-075	39,660.00	36,248.49	36,248.49	88.15	31,953.04	31,953.04		
315-2525	1	M	-2421-002 APPR-W32	134,032.00	12,042.62	12,042.62	88.18	10,619.18	9,873.44		745.74
317-2516	1	M	-3650-002 APPR-W32	79,362.00	82,626.82	82,478.93	88.18	72,729.92	72,572.85		157.07
320-2528	1	M	-1140-002 APPR-W32	88,180.00	60,170.92	60,233.52	88.18	53,113.92	52,628.78		485.14
322-2513	1	M	-2955-002 APPR-W32	13,496.00	26,308.57	26,278.57	81.80	21,495.87	13,496.00	7,999.87 B	
324-2521	1	M	-5262-002 APPR-W32	10,578.00	8,047.70	8,047.70	85.77	6,902.51	6,902.51		
3[illegible]2529	1	X10	-1525-002 APPR-772	1192,125.00	48,566.85	48,596.85	85.00	41,307.32	39,306.91		2,000.41
324-2531	1	M	-1635-003 APPR-W32		114.80	114.80	88.15	101.20		101.20 A	
326-2554	1	M	-9793-002 APPR-W36	407,406.00	422,994.37	422,441.77	85.77	362,328.31	350,552.00		11,776.31
326-2556	1	XI	-9699-002 APPR-823	34,787.98	49,035.01	49,035.01	85.00	41,679.76	34,787.98	6.891.78 B	
326-2557	1	XI	-9699-001 APPR-823	40.82	47.58	47.58	85.80	40.82	40 82		
326-2558	1	XI	-9823-001 APPR-823	55,250.00	65,771.76	65,77..76	85.00	55,906.00	55,250.00	656.00 B	
326-2559	1*	M	-9822-004 APPR-W36	9,200.52	10,433.84	10,433.84	88.18	9,200.56	9,200.52	.04 B	

9367

302-1003

STATE OF OREGON **INTEROFFICE MEMO**

DEPT. TELEPHONE

TO: G W Wimer
Region 2 Const. Engr., Salem

DATE: March 1, 1982

Kenneth D Karnosh

FROM: Kenneth D Karnosh
Project Mgr., Albany

REGION 2 ENGINEER
RECEIVED
MAR 2 1982
RBE ☐ [✓ RE] [✓ RME] [✓ RMS] RTE ☐ ROE ☐ ULE ☐ GEO ☐ PSO ☐ ENV ☐ [✓ RFE]

SUBJECT: Kings Boulevard-Highland Drive
Walnut Boulevard(Corvallis)
Benton Co. Contract 9367
Price Agreement 2

DESCRIPTION: CH2M-Hill is developing an office complex in the southwest quadrant of the Walnut-Kings Intersection. The City of Corvallis has requested that the two accesses to the complex and the left turn refuge on Walnut Boulevard be constructed as part of this contract and the cost of the extra work will be paid by CH2M-Hill through the City of Corvallis. Price Agreement 2 provides for the addition to the project.

JUSTIFICATION: This extra work is required by the City of Corvallis before the adjacent development can be done. Including it in this project will produce a uniform result. All unit prices are bid prices except the item for constructing approaches, which price is justified on the attached sheet.

EFFECT ON PROJECT: This work will be performed in conjunction with similar work on the project and will have a negligible effect on project completion time.

PRIOR APPROVAL: Gordon Wyatt-City of Corvallis requested that this additional work be included on this project. This proposed agreement has not yet received OSHD or FHWA approval.

DISPOSITION: Submitted for approval and forwarding. This agreement should be classed as non-participating since the additional costs will be paid by CH2M-Hill through the City of Corvallis.

cc: C. T. [illegible] order and [illegible] above.

This order non-participating. City to pay State for 100 percent of these costs and collect these costs from CH2M-Hill based on quantities given them directly by Ken Karnosh

G Wimer

cc DE Swan w/attach - Info

81-125-1387

OREGON DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

WORK OR CHANGE ORDER SUPPORTING DATA

PROJECT NAME (SECTION) Kings Boulevard-Highland Drive		CONTRACT NO. 9367
HIGHWAY Walnut Blvd(Corvallis)	COUNTY Benton	PREFIX 302-1003
SUBMITTED BY (RESIDENT) Ken Karnosh	DATE 3/1/82 FOR ☐ REVIEW ☒ APPROVAL	F.A. PROJECT NO. M-2120(3)
SUBMITTED BY (REGION) Wimer	DATE 3-3-82 FOR ☐ REVIEW ☒ APPROVAL	TO ACCOMPANY (ORDER TYPE AND NUMBER) P A 2

WORK OR CHANGE HAS BEEN DISCUSSED WITH—

Gordon Wyatt (City of Corvallis) BY Ken Karnosh ON

G W Wimer BY Ken Karnosh ON

BY ON

BY ON

WORK OR CHANGE HAS BEEN DISCUSSED AND APPROVAL TO PROCEED OBTAINED FROM—

BY ON

BY ON

BY ON

FEDERAL HIGHWAY TENTATIVE APPROVAL OBTAINED FROM— SUBSTANTIAL CHANGE— ☐ YES; ☐ NO

BY ON

COST ESTIMATE, FORM 734-1877 IS ATTACHED— ☐ YES; ☒ NO; ☐ NOT APPROPRIATE

COSTS HAVE BEEN DISCUSSED WITH (Construction Cost Unit or Technical Services Section)—

Justification of cost of commercial approach attached. Other items are extensions of the unit bid prices.

BY ON

ORAL APPROVAL OF COSTS OBTAINED FROM (Construction Cost Unit or Technical Services Section)—

BY ON

NET EFFECT OF ORDER ON PROJECT	PROJECT AUTHORIZATION	ESTIMATE PROJECT COST WITH ORDER	OVERRUN
INCREASE ~~DECREASE~~ $ 16,621	$ 744,333	$ 762,873	2.5 %

ADDITIONAL INFORMATION THAT IS NOT INCLUDED ON ORDER (Additional Description; Who Requested; Why Necessary; Why Cost is not a Contractor Responsibility; Parties other than State or FHWA that will Share the Cost; Estimated Starting Date or Date Work Started; Emergency Work Prior to Approval; Estimated Effect on Project Time; Significant Discussions; References to Supporting and/or Attached Documents)—

CH2M-Hill is developing an office complex in the southwest quadrant of the Walnut-Kings Intersection. The City of Corvallis has requested that the two accesses to the complex and the left turn refuge on Walnut Boulevard be constructed as part of this contract. The cost of the extra work will be paid by CH2M-Hill through the City of Corvallis, so all costs on this agreement should be classed as non-participating. Inclusion of this work on this contract will have a negligible effect on the project completion date.

☐ CONTINUED ON ADDITIONAL SHEET(S)

734-1882 (11-81)

Submit Original to Construction Branch

9-N

Price Agreement

APPLYING TO EXTRA WORK AND EXTRA MATERIAL

OREGON STATE HIGHWAY DIVISION

Project Name Kings Boulevard-Highland Drive
Date Feb 22, 1982

Highway Walnut Boulevard(Corvallis)
Contract No. 9367

County Benton
Prefix 302-1003

Contractor Green & White Rock Products, Inc.
F. A. Project No. M-2120(3)

Address P O Box 886, Corvallis, Oregon, 97339
Price Agreement No. 2

For the below described extra work or extra material to be performed or furnished under the contract above referred to, the contractor agrees to accept payment at the prices given herein, understanding that, except as herein otherwise provided, the work is to be performed and the material is to be furnished in accordance with the specifications which form a part of the contract and in accordance with the instructions of the engineer.

Work to be done: Const. 36' wide approaches at sta. 39+10 Rt. and K6+23 Lt. Extend 80' typical section from sta 39+60 to 34+50 (taper section to sta 32+50). Const. manhole in existing storm sewer and 50' of 12" pipe at K 6+23. Delete sidewalk const. Rt side from start of project to sta 39+10. This work is for the left turn refuge and accesses needed to serve the proposed CH2M-Hill development.

Locations by station numbers:

K 5+84.7 to K 6+61
32+50 to 39+60

Names of pay items, estimated quantities and agreed prices:

Items listed on back of sheet

Total Cost = $ 16,621.47

Specifications, basis of measurement and other provisions:
Materials and workmanship shall conform to contract specifications. Item 30211 will be constructed in accordance with the plan shown on sheet 2D of the project plans with a curb radius of 20 feet and a width of 36 feet.

INSTRUCTIONS

After the signature of the contractor has been obtained, submit six copies (including original copy) to the Salem Office. After approval by the Assistant State Highway Engineer, approved copies will be sent to the Contractor, the Regional Engineer, and the Resident Engineer.

This order does not constitute authority for expenditure until approved by the Assistant State Highway Engineer or State Highway Engineer.

Project authorization $ 744,333
Present estimate of project cost, including $ 16,621 for work under this order $ 762,873
Expected XXXXXXXX over-run (amount) $ 18,540
Expected XXXXXXXX over-run (per cent) + 2.5

Space to right of this line is for use of Salem Office

Submitted by: Kenneth D. Karnosh
Kenneth D Karnosh
Resident Engineer

Approval Recommended:
Division Engineer

Approval Recommended:
Construction Engineer or Bridge Engineer

Signed Green & White Rock Products Inc.
Contractor

Approved:
Deputy State Highway Engineer, Assistant State Highway Engineer or Office Engineer

Approval Recommended
for 100% City Cost.
Principal Engr City of Corvallis

SP*70858-734
Form 734-1169 (Rev. 3-79)

Summary of pay items, estimated quantities, and prices:

30201:	B.I. 11	Aggregate Base	234 tons @ $5.00 per ton	=	$ 1,170.00
30202:	B.I. 13	12" Sewer Pipe	50 feet @ 12.50 per foot		625.00
30203:	B.I. 15	Concrete Manholes	1 only @ 1,200.00 each		1,200.00
30204:	B.I. 20	Concrete Walks	-370 sq yd @ 5.50 per sq yd		-(2,035.00)
30205:	B.I. 33	General Excavation	741.8 cu yds @ 2.70 per cu yd		2,002.86
30206:	B.I. 34	Trench Escavation	28 cu yds @ 5.00 per cu yd		140.00
30207:	B.I. 36	Lime Treated Subgrade	592.7 sq yds @ 0.90 per sq yd		533.43
30208:	B.I. 37	Lime for Treated Subgrade	6.67 tons @ 85.00 ton		566.95
30209:	B.I. 38	Asphalt Concrete	142.7 tons @ 30.75 per ton		4,388.03
30210:	B.I. 39	Plain Concrete Pavement	521.2 sq yds @ 8.50 per sq yd		4,430.20
30211:	XXXX	Commercial Approaches	2 only @ 1,800.00 per each		3,600.00
			TOTAL		$ 16,621.47

These items seperated from bid items because of different funding

FORM NO. E-106X (4-63)

OREGON STATE HIGHWAY DEPARTMENT

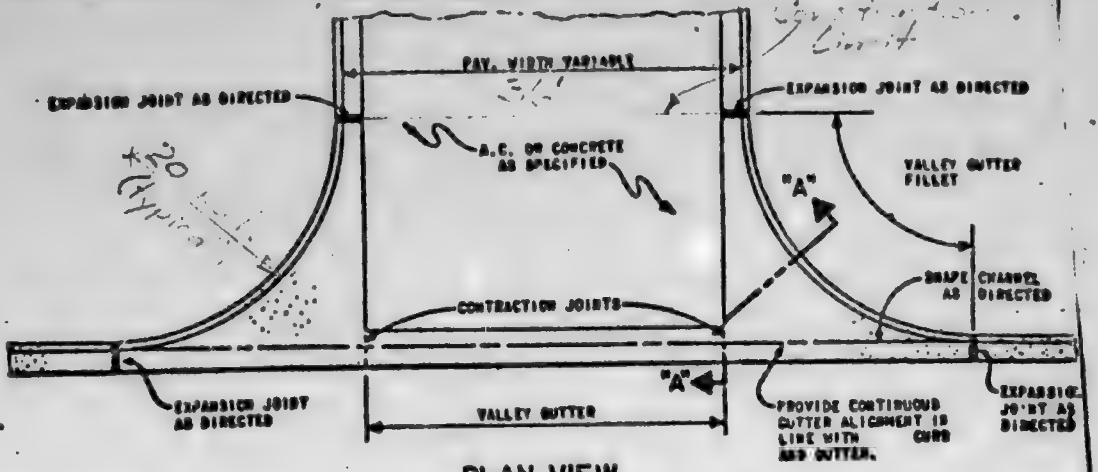
~~FINAL~~ QUANTITY CALCULATIONS

CONTRACT NO. 9367
SHEET 1 OF 1 SHEETS

NAME OF JOB Kings Blvd. Highland Dr.
BRIDGE NO.

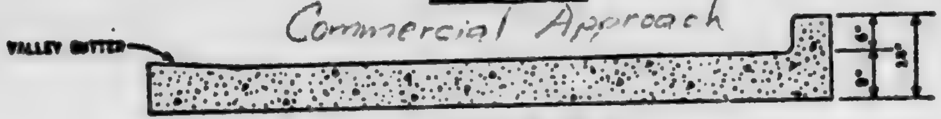
MADE BY Ken Kamrath 2-22 19 82 CHECKED BY ______ 19__ BACKCHECKED BY ______ 19__

CONTRACT ITEM NO.	REFER DWG. NOS: Sheet 2-Dwg Plans FIELD BOOK NO. ______ PAGE ______	TOTALS


PAV. WIDTH VARIABLE
36'
Construction Limit
EXPANSION JOINT AS DIRECTED
EXPANSION JOINT AS DIRECTED
+20' (typical)
A.C. OR CONCRETE AS SPECIFIED
"A"
VALLEY GUTTER FILLET
SHAPE CHANNEL AS DIRECTED
CONTRACTION JOINTS
"A"
EXPANSION JOINT AS DIRECTED
VALLEY GUTTER
PROVIDE CONTINUOUS GUTTER ALIGNMENT IN LINE WITH CURB AND GUTTER.
EXPANSION JOINT AS DIRECTED

PLAN VIEW

Commercial Approach


VALLEY GUTTER
6"
6"
12"

SECTION "A-A"

VALLEY GUTTER ACROSS INTERSECTION

[Justify contractor's quoted price of $\$1{,}800^{00}$ per unit to construct one of the units detailed above. Contractor's price does not include [illegible] or sidewalks.]

Approximate construction area = 140 sq.yd. ≈ $\$12^{80}$/sq.yd.

On this contract, the unit bid price for 4" concrete walks is $\$5^{50}$/sq.yd. (On two other contracts in Corvallis, bid prices for concrete walks are $\$11^{00}$ and $\$12^{30}$/sq.yd.)

Assuming concrete cost is $\$40^{00}$/cu.yd., cost of concrete alone for an 8" slab is approximately \$9/sq.yd., with 15% markup = $\$10^{35}$/sq.yd.

This leaves $\$12^{80} - 10^{35} = \$2^{45}$/sq.yd. or \$340± /approach for labor, profit, and overhead. With about 10 man-hours required for forming and 16 for placing, finishing, & cleanup, I have no problem justifying \$1,800/unit, especially considering prices on other projects for sidewalk construction.

I recommend approval. Kenneth D. Kamrath

SHEET TOTAL

9367

CORVALLIS FINANCE DEPARTMENT
180 NW 5th STREET
P.O.BOX 1083
CORVALLIS, OR 97330

FINANCE DEPARTMENT

(503) 757-6945

October 7, 1981

Mr. D.E. Swan
Operation Programming Engineer
Highway Division
Transportation Building
Salem, OR 97310

Dear Mr. Swan:

The City of Corvallis has established a local government pool account with the State Treasurer in the amount of $67,000. The pool account number is 4766 and the account description is "Walnut Boulevard - Kings to Highland." Attached is a copy of the limited power-of-attorney that was forwarded to the State Treasurer's office. As I understand the process, this should complete our portion of the financial requirements.

If you have any questions or require additional information, please contact me at 757-6993.

Sincerely,

Greg Scott
Assistant Finance Director

cc: Ken Thompson
Gordon Wyatt

[illegible]MITED POWER OF ATTORNEY
LOCAL GOVERNMENT INVESTMENT POOL

The City of Corvallis hereby appoints the
Local Government Unit

Investment Manager of the Oregon State Excess Fund, as attorney in fact for it and said officer shall have the power of attorney to negotiate warrants made payable to the Oregon State Department of Transportation, Highway Division and delivered to said officer by either H. S. Coulter, State Highway Engineer; Vernon E. Skoog, Highway Division Controller; Frank R. Griffin, Highway Division Assistant Controller; or Richard Hacek, Highway Division Assistant Controller for the State of Oregon, for the purpose of depositing the proceeds of such warrents to the account of the Oregon State Department of Transportation, Highway Division, with the Oregon State Treasurer.

The City of Corvallis has deposited with
Local Government Unit

the State of Oregon Investment Pool the sum of $ 67,000. The purpose of this deposit is to create a fund from which to pay its share of the cost of certain improvements to be made in connection with Walnut Boulevard, Kings to
Project Name

Highland

By this document it authorizes the Highway Division of the State of Oregon, Department of Transportation to draw on the account created by this instrument for the purposes above stated with the State Excess Fund. The authorized signatures of withdrawal will be one of any of the following: H. S. Coulter, Vernon E. Skoog, Frank R. Griffin, or Richard J. Hacek. The signature of either upon a voucher in a form acceptable to the custodians of the State Investment Pool shall constitute proper authority for the withdrawal of money up to the total amount of the deposit identified above.

The authorized signatures of the above individuals shall be furnished by the Highway Division of the Department of Transportation to the State Treasury Department.

This power of attorney was authorized by City of Corvallis Council
Local Government Unit

this 5th day of October, 1981 by a vote of the majority of a quorum of its governing body.

City Manager

Form No. 734-1812(2-8

9367

September 25, 1981

ACC

Mr. A. Gordon Wyatt
Principal Engineer
City Hall
Corvallis, Oregon 97330

Dear Gordon:

On September 24, 1981 the Highway Division received a satisfactory bid from Green and White Rock Products, Inc., Corvallis, Oregon 97330 for the N.W. Kings Blvd.-Highland Drive Section of Walnut Blvd.

We anticipate the construction cost to be:

Contractor's Bid (Alternate "B")		$641,450.20
Anticipated Additional Items:		
Permanent Striping	$4,500	
Signal Controller Testing	1,400	
"OPTICON" Testing	950	
Bikeway Signs	1,500	
City of Corvallis (Water)	4,000	
Consumers Power, Inc.	2,000	$ 14,350.00
SUBTOTAL		$655,800.20
Contingencies (4 1/2%)		29,511.01
Engineering (9%)		59,022.02
TOTAL CONSTRUCTION COST		$744,333.23

City Share: 9% of $744,333.23 = $66,989.99

ADVANCE DEPOSIT = $67,000.00

We will award the contract when we receive your advance deposit, which should arrive no later than October 16, 1981.

The attached sheet describes the options for making your advance deposit. Please select an option and submit your deposit as described in the instructions.

$67000
Rec'd LGIP
10-8-81
KEH

Very truly yours,

ORIGINAL SIGNED BY
D. E. SWAN

D. E. Swan
Operation Programming Engineer

CKK:pf
Attachment
bcc w/AD # 957: Phil Stearns, Region 2 Federal Aid Engineer
Vern Skoog - Please return completed AD # 957 when advance deposit is received.

9367

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

9-2-81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. M-2120(3)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Benton

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 10077

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 9/2/81

8. FEDERAL ROUTE NUMBER FAU 2120

9. STATE ROUTE NUMBER City Street

10. GENERAL LOCATION:
NW Kings Blvd. - Highland Drive (Corvallis) Section

11. GENERAL DESCRIPTION OF WORK
Utility Adjustment

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* Utility Adjustment

13. REMARKS

As requested in Mr. Swan's letter of 8/4/81 you are now authorized to proceed with the actual adjustments of the City of Corvallis Water facilities. Reimbursement on an actual cost basis estimated to be $3,470 Federal Funds $3,060 is approved.

I approve the Agreement with the City of Corvallis.

Approval and participation for the eligible portion of the work authorized above is subject to the provisions of the Federal aid Manual.

(Funding from 20% limitation)

orig. w/att
9-3-81

RECEIVED
STATE HWY ENGR
SEP 3'81
REFER TO Moehring
FOR
Info | Inv | Act

14. DATE 9/2/81

15. SIGNATURE OF APPROVING OFFICIAL

16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9367

L

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

9-2-81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. M-2120(3)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Benton

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 10077

6. TO

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 9/2/81

8. FEDERAL ROUTE NUMBER FAU 2120

9. STATE ROUTE NUMBER City Street

10. GENERAL LOCATION:

NW Kings Blvd. - Highland Drive (Corvallis) Section

11. GENERAL DESCRIPTION OF WORK

Grade, drain, high type pavement

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

- ☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
- ☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
- ☐ ACQUISITION OF RIGHT-OF-WAY
- ☒ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
- ☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
- ☒ OTHER *(Specify)* Permanent Pavement Striping S.F. $4,500
  Temporary Erosion Control $200

13. REMARKS

After concurrence in award you are authorized to proceed with those items listed above as shown in your Estimate.

Mr. Swan's August 31, 1981 request and certifying statements are accepted.

PS&E documents for the subject project have been reviewed and are approved at a total estimated cost of $810,634 Federal Funds $714,817.

A signed copy of the Title Sheet is returned herewith.

(This is a 20% limitation project)

Orig filed 9-3-81

RECEIVED
STATE HWY ENGR
SEP 3'81
REFER TO
Moehring
FOR
Info | Inves | R&E | | Sign | Act | File

14. DATE 9/2/81

15. SIGNATURE OF APPROVING OFFICIAL G. K. Hessner

16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9367

L

ROW 18-4

August 4, 1981

TO: D. E. Wilken, Division Administrator
Federal Highway Administration

FROM: D. E. Swan D E Swan
Operations Programming Engineer

NOTED
E. S. HUNTER

SUBJECT: Water Facilities Relocation
City of Corvallis
NW Kings Blvd.-NW Highland Dr. (Corvallis) Section
FAU-2120 (Walnut Blvd.)
Benton County
Project No. M-2120(3)

Here is a copy of an estimate of cost to adjust the City of Corvallis' water facilities dated July 17, 1981 and a sketch showing their proposed relocation.

A certification prepared by Don Bedford as to the City's rights in the land occupied by their facilities is in our files.

The City is responsible for the relocation of utility conflicts on this project, therefore, a conflict letter was not required.

An appropriate permit for the utility's proposed relocation will not be issued as these are City-owned facilities on City street right of way.

The State is not entitled to a credit for expired service life under the provisions of Paragraph 9b (1) (b) of PPM 30-4, as the relocation involves crossings of the project by the facilities.

There will be no betterment derived from the proposed adjustment of the City's facilities.

Your approval of the actual cost agreement, as evidenced above, and confirmation of your advanced authorization to proceed with the work as of August 4, 1981 under the provisions of PPM 30-4 and 30-4.1 is requested. Estimated cost to the State is $3,470.

DES/JMC/vlw
Enc.
cc: E. S. Hunter
Jack M. Cartwright
Don Bedford

RECEIVED
TECHNICAL SERVICES
AUG 5 '81
REFER TO
FOR
File
Act
Sign
D/R
R/D
Invest
Info

9367

OREGON STATE HIGHWAY DIVISION
120 DOT Building
Salem, Oregon 97310

Highway # 702

7-31-81

Attention: Right-of-Way Section

Subject: Federal Aid Project No. M-2120 (1) Prefix 302-1939

Project Name N.W. Kings Blvd. - N.W. Highland Dr. (Corvallis) Walnut Blvd.

Regarding the above referred to federal aid project, we hereby certify that to the best of our knowledge and belief:

A. Existing Right-of-Way

☐ 1. All construction can be accomplished completely within the existing right-of-way. This existing right-of-way was acquired prior to January 2, 1971.

B. New Right-of-Way

☒ 1. This project required additional right-of-way purchased after January 2, 1971. Right-of-way, easements, or rights-of-entry required for this project have been secured in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, and all incidental charges related to the transfer of property will be paid by the city in accordance with said Act.

☒ a. There has been no displacement of persons from residences, farms or businesses.

OR

☐ b. There has been displacement of persons from either residences, farms or businesses and in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, displaced persons, businesses, or farm operations have been provided relocation payments, if eligible, and relocation assistance. Displaced individuals or families have been relocated to decent, safe and sanitary housing or have been offered decent, safe, sanitary and fair housing immediately available on the open market.

C. Utilities

☒ 1. The occupancy and/or adjustment of existing utilities within the right-of-way of the above referred to federal aid project have been authorized by permit, franchise, or other approved procedure.

Signed at Corvallis, Oregon, this 31st day of July, 1981

City of Corvallis

~~Mayor~~ City Manager

Kenneth M Thompson
City Recorder

Certified By:
Virgil A Wilson
Regional Right-of-Way Supervisor
Date 8/4/81

Instructions: Complete A or B and C.
R/W File No.

9367 Benton Co.

ENVIRONMENTAL REVIEW CHECKLIST

ALL CLEAR 7/28/81

1 ~~Sim~~

Sept. 3, 1981 Bid Letting ________ All Clear Deadline

SECTION NW Kings Blvd-NW Highland Dr (Corvallis)
Highway FAU 2120, Walnut Blvd.
County Benton Region II
Type of Work G-P-Sig. Funds FAUS
State___ Consultant ___ Plans Avail.___Yes ___No

Const Noise ✓

	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR
DOCUMENTS:					
EIS		☒			☒
Negative Declaration	☒				
Project Assessment	☒				
Write-off Letter	☒				
PERMITS:					
Division of State Lands	☒				
D.O.G.M.I.	☒				
Corps of Engineers	☒				
Coast Guard	☒				
Co. Conditional Use	☒				
NPS Air Pollution	☒				
NPS Water Pollution	☒				
CULTURAL:					
Cultural Survey		☒			☒
Cultural Salvage	☒				
NOISE:					
Noise Study		☒			☒

9367

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:

July 16, 1981

TO: Dale E. Wilken
Division Administrator
Federal Highway Administration

Original Signed By
D. E. Swan

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 10077
Project No. M-2120 (3)
N.W. Kings Blvd. - Highland Dr. (Corvallis) Section
Benton County

Attached data consists of PR-1 forms with project maps for the subject project.

This project is expected to be funded from the 20% of the FY'81 limitation withheld from distribution until after August 1, 1981.

A copy of the State Clearinghouse A-95 review conclusions was forwarded previously.

DRH/lms
Attachments

cc: C.O. Fredrickson (Region 2)
Gary Zehner w/att.
General Files

6

Form 734-3122

Budget Bureau No. 41-R20

MONTHLY TRANSACTION NO.

DATE SUBMITTED TO W.O.

FORM PR-1 (REV. 4-61)

7-16-81

FEDERAL-AID PROGRAM DATA
(PPM 21-1)

CARD 2	REPORT NUMBER (18) (20)	PROJECT LOCATION (45 typewriter spaces) 21 65 City St., Walnut Blvd. (Corvallis)	**ADT**	PRESENT see M-2120(1)	FUTURE (66) (70) - - -	YEAR (71) (72) - -	REGION 10	STATE NAME Oregon

CARD 3	CHARACTER OF PROPOSED WORK (35 typewriter spaces) 28 62 Gr., Dr., & H-T Pave.	NATL. FOREST (63) (65)	FH ROUTE NO. (66) (68)	SUPV AGCY (69)	DA CLASSIF. (70)	DA AREA (71)	EMERG. YR. (72) (73)	PL. AUTH YR (74) (75)	PROJECT NUMBER PREFIX LETTER(S) 14 23 M-	NUMBER 7 2120

CARD 4	CLASS OF FEDERAL FUNDS Urban System			COUNTY NAME Benton			
	NAME OF URBAN AREA 17-31 Corvallis	ROUTE NO. U	FEDERAL-AID 2120	(32)	STATE City St.	(36) (37)	U.S. -

ESTIMATED PROJECT COST BY PHASES

CARD 5	LINE NO.	CHANGE CODE	PROJECT CODE	CLASS	WORK TYPE	WORK STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS 88.18%	STATE FUNDS	OTHER FUNDS
1	(14-15)	(16	41	42	43 46	53		(54) (58)	(59) (66)	(67) (76)		
5					**PE**							
5					**ROW**							
5					**CONST** (CODE) 6204/7205		"N.W. Kings Blvd. - Highland Dr. (Corvallis) Sec."	0.896	858,500	757,000	50,750	50,750

CARD 1	CODE 1	PREPARED BY DRH	PROJECT TOTALS	0.896	858,500	757,000	50,750	50,750
1	14	PROGRAM APPROVAL DATES 2-26-76 10-1-80			(16) (23)	(24) (33)	REMARKS Additional Data: Item No. M Respe	

Budget Bureau No. 41-R2067; Approval Expires February 28, 1966

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

FORM PR-1
(REV. 4-61)

7-16-81

FEDERAL-AID PROGRAM DATA

(PPM 21-1)

OCATION (45 typewriter spaces) t., Walnut Blvd. (Corvallis)	ADT	PRESENT see M-2120(1)	FUTURE - - -	YEAR - -	REGION 10	STATE NAME Oregon	STATE CODE 41

APPN CODE W32 | ITEM NO. 10077

(35 typewriter ve.	NATL. FOREST	FH ROUTE NO.	SUPV AGCY	DA CLASSIF.	DA AREA	EMERG. YR.	PL. AUTH YR	

PROJECT NUMBER: PREFIX LETTER(S) M- | NUMBER · 2120 | SEQ. NO. (3) | I. Projects Only: POST MI. | DESIG.

Urban System

Corvallis

COUNTY NAME Benton | CODE 003

PROGRAM STAGE ☐ 1 OR ☐ 2

ROUTE NO. U | FEDERAL-AID 2120 | STATE City St. | U.S. - -

ESTIMATED PROJECT COST BY PHASES

E	STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS 88.18%	STATE FUNDS	OTHER FUNDS	CHARACTER OF PROPOSED WORK (Full description)
V								
ST 205		"N.W. Kings Blvd. - Highland Dr. (Corvallis) Sec."	0.896	858,500	757,000	50,750	50,750	ROW-80 normal; Access Control-part.; Parking Restrictions-Complete.
	DRH	PROJECT TOTALS	0.896	858,500	757,000	50,750	50,750	

L DATES

2-26-76
10-1-80

REMARKS

Additional Data: Item No. M-65 & 10077 Project No. M-2120 (1) & (2) Respectively.

-over-

USCOMM DUSCOMM-DC 48905-P61

N.W KINGS BLVD. - HIGHLAND DR. (CORVALLIS) SEC.
PROJECT NO. M-2120 (3)

Remarks: Continued

Project Data: Work under this project consists of grade, drain and H-T pave. to provide for a basic curbed section having 4-11 foot travel lanes, variable median of 2 foot to 12 foot, 5 foot bike lanes and sidewalks as specified. Utility adjustments as required and incidental work common to this type of project.

NOTE: 1) This project is in Congressional District No. 1.
2) Included in FY'81 SOCL dated 9-80 on page 15 and on page 76 of the 6 yr. HIP.

9367

Section N.W. Kings Blvd.-Highl[illegible] Dr. (Corvallis) Programmin[illegible]stimate $ $ 858,000

Highway FAU 2120 (Walnut Blvd) Project Length 0.90 mile

County Benton 7-16-81 Completion Time 350 calendar days

Kind of Work Grading, Paving and Signals Est. Comp. Date 9-19-82

Prefix 302-1939 Letting Date September 3, 1981 Project No. M-2120(3)

ESTIMATED CONSTRUCTION AUTHORIZATION

		Alt. "A"	Alt. "B"
Estimated Contract Amount		$ 742,009.50	709,714.50
Anticipated Additional Items:			
Royalty Payment.			
Permit Fees			
Slide Correction			
Railroad Protective Costs			
Other Railroad Costs			
Permanent Signing			
Permanent Pavement Striping.	4500		
Temporary Pavement Striping.			
Remove Pavement Striping (Exist. & Temp.) . . .			
Temporary Erosion Control			
State Furnished ____________			
Roadside Seeding & Mulching		$ 14,350.00	14,350.00
Asphalt Cement Adjustment			
On the Job Trainees			
State Responsibility for Damages			
Signal Controller Testing (Engineering)	1,400		
"OPTICOM" Testing (Engineering)	950		
Bikeway Signs	1,500		
Adjust Utilities:			
City of Corvallis (water)	4,000		
Consumers Power Inc.	2,000		
Subtotal		$ 756,359.50	724,064.50
Contingencies (4-1/2%)		34,036.18	32,582.90
Engineering ([illegible], 9, [illegible]%)		68,072.36	65,165.81
Subtotal		$	
Credit for ______________________			
Estimated Net Authorization, Construction		$ 858,468.04	821,813.21

APPROVED

cc
Stearns
7-16-81

____
Road Design Engineer

Rev. 3/81

O GON STATE HIGHWAY DIVISION
SUMMARY--BID SCHEDULE--COST ESTIMATE

Sheet 1 of 5
Date 7-9-81

Section N.W. Kings Blvd. - Highland Dr. (Corvallis)
County Benton
Kind Of Work Grading, Paving and Signals
Length
Name Butler

COST ANALYSIS UNIT 9-14-81 R
THIS ENGINEERING ESTIMATE IS PRICED FOR
BID LETTING Sept 3, 1981

No	Item	Code	Unit	Quant.	Unit Cost	Total
1	Mobilization		Lump Sum	All	8% Lump Sum	$52,600^{00}$
2	Temporary Protection and Direction of Traffic		Lump Sum	All	Lump Sum	$3,370^{00}$
3	Temporary Signs		Sq. Ft.	307	6^{00}	$1,842^{00}$
4	Temporary Barricades		Each	10	100^{00}	$1,000^{00}$
5	Flagmen		Hour	240	23^{50}	$5,640^{00}$
	ROADWORK					
6	Clearing and Grubbing		Lump Sum	All	Lump Sum	$1,500^{00}$
7	Removal of Structures and Obstructions		Lump Sum	All	Lump Sum	$6,000^{00}$
8	Finishing Roadbed and Slopes		Lump Sum	All	Lump Sum	$2,250^{00}$
9	Furnishing and Placing Topsoil		Cu. Yd.	480	12^{00}	$5,760^{00}$
10	1"-0 Aggregate Base		Ton	1,300	6^{00}	$7,800^{00}$
11	10-inch Sewer Pipe		Lin. Ft.	6	14^{50}	87^{00}
12	12-inch Sewer Pipe		Lin. Ft.	954	14^{50}	$13,833^{00}$
13	Extra for Pipe Under Pavement		Lin. Ft.	40	15^{00}	600^{00}
14	Concrete Manholes		Each	1	$1,500^{00}$	$1,500^{00}$
15	Concrete Inlets, Type D		Each	1	450^{00}	450^{00}
16	Concrete Curb Inlets		Each	26	450^{00}	$11,700^{00}$

OREGON STATE HIGHWAY DIVISION
SUMMARY--BID SCHEDULE--COST ESTIMATE

Sheet 2 of 5
Date
County
Name

Section N.W. Kings Blvd - Highland Dr. (Corvallis)
Kind Of Work
Length

No	Item	Code	Unit	Quant.	Unit Cost	Total
17	Guard Rail, Type 1		Lin. Ft.	88	9^{00}	792^{00}
18	Rail End Pieces, Type B		Each	2	75^{00}	150^{00}
19	Concrete Walks		Sq. Yd.	5,200	11^{50}	59,800^{00}
20	Concrete Curbs		Lin. Ft.	1,060	12^{00}	12,720^{00}
21	Extra for Asphalt Approaches		Each	6	200^{00}	1,200^{00}
22	Adjusting Manholes		Each	14	175^{00}	2,450^{00}
23	Reconstructing Concrete Manholes		Each	11	650^{00}	7,150^{00}
24	Roadside Seeding and Mulching		Acre	2	350^{00}	700^{00}
	Alternate "A" (Items 25 through 32 Incl.)					
25	General Excavation		Cu. Yd.	26,700	2^{50}	66,750^{0}
26	Trench Excavation		Cu. Yd.	320	10^{00}	3,200^{0}
27	Watering		M-Gal	85	15^{00}	1,275^{0}
28	Cement Treated Base Mixture		Ton	15,500	9^{50}	147,250^{0}
29	Portland Cement in CTB Mixture		Ton	860	82^{00}	70,520^{0}
30	Asphalt in Seal		Ton	35	225^{00}	7,875^{0}

FORM 734-1736 (1-79)

O ON STATE HIGHWAY DIVISION
SUMMARY--BID SCHEDULE--COST ESTIMATE

Sheet 3 of 5
Date
County
Name

Section N.W. Kings Blvd - Highland Dr. (Corvallis)
Kind Of Work
Length

No	Item	Code	Unit	Quant.	Unit Cost	Total
31	Class "B" or Class "C" Asphalt Concrete Mixture		Ton	5,300	14^{85}	78,705^{00}
32	Asphalt Cement in Mixture		Ton	340	218^{00}	74,120^{00}
	Alternate "B" (Items 33 through 40 Incl.)					
33	General Excavation		Cu. Yd.	21,900	2^{50}	54750^{00}
34	Trench Excavation		Cu. Yd.	375	10^{00}	3,750^{00}
35	Watering		M Gal	90	15^{00}	1,350^{00}
36	Lime Treated Subgrade		Sq. Yd.	28,000	1^{25}	35,000^{00}
37	Lime for Treated Subgrade		Ton	315	84^{00}	26,460^{00}
38	Class "B" or Class "C" Asphalt Concrete Mixture		Ton	1,300	15^{50}	20,150^{00}
39	Asphalt Cement in Mixture		Ton	80	218^{00}	17,440^{00}
40	Plain Concrete Pavement		Sq. Yd.	23,500	11^{00}	258,500^{00}

FORM 734-1736 (1-79)

O ON STATE HIGHWAY DIVISION
SUMMARY--BID SCHEDULE--COST ESTIMATE

Sheet 4 of 5
Date
County
Name

Section N.W. Kings Blvd- Highland Dr. (Corvallis)
Kind Of Work
Length

No	Item	Code	Unit	Quant.	Unit Cost	Total
	SIGNING					
41	Removal of Existing Sign Installations		Lump Sum	All	Lump Sum	1,300.00
42	Sign Support Footings		Lump Sum	All	Lump Sum	3,150.00
43	Pipe Sign Posts		Lump Sum	All	Lump Sum	4,424.00
44	Type "C" and "D" Signs in Place		Sq. Ft.	12	11.00	132.00
45	Type "EE" Signs in Place		Sq. Ft.	50	12.50	625.00
46	Type "T" Signs in Place		Sq. Ft.	33	12.50	412.50
47	Type "U" Signs in Place		Sq. Ft.	3	18.00	54.00
48	Move and Reinstall Existing Signs		Lump Sum	All	Lump Sum	1,600.00

O ON STATE HIGHWAY DIVISION

SUMMARY--BID SCHEDULE--COST ESTIMATE

Sheet 5 of 5

Date

Section N. W. Kings Blvd - Highland Dr. (Corvallis)

County

Kind Of Work

Length

Name

No	Item	Code	Unit	Quant.	Unit Cost	Total
	TRAFFIC SIGNALS					
49	Traffic Signal Installation, Complete		Lump Sum	All	Lump Sum	73,733
50	Fire Pre-emption System, Complete		Lump Sum	All	Lump Sum	5,990
	Total Amount of Bid Alternate "A" (Items 1 through 32 Incl. and Items 41 through 50 Incl.)					742,009^{5}
	Total Amount of Bid Alternate "B" (Items 1 through 24 Incl. and Items 33 through 50 Incl.)					709,714^{5}

9367

L.

U. S. DEPARTMENT OF TRANSPOR TION
FEDERAL HIGHWAY ADMINIST ATION

6-1-81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. M-2120(1)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Benton

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. M-65

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 10/24/80

8. FEDERAL ROUTE NUMBER FAU 2120

9. STATE ROUTE NUMBER City Street

10. GENERAL LOCATION:
City Street - 25th Street - Highland Drive (Corvallis)

11. GENERAL DESCRIPTION OF WORK
Program change

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

- ☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
- ☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
- ☐ ACQUISITION OF RIGHT-OF-WAY
- ☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
- ☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
- ☒ OTHER *(Specify)* Program change

13. REMARKS

This is to document a program change requested by Mr. Swan's letter of 8/8/80 and approved by FHWA letter dated 10/24/80 by G.L. Green, Division Administrator. Program change approved is as follows:

1) Project Location: Change to read "City St., 25th St. to Highland Dr. (Corvallis)

2) Miles: Change to read "0.91".

RECEIVED
STATE HWY ENGR
JUN 4'81
REFER TO
Maehring
FOR

Info	Inves	R/D	D/R	Sign	Act	File

orig to
6-4-81

14. DATE 6/1/81

15. SIGNATURE OF APPROVING OFFICIAL

16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9367

4

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

6-1-81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. M-2120(1)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Benton

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. M-65

6. TO
Mr. H. S. Coulter
State Highway Engineer
State Of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 6/1/81

8. FEDERAL ROUTE NUMBER FAU 2120

9. STATE ROUTE NUMBER City Street

10. GENERAL LOCATION:
City Street - 25th Street - Highland Drive (Corvallis)

11. GENERAL DESCRIPTION OF WORK
Program change

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* Program change

13. REMARKS

As requested in Mr. Swan's letter of 5/20/81 I approve the revised Preliminary Engineering Costs to a TEC of $125,799 Federal Funds $98,264.

(Increase TEC $18,800 Federal Funds $14,699)

orig to
6.4.81

RECEIVED
STATE HWY ENGR
JUN 4'81
REFER TO Moehring
FOR

Info	Inves	R/D	D/R	Sign	Act	File

14. DATE 6/1/81

15. SIGNATURE OF APPROVING OFFICIAL

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9367

5-21-81

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	Title Sheet
2,2A	Typical Sections
2B,2C	Special Details
2D	Special Details
2E	Pipe Data
2F	Summary
3-7 Incl.	Plan & Profile

Temp. Prot. & Direction Of Traffic To Be Written in Specs.

STATE OF

DEPARTMENT OF T

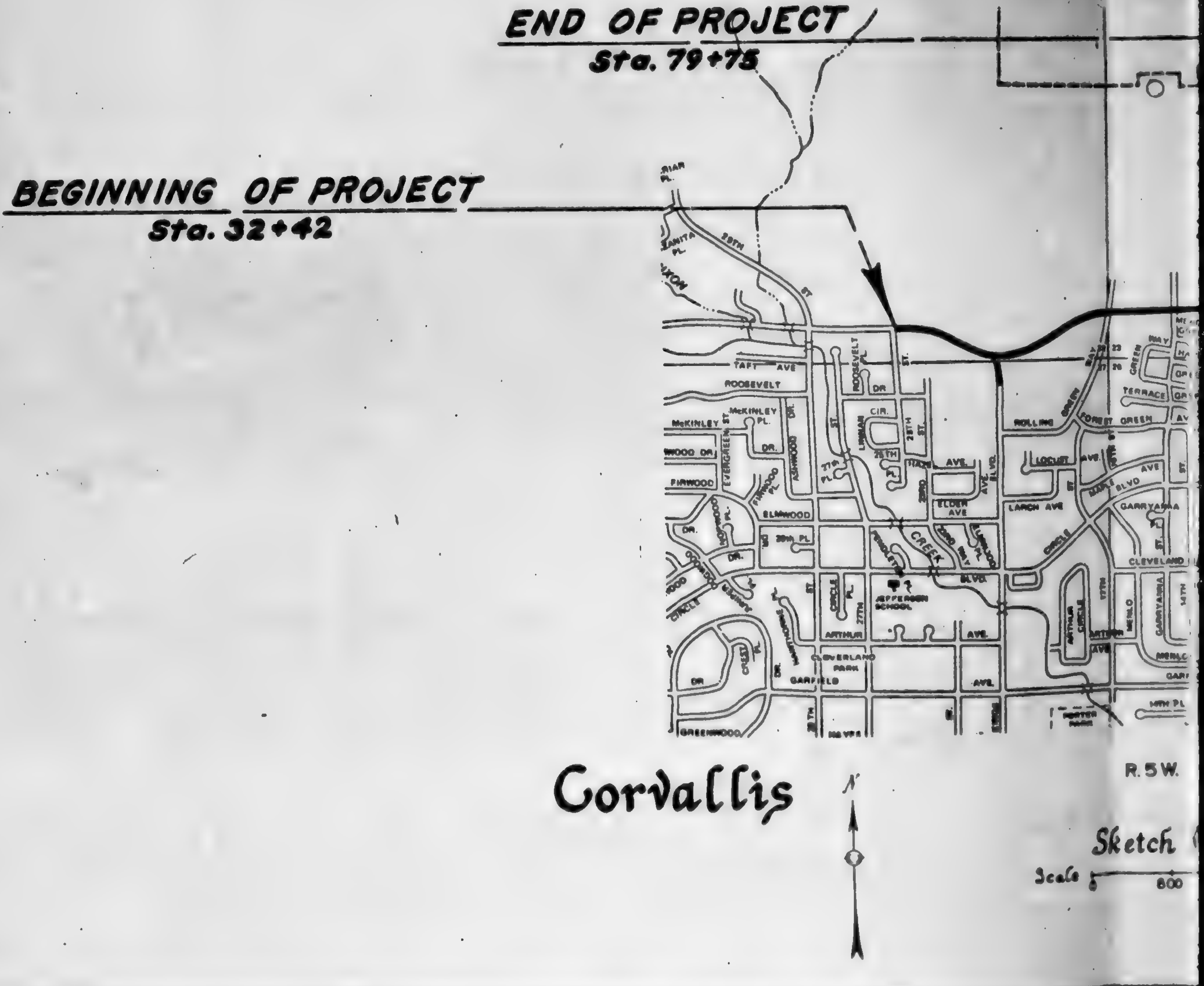
STATE HIGHW

PLANS FOR PROPO

N.W. KINGS BLVD. – HIGHLA

FAU 2120 (WA

BENTON C


END OF PROJECT
Sta. 79+75
BEGINNING OF PROJECT
Sta. 32+42
TAFT AVE
ROOSEVELT
McKINLEY
FIRWOOD
ELMWOOD
ROLLING GREEN
FOREST GREEN
TERRACE
LOCUST
LARCH AVE
ELDER AVE
GARRYANNA
CLEVELAND
CIRCLE BLVD.
JEFFERSON SCHOOL
ARTHUR
CLEVERLAND PARK
GARFIELD
GREENWOOD
HARRISON
CREEK
Corvallis
N
R.5W.
Sketch
Scale 0 800

E OF OREGON

OF TRANSPORTATION

IGHWAY DIVISION

OR PROPOSED PROJECT

Note:
R/W lines not shown
(To Be Acquired by City)

N.W. KINGS BLVD.-HIGHLAND DR. (CORVALLIS) SEC. FAU 2120 (WALNUT BLVD.) BENTON COUNTY				SHEET No. 1
FED. ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
10	OREGON			See Index

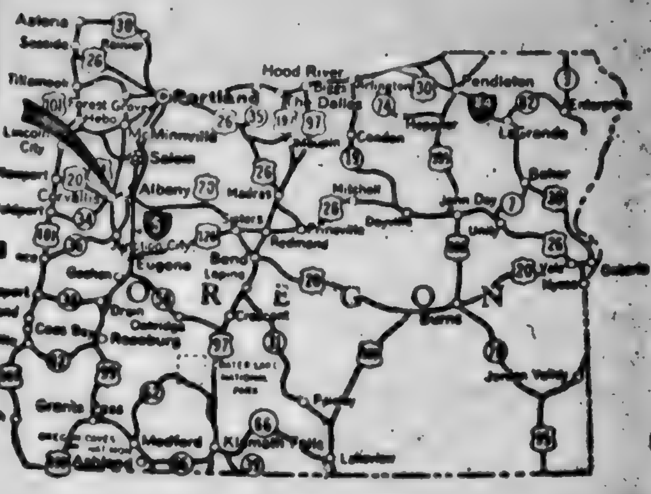
FAUS

PRELIMINARY COPY
FEB 18 1981
SUBJECT TO CHANGE
FINAL DESIGN UNIT

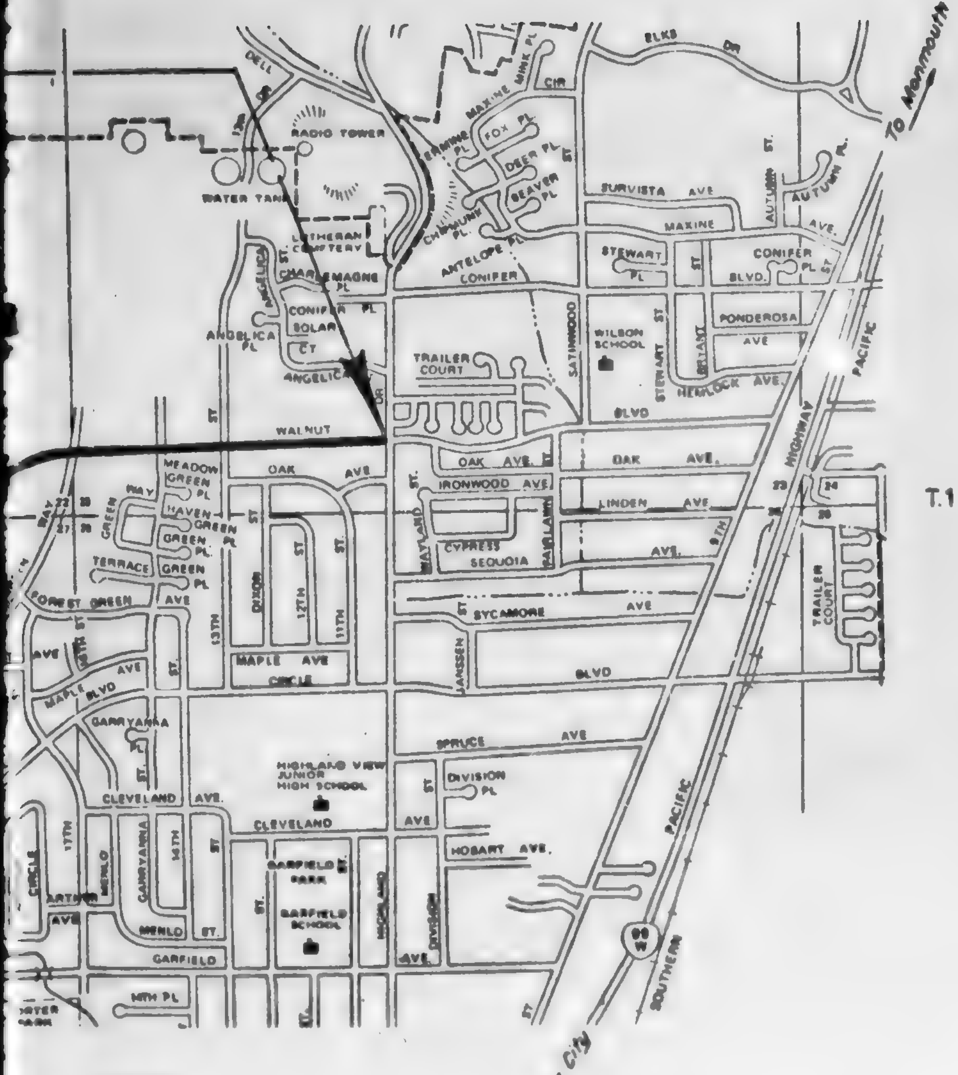
GHLAND DR. (CORVALLIS) SEC.

0 (WALNUT BLVD.)

ENTON COUNTY



Astoria
Seaside
Tillamook
Forest Grove
Hebo
Lincoln City
Newport
Corvallis
Portland
McMinnville
Salem
Albany
Madras
Hood River
The Dalles
Pendleton
La Grande
Enterprise
Condon
Mitchell
John Day
Baker
Redmond
Prineville
Bend
Eugene
Florence
Reedsport
North Bend
Coos Bay
Coquille
Roseburg
Gold Beach
Grants Pass
Medford
Ashland
Klamath Falls
Lakeview
Burns
Jordan Valley
O R E G O N



ELKS DR
RADIO TOWER
WATER TANK
LUTHERAN CEMETERY
CHARLEMAGNE
CONIFER
SOLAR CT
ANGELICA
ANTELOPE PL
SURVISTA AVE
MAXINE
STEWART PL
CONIFER BLVD
PONDEROSA AVE
TRAILER COURT
WILSON SCHOOL
HEMLOCK AVE
WALNUT
OAK AVE
IRONWOOD AVE
LINDEN AVE
CYPRESS
SEQUOIA
SYCAMORE AVE
MAPLE AVE
CIRCLE
BLVD
SPRUCE AVE
DIVISION PL
HIGHLAND VIEW JUNIOR HIGH SCHOOL
CLEVELAND AVE
HOBART AVE
GARFIELD PARK
GARFIELD SCHOOL
GARFIELD
HIGHLAND
12TH
11TH
9TH
PACIFIC HIGHWAY
SOUTHERN PACIFIC
99W
TRAILER COURT
To Monmouth
To Junction City
T.11 S.
R.5 W.

Sketch Map
Scale 0 800 1600 Feet

APPROVED
CITY OF Corvallis
BY ~~MAYOR~~
City Engineer
BY ~~RECORDER~~
DATE 5/28/81

PRELIMINARY COPY
SUBJECT TO CHANGE

H.S. Coulter STATE HIGHWAY ENGINEER

E.S. Hunter ASSISTANT STATE HIGHWAY ENGINEER

OREGON TRANSPORTATION COMMISSION

Anthony Yturri	CHAIRMAN
Tom Walsh	VICE CHAIRMAN
Gordon Coleman	COMMISSIONER
Peter J. Brix	COMMISSIONER
Michael P. Hollern	COMMISSIONER
Fred B. Klaboe	DIRECTOR OF TRANSPORTATION

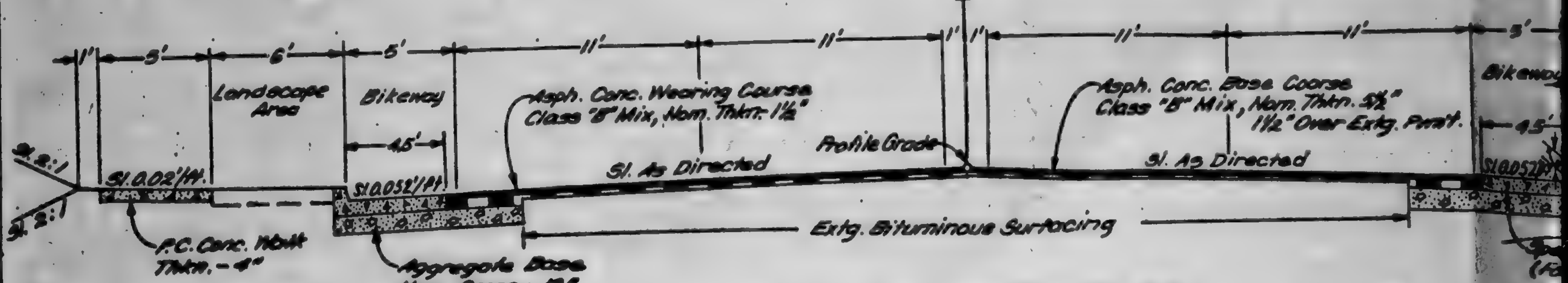
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

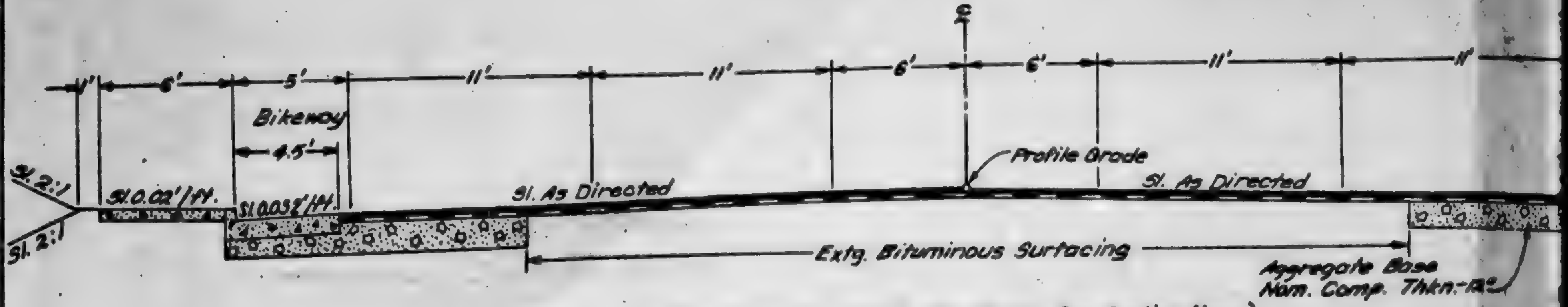
FIELD OPERATIONS ENGINEER DATE

TYPICAL SE

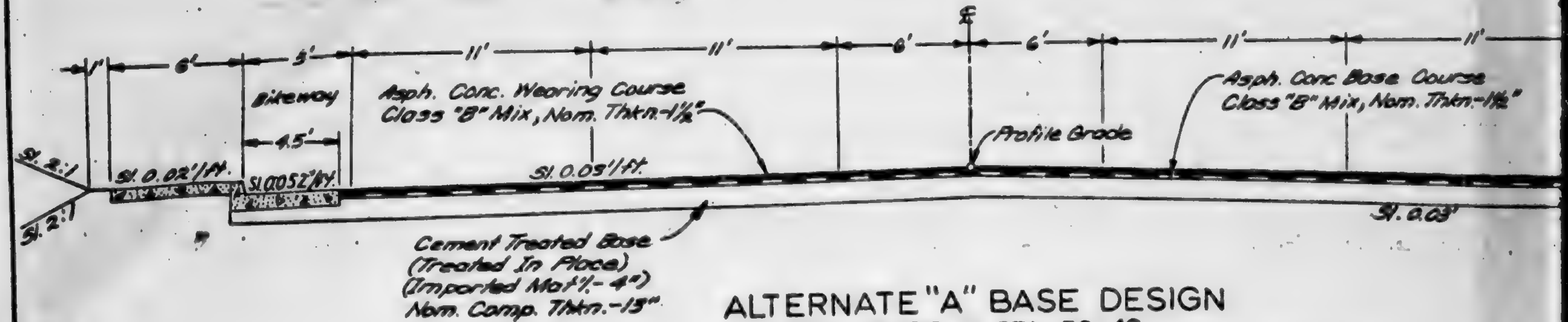
R/W Map No. 10C-51-12


1'
5'
6'
5'
11'
11'
1'
1'
11'
11'
5'
Landscape Area
Bikeway
Bikeway
4.5'
4.5'
Asph. Conc. Wearing Course Class "B" Mix, Nom. Thkn.-1½"
Asph. Conc. Base Course Class "B" Mix, Nom. Thkn. 5½" 1½" Over Extg. Pvmt.
Profile Grade
Sl. As Directed
Sl. As Directed
Sl. 2:1
Sl. 2:1
Sl. 0.02'/Ft.
Sl. 0.052'/Ft.
Sl. 0.052'/Ft.
Extg. Bituminous Surfacing
P.C. Conc. Walk Thkn.-4"
Aggregate Base Nom. Comp.-12"

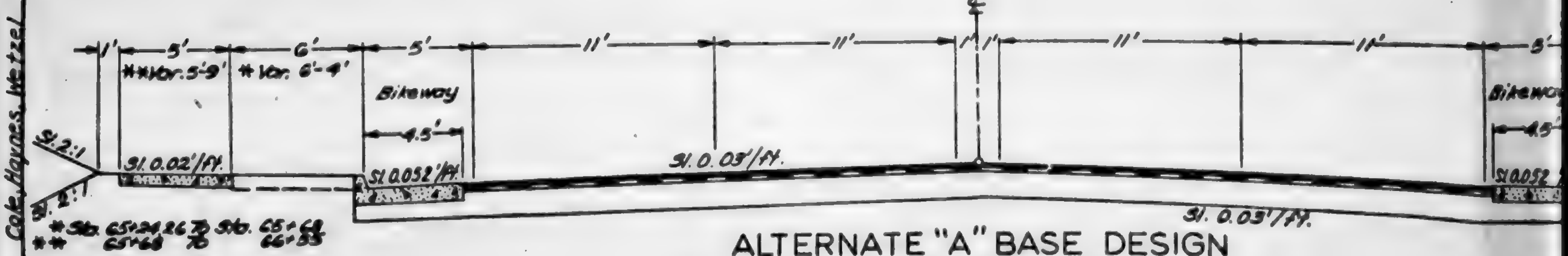
STA. 32+42 To STA. 37+50
37+50 To 39+60 (Taper Section)


1'
6'
5'
11'
11'
6'
6'
11'
11'
Bikeway
4.5'
Profile Grade
Sl. As Directed
Sl. As Directed
Sl. 2:1
Sl. 2:1
Sl. 0.02'/Ft.
Sl. 0.052'/Ft.
Extg. Bituminous Surfacing
Aggregate Base Nom. Comp. Thkn.-12"

(For Surfacing Details Not Shown, See Section Above)
STA. 39+60 To STA. 42+00


1'
6'
5'
11'
11'
6'
6'
11'
11'
Bikeway
4.5'
Asph. Conc. Wearing Course Class "B" Mix, Nom. Thkn.-1½"
Asph. Conc. Base Course Class "B" Mix, Nom. Thkn.-1½"
Profile Grade
Sl. 2:1
Sl. 2:1
Sl. 0.02'/Ft.
Sl. 0.052'/Ft.
Sl. 0.03'/Ft.
Sl. 0.03'
Cement Treated Base (Treated In Place) (Imported Mat'l.- 4") Nom. Comp. Thkn.-13"

ALTERNATE "A" BASE DESIGN
STA. 42+00 To STA. 59+10
59+10 To 61+20 (Taper Section)

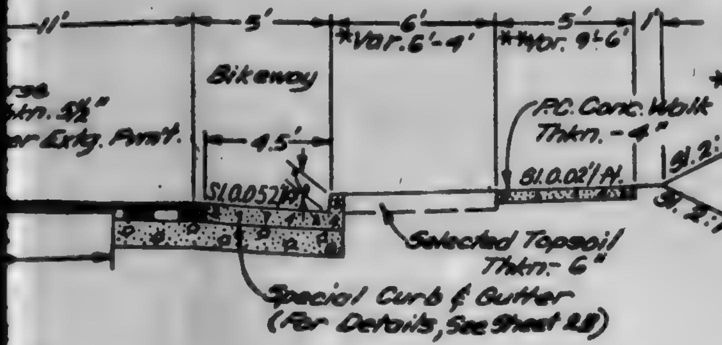

1'
5'
6'
5'
11'
11'
1'
1'
11'
11'
5'
** Var. 5'-9'
* Var. 6'-4'
Bikeway
Bikeway
4.5'
4.5'
Sl. 2:1
Sl. 2:1
Sl. 0.02'/Ft.
Sl. 0.052'/Ft.
Sl. 0.052
Sl. 0.03'/Ft.
Sl. 0.03'/Ft.
* Sta. 65+24.26 To Sta. 65+68
** 65+68 To 66+55

ALTERNATE "A" BASE DESIGN
(For Surfacing Details Not Shown, See Section Above)
STA. 61+20 To STA. 68+00

Cole, Haynes, Wetzel

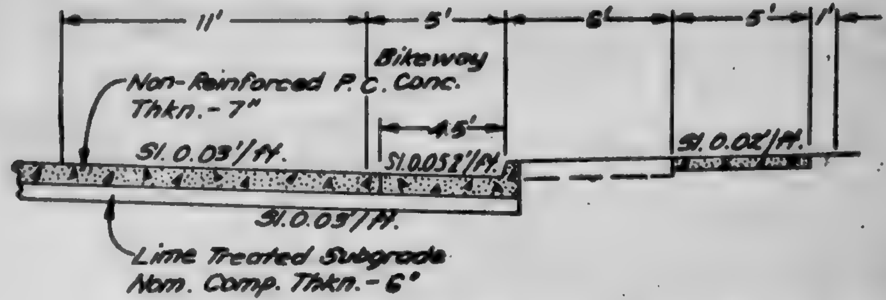
SECTIONS

N.W. KINGS BLVD.-HIGHLAND DR.(CORVALLIS) SEC. FAU 2120 (WALNUT BLVD.) BENTON COUNTY				SHEET No. 2
FED. ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
10	OREGON			See Index

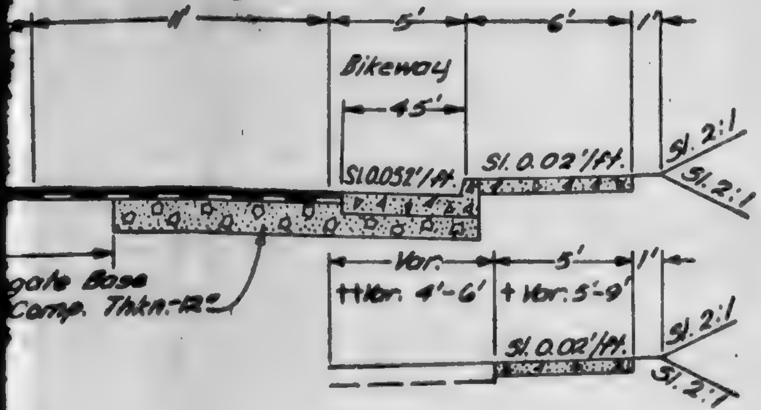

11'
5'
6'
5'
1'
Bikeway
*Var. 6'-4'
**Var. 9'-6'
rse
hkn. 5½"
er Extg. Pvmt.
4.5'
Sl. 0.052'/Ft.
P.C. Conc. Walk
Thkn. - 4"
Sl. 0.02'/Ft.
Sl. 2:1
Sl. 2:1
Selected Topsoil
Thkn. - 6"
Special Curb & Gutter
(For Details, See Sheet 2B)

* Sta. 37+50 To Sta. 38+20
** 38+20 To 39+60

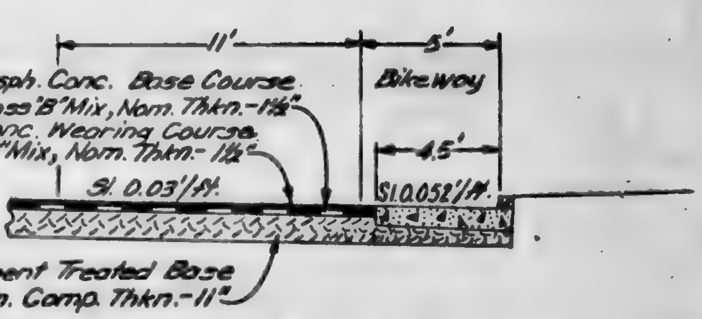
ection)


11'
5'
6'
5'
1'
Bikeway
Non-Reinforced P.C. Conc.
Thkn. - 7"
4.5'
Sl. 0.03'/Ft.
Sl. 0.052'/Ft.
Sl. 0.02'/Ft.
Sl. 0.03'/Ft.
Lime Treated Subgrade
Nom. Comp. Thkn. - 6"

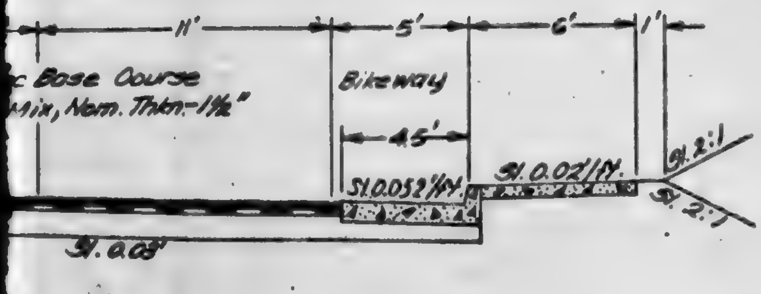
ALTERNATE "B" BASE DESIGN


11'
5'
6'
1'
Bikeway
4.5'
Sl. 0.052'/Ft.
Sl. 0.02'/Ft.
Sl. 2:1
Sl. 2:1
gate Base
Comp. Thkn. - 12"
Var.
5'
1'
††Var. 4'-6'
†Var. 5'-9'
Sl. 0.02'/Ft.
Sl. 2:1
Sl. 2:1

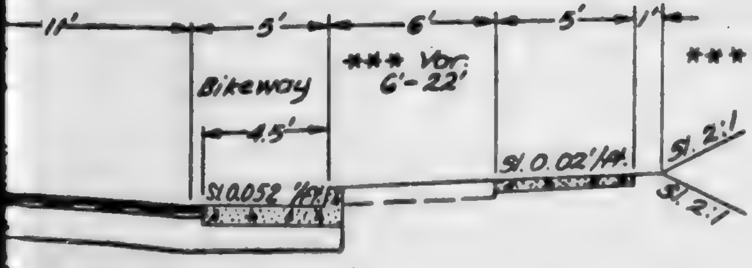
† Sta. 59+10 To Sta. 60+50
†† 60+50 To 61+20


11'
5'
Bikeway
Asph. Conc. Base Course
Class "B" Mix, Nom. Thkn. - 1½"
Asph. Conc. Wearing Course
Class "B" Mix, Nom. Thkn. - 1½"
4.5'
Sl. 0.03'/Ft.
Sl. 0.052'/Ft.
Cement Treated Base
Nom. Comp. Thkn. - 11"

ALTERNATE "C" BASE DESIGN


11'
5'
6'
1'
c Base Course
Mix, Nom. Thkn. - 1½"
Bikeway
4.5'
Sl. 0.052'/Ft.
Sl. 0.02'/Ft.
Sl. 2:1
Sl. 2:1
Sl. 0.03'

on)


11'
5'
6'
5'
1'
Bikeway
*** Var. 6'-22'
4.5'
Sl. 0.052'/Ft.
Sl. 0.02'/Ft.
Sl. 2:1
Sl. 2:1

*** Sta. 65+24.26 To Sta. 67+80

9367

Form E-39 (Rev. 9-71)

OREGON STATE HIGHWAY DIVISION

AUTHORITY FOR SURVEY

Section High land Drive-Kings Blvd.

Highway Walnut Blvd. (Corvallis)

County Benton

Date May 14, 1981

Authorization No. 5

Survey Prefix 302-1939 (Assigned by Salem office)

Description of termini, route, length, etc.:

The project is the extension of Walnut Blvd. from Highland Drive to NW Kings Blvd.
Project length is 3,800 feet.

M-2120(1)

Purpose of survey: To prepare plans, specifications and cost estimates to construct 50' to 60' wide street with curbs, drains and type II bikepath.

Estimate of cost:

Resident Engr.	7,500	R/W Liaison	1,000
Citizens Invol.	100	Utility	500
Local Govt.	15,000	Reconn. & Hyd.	500
Consultant	53,199	Proj. Mgmt.	200
Final Design	18,000	Specifications	2,500
Prl. Design	4,100	Adm. Serv.(eng.)	100
R/W Descr.	2,000	Environmental	15,000
Soils & Geol.	1,100	Training	500
Traffic	3,000	Hearing	1,500

Total estimated cost of survey	$ 125,799
Previous authorization	93,900
Additional authorization requested	31,899
Additional authorization approved (Salem)	
Total all authorizations approved (Salem)	

Erng w/p

INSTRUCTIONS

Submit four copies to Salem. After approval by the Assistant State Highway Engineer, one copy will be sent to the Regional Engineer and one copy to the Resident Engineer.

This form does not constitute authority for making survey until approved and returned.

Submit separate order for each survey.

RECEIVED
MAY 29 1981
LOCATION SECTION

Requests made by:

John Grassman

Recommended for Approval:

Regional Engineer

Recommended for Approval:

Location Engineer

Approved:

Assistant State Highway Engineer

BEN GIFFORD

SP*23604-734

9367

City of Corvallis

CORVALLIS CITY HALL
501 S.W. MADISON AVENUE
P.O. BOX 1083
CORVALLIS, OREGON 97330
(503) 757-6923

PUBLIC WORKS DEPARTMENT

April 17, 1981

Mr. Steve Bauer, Executive Director
League of Oregon Cities
P.O. Box 928
Salem, OR 97303

FAU PROJECTS FUNDING - CITY OF CORVALLIS

The City of Corvallis received State and Federal approval for three Federal Aid Urban (FAU) Street projects in 1975, i.e.:

1. Lantana Avenue - Witham Hill Drive Section of N.W. Circle Boulevard;
2. Kings Boulevard - Highland Drive Section of N.W. Walnut Boulevard; and
3. N.W. Ninth Street - SPRR Section of N.E. Circle Boulevard.

Since 1975 we have conducted the required environmental studies, prepared and published the necessary Draft and Final Environmental Impact Statements, held public hearings, and performed other preliminary engineering tasks on the three FAU projects as required. All three projects are now in the final design process and are scheduled for the construction bidding and Contract award in August, September, and October 1981. Needless to say, the delays that we have experienced over the past 6 years have resulted in substantial increases in the costs for the projects.

The City's present FAU allocations will not be sufficient to fund all three of the projects at the normal FAU (82 percent)/State (9 percent)/local (9 percent) funding ratios. The City proposes to participate in the projects at funding levels that will permit all three projects to be accomplished. The funding proposal, as outlined below is predicated on the basis of "borrowing in advance" against future Federal Aid allocations for the full 5 years as allowed under the present ODOT/LOC/AOC "Guidelines and Working Agreements" for Federal Aid Urban projects.

TOTAL ESTIMATED PROJECT COSTS

N.W. Circle Boulevard	$ 500,000
N.W. Walnut Boulevard	1,350,000
N.E. Circle Boulevard	1,500,000
Total Estimated Project Costs	$3,350,000

PROPOSED PROJECT FUNDING

Federal Aid (FAU) Funding		
Balance of Allocations: Fiscal Years 1972-1981	$1,130,000	
Estimated Future FAU Allocations: Fiscal Years 1982-1987	1,020,000	

(The projects are scheduled for contract after the beginning of Fiscal Year 1982, therefore, this Estimated Future FAU Allocation includes a 6-year projection.)

Total Estimated FAU Allocations	$2,150,000	(64.2%)
State (ODOT) Funding $\frac{(\$2,150,000)\ (0.09)}{(0.82)} =$	235,975	(7.0%)
State Railroad Grade Crossing Protection Account Funding	$ 90,000	(2.7%)
Total Federal and State Funding	$2,475,975	(73.9%)
Southern Pacific Transportation Company	$ 24,000	(0.7%)
Required Local Funding Balance =	$ 850,025	(25.4%)

The percentages of the total costs are shown in parentheses following the estimated dollar amounts to show the cost sharing relationships.

The City has $268,000 committed to these projects as a part of an approved Three-Year Capital Improvements Program. We are attempting to raise the balance of the needed funds through other means, e.g., Local Improvement Districts, etc. We intend to diligently pursue local funding programs necessary to adequately fund all three projects; however, to insure that the projects remain totally viable from the funding standpoint, the City of Corvallis is requesting that the League of Oregon Cities, the Association of Oregon Counties, and the Oregon Department of Transportation authorize a deviation, as provided in Section VI.C.4. of the "Guidelines and Working Agreement", that will allow the City to utilize Federal Aid funding allocations up to an additional 3 years (through fiscal year 1990). It must be emphasized that these are not new projects but are projects that have already been approved and have advanced to the construction phase. Making sure that adequate funding for all three projects is available is of extreme importance to the Corvallis community.

Your careful consideration of this request at the earliest possible date will be greatly appreciated. Please feel free to contact either myself or A. Gordon Wyatt, Principal Engineer (757-6941), if you have any questions in this regard. If necessary, we would be pleased to appear before the League Board to present our proposal.

Michael M. Randolph

MICHAEL M. RANDOLPH
PUBLIC WORKS DIRECTOR

MMR:pw
cc: Phillip D. Stearns, Oregon Highway Division
David H. Moehring, Oregon Highway Division
Don N. Harvell, Oregon Highway Division
Association of Oregon Counties
City Engineer
Principal Engineer
City Manager

9367

REVISED

OREGON STATE HIGHWAY DIVISION
Location Unit
Surfacing Design Group

Section: N.W. 25th Street-N.W. Highland Drive (Corvallis)
Highway: F.A.U. 2120
County: Benton
Prefix: 302-1939
Res. Engr. K. Karnosh

Date March 31, 1981
Twenty Year Traffic Coefficient 8.5
18 kip s.a. per day 86.4
R Value 14
Frost Penetration - - - -
CBE Total Requirement *26.0"

STRUCTURAL SECTION
NEW WORK

ACTUAL THICKNESS	COMPONENT	CREDIT
	*Alternate "A"	
7.0"	P.C.C. (Non-Reinforced)	
6.0"	L.T.S.	
13.0"		

*Surfacing thickness determined by stress analysis method.

ACTUAL THICKNESS	COMPONENT	CREDIT
	Alternate "B"	
3.0"	A.C.	6.0"
11.0"	C.T.B.	20.0"
14.0"		26.0"

EXISTING ROADWAY

N.W. 25th Street-N.W. Kings Blvd. (Where utilized)

3.0" A.C.O.L. with one-half inch allowance for leveling.

1.0"	Asphaltic Concrete Wearing Surface & Base	=	2.0" Aggregate Base
1.0"	Cement Treated Base	=	1.8" Aggregate Base
1.0"	Plant Mix Bituminous Base	=	1.8" Aggregate Base
1.0"	Emulsion Treated Wearing Surface & Base	=	1.8" Aggregate Base
1.0"	Oil Mat	=	1.8" Aggregate Base
1.0"	Soil Cement (Existing Roadway Material)	=	1.5" Aggregate Base
1.0"	Lime or Cement Treated Subgrade	=	1.0" Aggregate Base
1.0"	Aggregate Subbase	=	0.8" Aggregate Base

Above Factors apply to materials that comply with Standard Specifications and Special Provisions.

F.H.W.A.
Location Engineer
Construction Engineer
Materials & Research
Region Engineer
Resident Engineer
Specifications Engineer
Final Design Engineer
Regional Geologist
D.E. Swan
City of Corvallis, Gordon Wyatt

G.

9367

Buzz -
This is the Memo
that I told you about
over the phone.
I'll talk to you about
it later.

*** MEMORANDUM ***

March 5, 1981

TO: City Engineer

FROM: Engineering Division

SUBJECT: Federal Aid Urban (FAU) Projects Status Report

The purpose of this FAU Status Report is to provide an update of the estimated project costs and the funding requirements for the three Federal Aid Urban Street projects i.e., N.E. Circle Boulevard, N.W. Walnut Boulevard and N.W. Circle Boulevard. The extensive delays experienced since 1974 which were required to meet all of the environmental concerns and requirements have resulted in substantial increases in the project costs.

By the time that the contracts are awarded this fall (presently on the Oregon Department of Transportation (ODOT) Bid Schedule for September 24, 1981) about $350,000 will have been spent on preliminary engineering, environmental impact studies, and the final design. The environmental impact studies account for two-thirds or more of this cost. All of this preliminary engineering and environmental study costs has used nearly two years of our allocations of FAU funds.

In order to completely fund all three FAU projects it will be necessary for the City to borrow ahead for at least five-years against future FAU or other Federal Aid Highway funding allocations. Borrowing against future allocations is provided for under an existing ODOT - League of Oregon Cities - Association of Oregon Counties Agreement. In addition, it will be necessary to increase the City's participation in the total costs. The City's participation will come from the Capital Improvements Program (CIP) funds and from assessments to the adjacent benefited properties.

The following materials and information summarize the present estimated costs and show how the various funding sources must be applied in order to keep the projects viable and on schedule. The City will be required to advance all of the local participation funding amounts to ODOT prior to ODOT's awarding of the construction contracts.

FEDERAL AID URBAN (FAU) FUNDING STATUS

FAU Allocations Fiscal Year (F.Y.)

1972 to F.Y. 1981: Total to Date =	$ 1,415,623
FAU Funds expended 1974-1981: Approximately	$ 286,998
Present (1981) FAU Fund Balance:	$ 1,128,625

Estimated Future FAU Allocations 6 years @ $170,000 per year =	$ 1,020,000

(Note: A 6-year additional allocation has been projected because the Construction Contracts will be awarded after October 1, 1981, the beginning of F.Y. 1982. We will then borrow ahead against future allocations for F.Y. 1983 through F.Y. 1987.)

TOTAL ESTIMATED FAU FUNDS AVAILABLE FOR THESE PROJECTS	$ 2,148,625
Estimated ODOT Funds $\left[\frac{(\text{FAU Funds} - \$2,148,625)(0.09)}{(0.82)} = \$235,825\right]$	$ 235,825
ESTIMATED TOTAL FAU AND ODOT FUNDS =	$ 2,384,450

ESTIMATED PROJECT COSTS	
N.E. Circle Boulevard	$ 1,500,000
N.W. Walnut Boulevard	$ 1,350,000
N.W. Circle Boulevard	$ 500,000
TOTAL ESTIMATED FAU PROJECTS COSTS	$ 3,350,000

The above project estimated costs for the N.E. Circle Boulevard and N.W. Walnut Boulevard projects are based upon the detailed final engineering designs. These estimates include the estimated costs for rights-of-way, traffic signals, railroad grade crossing protection devices and for construction engineering and contingencies. The project cost estimate for the N.W. Circle Boulevard project is based upon the preliminary engineering design estimates. Final design on this project will be underway just as soon as the ODOT and the Federal Highway Administration (FHWA) approves the City/Consultant Agreement. The $965,550 difference between the Total Estimated Project Costs and the Estimated Total FAU and ODOT Funds (as shown above) is the total required "local funding" participation amount.

Negotiations are underway with the Southern Pacific Transportation Company (SPTC) and with the Oregon Public Utilities Commissioner's (PUC) Office. We have received a verbal committment and we are confident that the PUC will participate in the costs for the required railroad protection devices from State Grade Crossing Protection Account (SGCPA) funds. The SGCPA funding participation is estimated at about $90,000. We are attempting to obtain SPTC participation for railroad grade-crossing improvements in an amount of about $50,000. As indicated, the SGCPA funds are reasonably secure but the SDTC's participation is more uncertain at this time. We will continue to work diligently to secure participation in the costs by SPTC.

The $965,550 local participation amount is projected to be obtained as follows:

State Grade Crossing Protection Account	$ 90,000
Southern Pacific Transportation Company	$ 50,000
City of Corvallis Participation (CIP*)	$ 275,550
Assessments to Benefited Properties	$ 550,000
TOTAL LOCAL FUNDING	$ 965,550

(*Note: The approved CIP includes $268,000 for participation toward these three projects. Any additional balance in local participation will require funding from the Street SDC funds.)

The Resolution of Intent to form an Assessment District on N.E. Circle Boulevard and N.W. Walnut Boulevard was approved by the City Council on February 17, 1981. The Public Hearings and the Ordinance to Improve is tentatively scheduled for the April 6, 1981, City Council Agenda. Neighborhood information meetings are being scheduled for March 23 and 25, 1981. Affected property owners will be notified and invited to the information meetings.

The following information is a project-by-project summary of the estimated costs and of the proposed funding methods.

N.E. CIRCLE BOULEVARD (74-589)

Estimated Cost:		$ 1,500,000
Proposed Funding:		
FAU Funds	$ 778,550.00 (51.9%)	
ODOT Funds	83,450.00 (5.6%)	
SGCPA Funds	90,000.00 (6.0%)	
SPTC	50,000.00 (3.3%)	
City-CIP/STSDC	101,592.44 (6.8%)	
City-Assessment District	396,407.56 (26.4%)	
TOTAL PROPOSED FUNDING		$ 1,500,000

N.W. WALNUT BOULEVARD (74-592)

Estimated Cost:		$ 1,350,000
Proposed Funding:		
FAU Funds	$ 963,275.00 (71.4%)	
ODOT Funds	105,725.00 (7.8%)	
City-CIP/STSDC	131,000.00 (9.7%)	
City-Assessment District	150,000.00 (11.1%)	
TOTAL PROPOSED FUNDING		$ 1,350,000

N.W. CIRCLE BOULEVARD (74-588)

Estimated Cost:		$ 500,000
Proposed Funding:		
FAU Funds	$ 413,605.00 (82.8%)	
ODOT Funds	45,395.00 (9.0%)	
City Funds	41,000.00 (8.2%)	
TOTAL PROPOSED FUNDING		$ 500,000

In totaling the FAU and ODOT funding amounts for the three projects, there is an indicated additional short-fall of about $7,000 over the total $2,384,450 amount shown early in this report. This or any other short-fall amount that might occur will have to be made up from City participation/or by additional borrowing against future Federal Aid Funding allocations.

As indicated in the previous FAU Status Report, all three of the projects are anticipated to be under contract during the 1981 Calendar Year. It is anticipated that the construction should be completed on all three projects by late fall 1982.

Copies of the proposed Assessment District Maps and the amounts of the assessments will be made available for the Public Works Committee's review prior to the Public Hearing. The information in this memorandum is intended to supplement and to explain the reasons why the Assessment Districts are required.

A Gordon Wyatt

A. GORDON WYATT
PRINCIPAL ENGINEER
cb
cc: Public Works Director

9367

1-5-81
E

CORVALLIS -	OBL.	SPENT
9th - SPRR, Circle Blvd.		
P.E M-2110(2) =	43,938	41,195 (50,000)
R/w M-2110(3) =	124,378	—
Const	1,175,060	
Kings Blvd - Highland, Walnut Blvd.		
P.E. M-2120(1) =	75,765	81,995 (90,000
R/w M-2120(2) =	24,682	—
Const	1,200,300	
Witham Hill - Arbol Place, Circle Blvd.		
P.E. M-2110(1) =	72,445	82,613 (90,000
~~R/w~~ Const	252,560	

P.E. $230,000

R/w 149,060

ALLOCATED = 1,415,623 (Thru 1981)

5YR ADVANCE = 858,545

$2,274,168

$2,865,000

1-5-81

Don, Phil & I met w/Gordon Wyatt re: funding of Corvallis FAU projects.

308,000
.82
616000
2464000
252560.00
90,000
342560

1,465,000
82
2930000
11710000
1,200,300.00
90000
24,682
1,314,982

1,433,000
82
2866000
11464000
1,175,060.00
124,378
50,000
1,349438

Circle East	#1,349,438
Walnut Blvd.	1,314,982
Circle west	342,560

82)3,006,980(3667,000
246
546
492
549
492
578
574
40

936.7

STATE OF OREGON
ROAD DESIGN SECTION

INTEROFFICE MEMO
DES 16-1

TO: MEMO TO THE FILE

DATE: December 19, 1980

Duane O. Christensen

FROM: Duane O. Christensen
Final Design Engineer

SUBJECT: N.E. Circle Boulevard, FAU 2110
N.E. Walnut Boulevard, FAU 2120

The following met on Wednesday, December 17, 1980 to discuss requested revisions by the City of Corvallis in their letter of December 4, 1980:

A. G. Wyatt - City of Corvallis
D. O. Christensen - Final Design
W. E. Cole - " "
J. Sills - " "
D. Haynes - " "
P. Stearns - Region 2
J. Irwin - Traffic
D. Harwell - Project Management
D. Swan " "
F. Terpin - Location
D. Shaffer - "
E. Zehner P.M.

As a result of the discussions, the following was agreed upon:

1. On-street bikeways will be reduced from 6 feet to 5 feet.
2. Continuous left-turn median width on Circle Boulevard will be reduced from 14 feet to 12 feet.
3. The Traffic Section will salvage existing signal equipment and use where practical.
4. Right-of-way descriptions will be revised to reflect the narrower roadway section occasioned by changes in Items 1 and 2. These changes should eliminate the need for purchasing one of the residences on the project, thereby reducing right-of-way cost and relocation time that would delay the contract letting.
5. PUC maps will be revised so that Mr. Trygstad may make necessary revisions to the railroad agreements.

Bp
Dmtt.

6. The Traffic Section will add the signal at N.W. Walnut Boulevard and N.W. Highland Drive to the plans. Dave Weaver, Region 2 Traffic Engineer, is pursuing the signal warrants. Mr. Wyatt stated that the City would pay for the signal in the event that warrants were not adequate to meet Federal funding requirements.

These revisions will result in a savings in construction cost of $40,000 to $50,000 plus a reduction in right-of-way cost. Additional design cost by all parties to make these revisions will amount to approximately $6,000.

DOC:ja

cc E. S. Hunter
Participants
D. Weaver
R. Trygstad
H. Wakerlig
L. K. Watson
R. Henry
Loc. Govt.

9367

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
Region 2
2960 E. STATE STREET, SALEM, OREGON 97310 PHONE 378-2626

December 10, 1980

Gordan Wyatt
PRINCIPLE ENGINEER
City Hall/501 SW Madison
Corvallis, Oregon 97330

Dear Mr. Wyatt:

Review of the information submitted for traffic volumes estimated at the intersection of Walnut and Highland indicate that a traffic signal would be warranted at this location.

Your estimate of two-way traffic volumes of 7,000+ vehicles per day on the main thoroughfare and 6,000 vehicles per day on the minor approach would normally satisfy Warrant #1, Minimum Vehicular Volume. This assumption is based on the concept that the eighth highest hour is generally comparible to 5.5% of the ADT. These traffic volumes coupled with anticipated 85th percentile speeds in access of 40 mph would satisfy the Minimum Vehicular Volume Warrant.

Sincerely,
ORIGINAL SIGNED BY
DAVID R. WEAVER

David R. Weaver
REGION II TRAFFIC ENGINEER

DRW/bah

cc: L. E. George
Don Harwell
Phil Stearns

G Don H.

9367

L

U. S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

12-10-80

FEDERAL AID PROJECT NO.
[illegible]-2120(2)

STATE PROJECT NO.
See below

FROM:
G. L. Green, Division Administrator
FHWA - Oregon Division

PROGRAM NO.

ITEM NO.
10077

COUNTY NAME
Benton

PROGRAM STAGE (Check)
☐ 1. ☐ 2.

TO:

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

RECEIVED
STATE HWY ENGR
DEC 15 '80
REFER, TO.
[illegible]
FOR

Info	Inves	R/D	D/R	Sign	Act	File

12-15

DATE PS&E APPROVED

DATE AUTHORIZATION EFFECTIVE
12/11/80

FEDERAL ROUTE NUMBER
FAU 2120

STATE ROUTE NUMBER
City Street

GENERAL LOCATION:

NW Kings Blvd. - NW Highland Drive (Corvallis) Section

GENERAL DESCRIPTION OF WORK:

Right of Way

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

PRELIMINARY ENGINEERING TO DETERMINE
☐ LOCATION ONLY

PRELIMINARY ENGINEERING FOR SURVEY AND PLAN
☐ PREPARATION

☐ OTHER *(Specify)*

☒ ACQUISITION OF RIGHT-OF-WAY

CONSTRUCTION - ADVERTISE FOR RECEIPT
☐ OF BIDS

☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of 12/3/80 you are now authorized to proceed with the actual acquisition of file No. 51616 as shown on R/W Map 10C-51-12 at a TEC of $28,000 Federal Funds $24,682.

Federal participation is limited to that right of way actually incorporated in the final location of the subject project.

DATE
12/11/80

SIGNATURE OF APPROVING OFFICIAL
G K Hassan

TITLE
for Division Administrator

FORM PR-1240 (REV. 8-70)
EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U.S. GOVERNMENT PRINTING OFFICE: 1975-631-555

9367

2^{45} pm
12/8/80

Bob Prange
Gary Zehner

Please review this letter & if you feel comments are warranted please make them as appropriate.

I prefer if the Design Sect. is agreeable, based on all the items of possible change, that they and the city, region & all involved, meet & discuss the suggested changes, costs involved for time, effort, & reworking of plans & probable delays in scheduling for any or all projects. Also, that the design criteria be reviewed as to feasibility & justification of a deviation of standards, if practicable.

DmH

City of Corvallis

CORVALLIS CITY HALL
501 S.W. MADISON AVENUE
CORVALLIS, OREGON 97330

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION (503) 757-6941

TO
✓ Stoudenmeyer
Mann
Watson
Dorn
Lau
File Copy
Due
DESIGN ENGINEER

December 4, 1980

Duane O. Christensen
Final Design Engineer
222 Transportation Building
Salem, Oregon 97310

1 Versteeg
Anderson
2 Christensen
3 Olson
Sullivan
Terpin
Trout
Wakerlig

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DEC 05 1980
ROAD DESIGN SECTION

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NE CIRCLE BOULEVARD, FAU 2110, DES 16-1 (74-589)
NW WALNUT BOULEVARD, FAU 2120, DES 16-1 (74-592)

Thank you for your letter of November 14 and the enclosed cost estimate spread sheets for these two FAU projects. We appreciate your efforts toward expediting these projects. Your cost analysis certainly emphasizes the increase in costs due to inflation and as the results of the enumerable delays. The projected costs for these projects, as well as for the proposed NW Circle FAU project, have more than tripled since the projects were originated in 1974. Needless to say, the City is deeply concerned that we (the City and the State) will be able to finance projects in this manner. The City will be forced to borrow ahead against future FAU allocations in order to fund these projects.

Your letter identifies several concerns that need to be clarified. Possibly some minor changes can be implemented which would reduce the cost while not causing additional delays in the projects.

BIKEWAYS - CIRCLE AND WALNUT

Widening of the street section to accomodate on-street, Class III bikelanes in lieu of the joint-use Class I type bikeways was really a subject of discussion originating from Donald Schaffer, OSHD Bicycle Route Engineer. Not only has the funding for the joint-use, Class I bikeways come under scrutiny by OSHD it has also been discouraged by FHWA (9/5/80 Memorandum from Green to Coulfer, re: Geary Street, Albany). Certainly the City could not argue, very forcefully, against this change in bikeway concept if there were any problems with funding. Changing the concept did require substantial effort on the City's part to gain approval of the City's Bicycle Advisory Committee, the Public Works Committee and the Council. I had given you authority to proceed with the design even prior to securing the appropriate approvals so that additional delays would not be encountered.

To facilitate the on-street bikelane design and identification the City has requested that the projects include a curb-and-gutter section patterned after the one used very successfully in Eugene.

This Eugene standard curb-and-gutter has a 4.5-foot gutter section. Most of the contractors doing curb work in the Corvallis area are the same that do the work in the Eugene area and, therefore, the templates are readily available. Our cost analyses indicate that there is little, if any, increase in total project costs when the wider gutter section is used. The increased curb-and-gutter costs are offset by the reduction in paving costs.

NE CIRCLE BLVD.

Subsequent to a 7/31/80 meeting in your office the City prepared typical Sections for N.E. Circle Blvd. that provided for on-street bikelanes and a total curb-to-curb width of 70-feet for the section from ORE 99W east. A norrower section without the on-street bikelane was proposed for the NW 9th to ORE 99W section. The dimensions shown on these sections were influenced by the "desirable" standards and by the discussions of lane widths, etc. during that meeting. The City's official approval of the on-street bikelane concept included on-street bikelanes for the 9th to 99W section and future provisions for the extensions of on-street bikelanes on the 60-foot street section west of NW 9th Street (a/4-10-10-12-10-10-4/curb-to-curb typical section). The change to include bikelanes between 9th and 99W was relayed verbally to your staff.

On several occasions I have expressed concern to both Bill Cole and Jack Sills about "over-designing" and increasing the costs for the street. It would seem appropriate that this urban arterial street design could best be compromised to provide minimum lane widths, i.e., a typical street section of /5-11-11-12-11-11-5/ or a total 66-foot curb-to-curb. Six-foot curbline walks would also be provided along both sides except where the railroad structure would require diverting from the curbline, in which case the clear sidewalk width would be 4-5 feet. We feel very strongly that this will provide an adequate street section and that it will meet minimum Urban Arterial Street Standards (OSHD Standard Drawing 2128).

If the above recommended narrower street width is adopted we would also recommend that the proposed northerly curbline location as proposed for the 70-foot wide section be maintained for the 66-foot section. This would permit a reduction of 4-feet in the width of the southerly right-of-way acquisition. A reduction in the street width and right-of-way width would result in a total cost reduction of between $50,000 and $60,000 -- a significant savings. This reduced right-of-way taking would probably mean that the house (about station 14) would not have to be included in the acquisition. This would help reduce acquisition time, relocation costs and total project costs.

A reduction in total street width would also reduce the length of the railroad crossings and would therefore result in a reduced cost for the crossing reconstruction and possibly in the cost of the protection devices.

Possibly, an additional reduction might also be realized in the traffic signal construction. The estimated traffic signal costs ($175,000) are based upon completely new installations with no salvage of present equipment i.e. railroad pre-emption equipment and circuitry, special signing during train movements, etc. While it will be necessary to maintain the existing operations during construction it would also seem prudent that existing equipment be utilized whenever possible.

The City has requested certain features be added, e.g., improved rubber railroad crossings, emergency vehicle detection (Opticon) equipment, and so forth. We realize that these extras add to the initial costs of the project; however, they also reduce the long term maintenance and operations problems. Also, in the base and paving design we have requested that a 20-year design be used because of the problems associated with overlaying the pavement in the future. Asphaltic concrete pavement overlays must be "feathered" out to meet the gutter sections and consequently very little, if any, structural value is gained in the heavier used traffic lanes.

In general, I find no significant problems with the estimated costs for the three alternative designs. We certainly believe that it is prudent to offer the alternative designs and then select the alternative that will be the most cost effective over the long term use of the street. Any one of the three alternatives appear to be comparable and, therefore, the low bid alternate should be the way the project is constructed. The ever increasing costs for asphalt cement is certainly making the use of Portland cement concrete paving more competitive.

N.W. WALNUT BLVD.

The typical sections suggested by the City of Corvallis following the 7/31/80 meeting provided for a 58-foot wide curb-to-curb section of /6-11-11-2-11-11-6/. A five foot wide sidewalk would be located at or near the right-of-way line. The Walnut Blvd. Street width would widen uniformly to provide a 12-foot wide left turn lane at the intersections with Kings Boulevard, Rolling Green Way and Highland Drive. At these intersections the total curb-to-curb width would be 68-feet with 6-foot wide curbside sidewalks. We believe that the bikelanes could be reduced to a five foot width which would result in a total street width reduction of two-feet. The minimum urban arterial street standards would still be met and a $25,000 to $30,000 cost reduction could be realized. A 60 foot or 70 foot wide section, while maybe desirable, is in our opinion, not necessary and we feel strongly that the minimum urban arterial standards are appropriate for this street.

A clarification of the project extension to NW 25th Street seems appropriate. This extension (referred to as 800± feet in the estimate) is in fact not that long of an extension. The Walnut Blvd. centerline station at the intersection with Kings is approximately station 43. The 68 foot wide street section (required for the left turn lane configuration would extend westerly for 200-250 feet, in other words to about station 40 + 50. A 20 to 1 taper from the proposed 68-foot width to the existing 44-foot width would end at about station 38. This is about where the project would end if the extension to 25th Street was not included. In other words, the total project extension is about 550-feet rather than 800-feet. Considering the work required for widening, the 3-inch overlay over the existing A.C. paving and the addition of sidewalks from 25th Street to Kings Blvd. the total increased cost for this extension work is more realistically about $80,000 rather than $101,300 as indicated in your letter. We believe that it is more prudent to include this extension with this project rather than for the City to include it with our project from 25th Street to the west.

We have previously requested that a traffic signal for the intersection of NW Walnut Blvd. with NW Highland Drive be included in the project. The present traffic volumes on NW Highland Drive are about 5,000 vehicles per day. We would anticipate (based on future traffic projections) that the traffic volumes on NW Walnut at the completion of this project will be approximately 6,000 vehicles per day and the volume on NW Highland Drive will be in the 4,000-5,000 vehicles per day range. Some of the traffic now using the Highland Drive route will shift over to Walnut Blvd.

We would ask that serious consideration be given to modifying the street section as recommended in the sections above. For your information I have enclosed copies of this City's response to the P.U.C. regarding the railroad crossings on NE Circle Blvd. I have had a verbal commitment from David Astle that Railroad Grade Crossing Protection Funds would be available for participating in the railroad crossing protection. Please call me if I can be of assistance or if you have any questions in regards to the items in this letter.

A. GORDON WYATT
PRINCIPAL ENGINEER

cb
Enclosures

9367

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6-2

December 3, 1980

TO: G. L. Green, Division Administrator
Federal Highway Administration

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 10077
Project No. M-2120(2)
N.W. Kings Blvd.-N.W. Highland Dr. (Corvallis) Sec.
Benton County

Enclosed is data consisting of PR-1 forms, sketch maps and right of way roll map 10C-51-12 for the subject project.

I request authorization to proceed with the actual acquisition of the right of way at an estimated total cost of $28,000 with an obligation of $24,682 in federal funds. The right of way to be acquired is as outlined in red on right of way map 10C-51-12 and does not require relocation assistance.

A copy of the State Clearinghouse A-95 review conclusions has been previously forwarded.

CL:bke
Enc.

cc: J. Boyd
F. Lowe

Form 734-3122

Budget Bureau No. 41-R

FORM PR-1 (REV. 4-61)

FEDERAL-AID PROGRAM DATA

(PPM 21-1)

MONTHLY TRANSACTION NO.

DATE SUBMITTED TO W.O.

December 2, 1980

CARD 2	REPORT NUMBER (19) (20)	PROJECT LOCATION (45 typewriter spaces) 21 City St., 25th St. to Highland Dr. (Corvallis) 65	**ADT**	PRESENT 1,800	FUTURE ---- (66) (70)	YEAR -- (71) (72)	REGION 10	STATE NAME Oregon

CARD 3	CHARACTER OF PROPOSED WORK (35 typewriter spaces) 28 Right of Way Acquisition 62	NATL. FOREST (63) (65)	FH ROUTE NO. (66) (68)	SUPV AGCY (69)	DA CLASSIF. (70)	DA AREA (71)	EMERG. YR. (72) (73)	PL. AUTH YR (74) (75)	PROJECT NUMBER PREFIX LETTER(S) 14 M- 23	NUMBER 2120

CARD 4

CLASS OF FEDERAL FUNDS: Urban System

NAME OF URBAN AREA: Corvallis 17-31

COUNTY NAME: Benton

ROUTE NO. U | FEDERAL-AID 2120 (32) | STATE City St. (36) (37) -

										ESTIMATED PROJECT COST BY PHASES			
CARD 5	LINE NO.	CHANGE CODE	PROJECT CODE	WORK CLASS	WORK TYPE	WORK STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS 88.15%	STATE FUNDS	OTHER FUND
1	(14-15)	(16)	41	42	43 46	53		(54) (56)	(59) (66)	(67) (76)		
5					**PE**							
5					**ROW**		"N.W. Kings Blvd.- N.W. Highland Dr. (Corvallis) Section."	0.91	28,000	24,682	1,659	1,659 (C
5					**CONST** (CODE)							

CARD 1	CODE 1	PREPARED BY C.L.	PROJECT TOTALS	0.91	28,000 (16) (23)	24,682 (24) (33)	1,659	1,659 (C
1	14	PROGRAM APPROVAL DATES 2-26-76 10-01-80						

REMARKS

Additional Data: see item No. M-21

Budget Bureau No. 41-R2067; Approval Expires February 28, 196

FORM PR-1
(REV. 4-61)

FEDERAL-AID PROGRAM DATA

(PPM 21-1)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

December 2, 1980

CT LOCATION (45 typewriter spaces) St., 25th St. to Highland Dr. (Corvallis) 65	ADT	PRESENT 1,800	FUTURE ---- (66) (70)	YEAR -- (71) (72)	REGION 10	STATE NAME Oregon	STATE CODE 41 (2) (3)	APPN CODE W32 (4) (9)
								ITEM NO. 10077 (14)

ORK (35 typewriter sition 62	NATL. FOREST (63) (65)	FH ROUTE NO. (66) (68)	SUPV AGCY (69)	DA CLASSIF. (70)	DA AREA (71)	EMERG. YR. (72) (73)	PL. AUTH YR (74) (75)	PROJECT NUMBER PREFIX LETTER(S) M- 14 23 NUMBER 2120 7 SEQ. NO. (2) 13	I. Projects Only POST MI. (24) (26) DESIG. 27

Urban System

Corvallis

COUNTY NAME Benton CODE 003 (14) (16)

ROUTE NO. U

FEDERAL-AID 2120 (32)

STATE City St. (36) (37)

U.S. --- (41)

PROGRAM STAGE ☐ 1 OR ☐ 2

ESTIMATED PROJECT COST BY PHASES

ORK TYPE 46	STEP 53	TERMINI (Full description)	MILES (54) (58)	TOTAL ESTIMATED COST (59) (66)	FEDERAL FUNDS 88.15% (67) (76)	STATE FUNDS	OTHER FUNDS	CHARACTER OF PROPOSED WORK (Full description)
E								
OW		"N.W. Kings Blvd.- N.W. Highland Dr. (Corvallis) Section."	0.91	28,000	24,682	1,659	1,659 (City)	
NST DE)								
		C.L. PROJECT TOTALS	0.91	28,000 (16) (23)	24,682 (24) (33)	1,659	1,659 (City)	

OVAL DATES:
2-26-76
10-01-80

REMARKS
Additional Data: see item M-65, Project No. M-2120(1).

-over-

USCOMM DUSCOMM-DC 48905-

N.W. Kings Blvd. - N.W. Highland Dr. (Corvallis) Section
Project No. M-2120(2)

Project Data: Work under this project consists of right of way acquisition all phases as required for the future construction of a 54 foot curbed roadway to provide for 4 travel lanes with 8 foot bike path on the right and 6 foot sidewalk on the left.

FHPM 7-7-2 Requirements: Final Environmental Impact Statement adopted by FHWA 7-1-80.

FHPM 7-7-5 Requirements:

a) Public Hearings ---- Held on May 30, 1979
b) Location/Design ---- Approval granted by FHWA on August 4, 1980.

Note: 1) This project in Congressional District No. 1.
2) Included in FY '81 AP in schedule of Contract lettings on page 15.
3) No relocation assistance involved.

9367

Corvallis

November 14, 1980

DES 16-1

Mr. Roland Baxter
City Engineer
City of Corvallis
502 S.W. Madison Avenue
Corvallis, OR 97330

Attn. Mr. A. Gordon Wyatt
Principal Engineer

Dear Sir:

N.W. Kings Blvd.-Highland Drive
Walnut Blvd., FAU 2120
N.W. 9th Street-SPRR
Circle Blvd., FAU 2110
Benton County

Attached is an itemized breakdown on each project, showing the costs involved. The estimated costs for these projects have increased substantially because of the following major factors:

1. Revisions by the City of Corvallis to roadway typical sections to provide for on-street bikeways and the westerly extension of Walnut Boulevard.
2. Original field estimates for surfacing quantities on the Walnut Boulevard project were in error and a major increase in the costs for traffic signals and railroad crossings on the Circle Boulevard project were found.
3. Inflation. Liquid asphalt, including freight, has increased 92.2% from April 1979 to July 1980 and is projected to increase an additional 8.6% by July 1981, for a total increase of 109%.

} intersections left out + quantities.

The following summarizes the reasons for the increased costs on each project:

1 Versteeg ✓
Anderson
Christensen
3 Olson
Sullivan
2 Terpin E
Trout
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CIRCLE BOULEVARD (FAU 2110)

ITEM	COST	% INCREASE
1. Widening of Circle Blvd. to 70 feet from 64 feet to provide for on-street bikeways. This also increased the width of the proposed monolithic curb and gutter to 4 1/2 feet from 2 feet.	$ 63,111	7%
2. Traffic and railroad signals and railroad crossing (original field estimate in error).	$284,000	32%
3. Inflation increases. From April 1979 to August 1981 (proposed construction date) liquid asphalt cost has increased approximately 109%. Please note the proposed alternate base designs.	$ 30,180	3%
4. Other incidental increases: Storm sewer and earthwork. Also, this cost reflects mobilization, temporary protection and direction of traffic and engineering and contingencies increases in all of the above Item costs.	$136,031	16%
TOTAL INCREASE	$513,322	58%

WALNUT BOULEVARD (FAU 2120)

ITEM	COST	% INCREASE
1. Westerly extension of Walnut Blvd. to the 25th Street intersection to accommodate the City's future construction. This extension required widening of the existing 44-foot wide street to a 58-foot width and the addition of sidewalks along both sides.	$101,300	15%
2. Widening of Walnut Blvd. to 70 feet from 64 feet to provide for on-street bikeways between N.W. Kings Blvd. and Highland Dr. This also increased the width of the proposed monolithic curb and gutter to 4 1/2 feet from 2 feet.	$104,550	15%

Walnut Blvd. (FAU 2120) - continued

ITEM	COST	% INCREASE
3. Inflation increases. From April 1979 to August 1981 (proposed construction date) liquid asphalt cost has increased approximately 109%. Please note the proposed alternate base designs. Also, the original field estimate was in error.	$276,750	41%
4. Other incidental increases: The addition of a traffic signal at the intersection of Walnut Blvd. with Highland Dr., earthwork and addition of permanent signing and striping. Also, this cost reflects mobilization, temporary protection and direction of traffic, and engineering and contingencies increases in all of the above Item costs.	$197,643	28.6%
TOTAL INCREASE	$680,243	99.6%

These projects are presently scheduled for the third calendar quarter of the 1981 contract letting.

If you have any questions regarding these cost estimates, please contact me.

Very truly yours,
ORIGINAL SIGNED
DUANE O. CHRISTENSEN

Duane O. Christensen
Final Design Engineer

bc E. S. Hunter
C. O. Fredrickson w/attachment
Dorland Swan "
Jack Sullivan
W. E. Cole

WEC:ab/ja

9367

Corvallis

STATE OF OREGON

INTEROFFICE MEMO

DATE: October 29, 1980 DES 14

TO: Mr. D. O. Christensen
Final Design Engineer

FROM: Walter J. Hart Walter J. Hart
Bridge Engineer

SUBJECT: N. W. Kings Blvd.-Highland Dr. (Corvallis)
FAU 2120 (Walnut Blvd.)
Benton County

Additional right of way or easements for illumination will not be required where there is a minimum of three feet behind the sidewalk.

Where no additional right of way exists, then permission should be received from the City to locate lighting poles in the sidewalk. A minimum of three feet of clearance should be maintained in the sidewalk area.

Where poles are located in the sidewalk, we recommend the use of a 48-inch tactile warning strip in front of each pole for the visually impaired. Tactile warnings are recommended by FHWA Publication No. 1P-80-8 and ANSI A117.1-1980.

RAE:dh
Attachment

REFERRED TO
1 Beard WEC Stoudenmeyer
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Eriksen Watson
Hager Dorn Leu
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BY FINAL DESIGN ENGINEER

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and
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Anderson
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Dixon
3 Sullivan JWS
Terpin
Trost
2 Wakeling

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OCT 30 1980
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ROBERT R. ROUNDS

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Materials
81-125-1387

SP*75683-125

FORM 734-3126 (Rev. [illegible])

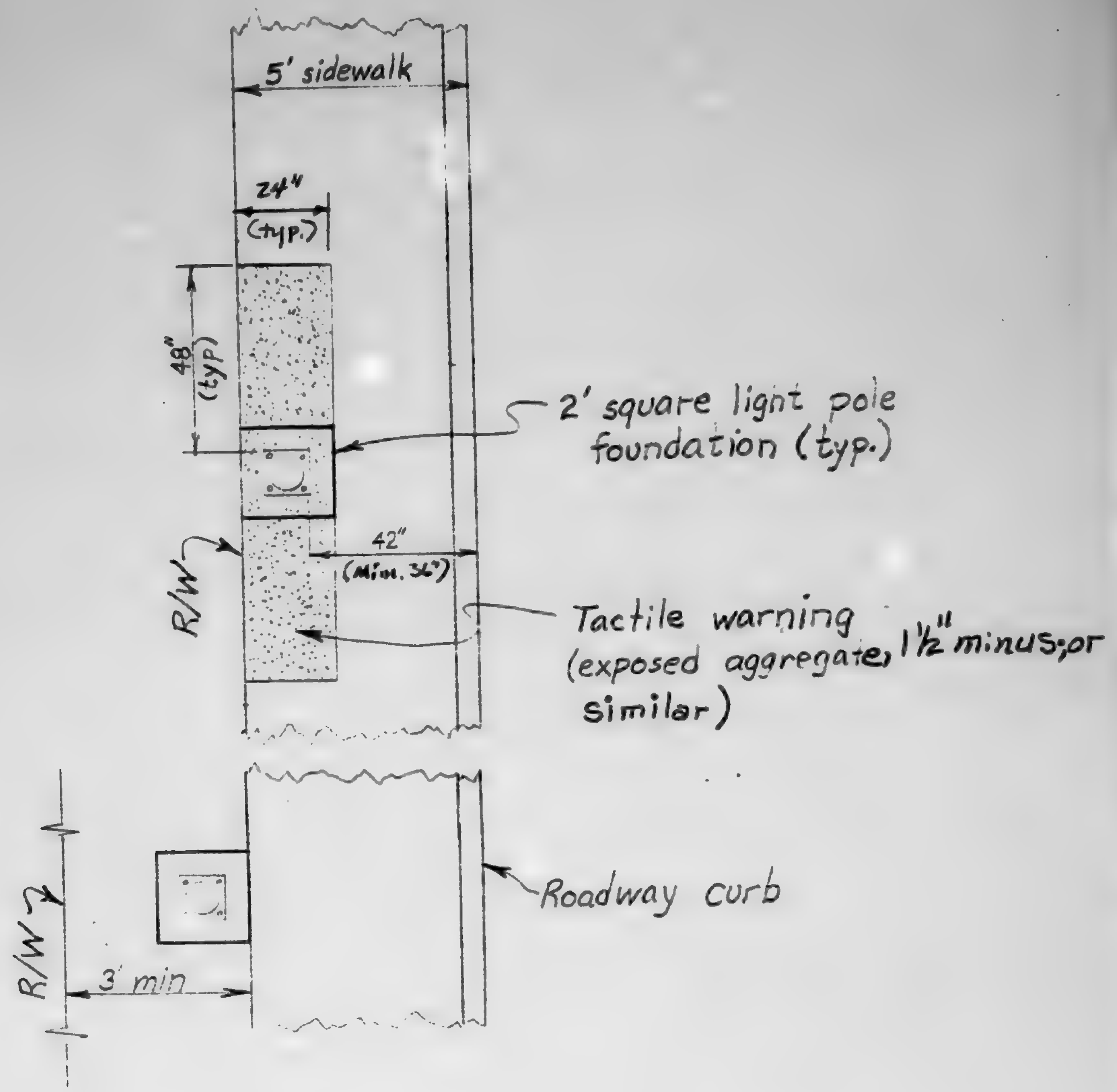
BRIDGE DESIGN UNIT
Oregon State Highway Division

Sheet ....

Bridge NW Kings Blvd - Highland Dr. (Corvallis) County Benton

Calculations by RAE Date 10-28-80 Bridge No. ....

SP*67746-[illegible]


5' sidewalk
24" (typ.)
48" (typ)
2' square light pole foundation (typ.)
42" (Min. 36")
R/W
Tactile warning (exposed aggregate, 1½" minus, or similar)
R/W
3' min
Roadway curb

LIGHT POLE LOCATIONS (TYP.)

Scale: ¼" = 1'-0"

9367 Form FHWA 121 (1/80)

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

THE OREGON DIVISION - Salem
UNITED STATES GOVERNMENT

memorandum

Subject: Oregon Project M-2120(1)
NW. Kings Blvd.-NW. Highland Dr.
Benton County (Corvallis) Section
(Your PRO 6 dtd 10-16-80)

Date: October 24, 1980

From: G. L. Green, Division Administrator

Reply to Attn. of: HPD.2-OR

To: Mr. H. S. Coulter, State Highway Engineer, ODOT

NOTED
H. S. COULTER

Subsequent to our letter of August 13, 1980, recommending a supplement to the EIS, it was determined that no significant impacts would occur with the proposed extension. Also the major type impacts have been discussed in the document. Therefore, we concur in the extension of 1,100 feet to 25th Street.

Valach
G. L. Green

cc:
OSHD (D E Swan, Proj Mgmt)
ODOT (G A Potter, Env)
OSHD (E S Hunter, Tech Svcs)
OSHD (Env, Reg II)

RECEIVED
STATE HWY ENGR
OCT 29 '80
REFER TO
FOR
Info | Inves | R/D | D/R | Sign | Act | File

9367

CORVALLIS - 1:30 10-20-80

Met with Roland Baxter, Gordon Wyatt, Mike Phil Stearns and Don Horwell.

City wants to utilize 82% pro rata on Walnut Blvd. project.

Gordon was concerned that our Design Section does not utilize the location data to prepare final plans. The ultimate project that comes out of Design doesn't agree with what City wants and is designed as a freeway.

Plans for Circle Blvd. call for catch basins too close together but design section requires they be there.

Easements that may be required on Walnut Blvd. will be acquired by City.

City requests that R/w acquisition be expedited on Circle East project. [illegible] office says 10 months is required [illegible] Circle Blvd. project - one house to be relocated.

Tony E. Zehn

7367

STATE OF OREGON
Highway Division 378-2626

INTEROFFICE MEMO

TO: D. H. Moehring
ASSISTANT STATE HIGHWAY ENGINEER

DATE: October ~~6~~ 10, 1980

FROM: Phillip O. Stearns Phil
REGION II FEDERAL AID ENGINEER

SUBJECT: Circle & Walnut Blvd. Projects
Corvallis Urban Area

Attached is a letter from Gordon Wyatt, Principal Engineer for Corvallis, requesting items to be included in subject projects.

In paragraph 6, Mr. Wyatt asks for extension of the Walnut Blvd. project 600' westerly to 25th Street.

Region Office concurs with City's wishes. Please process the requests through channels for approval.

POS/bah
W/Attachment

10-10-80
Cam Gilmour says Env. Sec.
NOT RESPONDING TO GREENS
COMMENTS, ASSUMES BUZ WILL.
BUZ TO DISCUSS w/ POTTER 10-13.
L

City of Corvallis

CORVALLIS CITY HALL
501 S.W. MADISON AVENUE
CORVALLIS, OREGON 97330

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION **(503) 757-6941**

September 30, 1980

Phillip O. Stearns
Region Federal Aid Engineer
P.O. Box 14030
Salem, OR 97310

N.E. CIRCLE BLVD - FAU 2110 (74-589) & N.W. WALNUT BLVD - FAU 2120 (74-592)

As we discussed on September 16, 1980, this letter contains the City's request to have the following items included with the projects that are in the final design phase. We believe that these items are or will be necessary for the functional operation of the specific projects when they are open to traffic. Also, these requests may be different than we had previously requested but because of the delays and because of other funding and operational priorities we believe that these items should now be included with the projects.

(1) Permanent signing and striping should be included on both projects.

(2) Lighting in conjunction with traffic signals should be included on both projects except that the City would provide the fixtures and would pay the power and maintenance costs in accordance with our contractural agreements with Pacific Power and Light. The service and equipment wiring should be provided with the signal construction. Metering is not required. Linear route lighting will be provided by the City.

(3) Emergency vehicle pre-emption (Opticom) should be included with the new or reconstruction of traffic signals on both projects.

(4) Bicycle detection should be provided for all signals where bicycle lanes are provided.

(5) On the N.E. Circle Blvd. project we would request that the Goodyear, or equal, rubber crossings be provided for both the Southern Pacific Railroad crossings.

(6) Provide for the westerly extension of the Walnut Blvd project so that the project beginning will be at the 25th Street intersection rather than approximately 600-700 feet east of 25th Street (approximately 500-600 feet west of Kings Blvd.). This extension will require a widening of the existing 44-foot wide street to a 58-foot width and add sidewalks along both sides. We also understand that the existing paving will be saved and strengthened with an A.C. overlay for this section.

The City has a project planned (one of our first priority projects) that will construct this section of Walnut Blvd from 25th Street westerly for about 2,000 feet. Our plans will conform to the street widths planned for the Walnut Blvd. project. If the Walnut Blvd extension is not included it will leave a short section of 44-foot street between two 58-foot wide sections.

The Environmental Impact Studies included this entire Walnut Blvd route. The Final EIS identified the impacts for this section including the extension. Recent conversations with the Environmental Section have concluded that a letter to FHWA so stipulating should be sufficient to cover the concerns outlined in Glen Green's 8/13/80 memorandum HPD2-OR.

(7) Include and construct a traffic signal at the intersection of Walnut Blvd with Highland Drive. Highland Drive is a relatively heavily used arterial street feeding to Crescent Valley area. Lighting and the emergency signal pre-emption should also be included as noted in items 2 and 3 above. We believe that the projected traffic will warrant this signal at the time the project is completed and open to traffic.

(8) Some of the City Council had expressed concern about the need for a traffic signal at the intersection of Kings Blvd with Walnut Blvd. We do not feel that this intersection will meet the warrants; however, we do feel that flashing signals (yellow on Walnut and red on Kings) to augment and support the stop signs will be necessary.

We would appreciate consideration for all of the above items.

Please furnish me with a copy of the necessary Supplemental Agreement information and Consultant Agreement forms for hiring the consultant to complete final design on the N.W. Circle project. K.C.M., Inc. has been selected and we will be trying to get the paper work in order so that when Final Design Authorization is received we can get the agreements finalized as soon as possible.

The Traffic section should contact Brian Fodness, Traffic Engineer at 757-6941 if there are questions relating to the signals.

A. Gordon Wyatt

A. GORDON WYATT
PRINCIPAL ENGINEER

gs
cc: Gary Potter, Manager
Dwayne Hofstetter, Traffic Control Engineer
Roger Trygstad, Railroad & Utility Engineer
Duane Christensen, Final Design Engineer
W.H. Wakerlig, Right-of-Way Descriptions Engr.
Traffic Engineer, Fodness

9367

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OREGON STATE HIGHWAY DIVISION
Location Section
Surfacing Design Unit

Section: N.W. 25th St.- N.W. Highland Dr. (Corvallis)
Highway: F.A.U. 2120
County: Benton
Prefix: 302-1939
Res. Engr. K. Oliver

Date September 23, 1980
Twenty Year Traffic Coefficient 8.5
18 kip s.a. per day 86.4
R value 14
Frost Penetration - - - -
CBE Total Requirement 26.0"

STRUCTURAL SECTION
NEW WORK

ACTUAL THICKNESS	COMPONENT	CREDIT
	Alternate "A"	
3.0"	A.C.	6.0
13.0"	S.C.	19.5
16.0"		25.5"

EXISTING ROADWAY

N.W. 25th St. - N.W. Kings Blvd. (Where utilized)

3.0"	A.C.O.L. with one-half inch allowance for leveling.

OREGON STATE HIGHWAY DIVISION
Location Section
Surfacing Design Unit

Section: N.W. 25th St.- N.W. Highland Dr. (Corvallis)
Highway: F.A.U. 2120
County: Benton
Prefix: 302-1939
Res. Engr. K. Oliver

Date September 23, 1980
Twenty Year Traffic Coefficient 8.5
18 kip s.a. per day 86.4
R value 14
Frost Penetration - - - -
CBE Total Requirement *26.0"

STRUCTURAL SECTION
NEW WORK

ACTUAL THICKNESS	COMPONENT	CREDIT
	*Alternate "B"	
7.0"	P.C.C. (Non-Reinforced)	
6.0"	L.T.S.	
13.0"		

*Surfacing thickness determined by stress analysis method.

ACTUAL THICKNESS	COMPONENT	CREDIT
	Alternate "C"	
3.0"	A.C.	6.0
11.0"	C.T.B.	20.0
14.0"		26.0"

1.0"	Asphaltic Concrete Wearing Surface & Base	= 2.0" Aggregate Base
1.0"	Cement Treated Base	= 1.8" Aggregate Base
1.0"	Plant Mix Bituminous Base	= 1.8" Aggregate Base
1.0"	Emulsion Treated Wearing Surface & Base	= 1.8" Aggregate Base
1.0"	Oil Mat	= 1.8" Aggregate Base
1.0"	Soil Cement (Existing Roadway Material)	= 1.5" Aggregate Base
1.0"	Lime or Cement Treated Subgrade	= 1.0" Aggregate Base
1.0"	Aggregate Subbase	= 0.8" Aggregate Base

Above Factors apply to materials that comply with Standard Specifications and Special Provisions.

F.H.W.A.
Location Engineer
Construction Engineer
Materials
Region Engineer
Resident Engineer
Specifications Engineer
Final Design Engineer
Regional Geologist
D. E. Swan

9367

STATE OF OREGON

INTEROFFICE MEMO

files

TO: Jim Dixon
Region 2 R/W Supervisor

DATE: September 16, 1980

FROM: Adele L. Egan
Right of Way Office Unit Supv.

SUBJECT: Services Agreement 168
NW Kings Blvd.-NW Highland Dr.
NW Walnut Blvd.
City of Corvallis

MISC. CONTRACTS and
AGREEMENTS No. 5312

Attached is an original of the Supplemental Agreement for Right of Way Services for this project to be given to the City and a copy for your files.

Will the project be programmed?

AE
mp

Attach.
cc: C. O. Fredrickson, w/c
Local Gov't Programs, w/c
Comm. Serv., w/orig.
Finance, w/c
Title, w/c
Description, w/c

Contains Recycled Materials
81-125-1387

SP*75683-125

9367 Form FHWA 121 (1/80)

2.

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

THE OREGON DIVISION
UNITED STATES GOVERNMENT

memorandum

Subject: Oregon Project M-2120(1)
N W Kings Blvd - N W Highland Dr.
(Corvallis) Sec. Walnut Blvd.
Benton County
(Pro 6-2) 8-8-80

Date: August 13, 1980

From: G. L. Green, Division Administrator

Reply to Attn. of: HPD.2-OR

To: Mr. H. S. Coulter, State Highway Engineer
Oregon State Highway Division

The program change request to extend the westerly limits of the Walnut Blvd. project cannot be approved until an environmental document is prepared to cover that section. The final EIS only covered the section from Kings Blvd to Highland Drive. If the plan is to rebuild 1100 ft. to the west of Kings Blvd, a supplement to the final EIS will be required.

for E J Valach
G. L. Green

cc:
OSHD (D E Swan)
Region (Gary Potter)

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STATE HWY ENGR
AUG 15 '80
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FOR

Info	Inves	R/D	D/R	Sign	Act	File

2

9367

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to File No.:
PRO 6-2

August ~~8~~ 12, 1980

TO: G. L. Green, Division Administrator
Federal Highway Administration

Original Signed By
D. E. Swan

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Program Change
Project No. M-2120(1)
NW Kings Blvd.-NW Highland Dr. (Corvallis) Sec.
Benton County

I request your approval of a program change to extend the westerly limits approximately 1100 feet requiring modifications of the PR-1 form as follows:

1) Project Location: Change to read "City St., 25th St. to Highland Dr. (Corvallis)".

2) Miles: Change to read "0.91".

The overall project cost does not require changing for this action.

JLG:bke

cc: Gary Zehner

8-12-80
Paul Kenill denied this request unless we modify F.EIS. Gordon Wyatt says City wants to amend F.EIS. & get F.A. He will send a letter.

Form 734-3122

9367

City of Corvallis

CORVALLIS CITY HALL
501 S.W. MADISON AVENUE
CORVALLIS, OREGON 97330

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION (503) 757-6941

August 4, 1980

Duane O. Christensen
Final Design Engineer
222 Transportation Building
Salem, OR 97310

N.E. CIRCLE BOULEVARD, FAU 2110 (#74-589)
N.W. WALNUT BOULEVARD, FAU 2120 (#74-592)

N.E. Circle Boulevard

The existing northerly street right-of-way (R/W) line adjacent to the Sizzler Restaurant property (N.E. corner of N.W. 9th and Circle) is fairly critical and should control the proposed street construction alignment and the street R/W at the westerly terminus of the proposed project. Any additional R/W taking from this property should be kept to the absolute minimum necessary for reconstructing the curb radius and sidewalk at this corner.

The Robinson property located at the northwest corner of N.E. Belvue and Circle is another R/W control. The Robinson's believe that they own to the old 40-foot roadway line as provided in the original Willamette Dale Farms Subdivision and they apparently have a survey and Title Insurance to support their contentions. They also have stated that a City Engineer told them that their property line (P/L) was at the old 40-foot R/W line. I am aware that one of the City's Engineering Technicians (now deceased) did give them permission to use the additional 15-feet for parking when the present building was constructed and until the street was widened.

The City believes that the records clearly show that the additional 15-foot of R/W was deeded and dedicated for roadway purposes. Most, if not all, of the other property owners along the north side of Circle between ORE 99W and Belvue recognize the 55-foot R/W line. Copies of the appropriate records and deeds were given to Bob Rounds on 7-31-80.

If the street reconstruction encroaches within the 15-foot R/W area it will eliminate all off-street parking in front of this commercial building and will result in substantial litigation. The new street must avoid any R/W taking that would extend onto the Robinson property and beyond the present northerly R/W line of the 55-foot R/W.

As an attempt to resolve some of the R/W acquisition problems I have shown a proposed realignment of the construction centerline that begins at the present station 0+00 (intersection of the N.W. 9th and N.E. Circle Blvd. R/W centerline) and proceeds easterly on a N89°33'50" East bearing to a P.I. that would be 20± feet south of station 12+00 and thence northeasterly to intersect back into the centerline approximately at the point of intersection with N.E. Seavy Avenue. This proposed realignment is shown on the print transmitted herewith. The delta angle at station 12 would be approximately 2 degrees and, if you wish, a horizontal curve could be used to flatten out the angle. This realignment would also comply with Public comments, requests and recommendations received at the Public Hearing on the Draft Environmental Impact Statement and the Preliminary Engineering Design.

It appears that a realignment like this could avoid the Sizzler and Robinson problems and might avoid any taking for R/W along the northerly side except for the Goldblatt/McFadden property immediately east of the Albany - Toledo Branch of Southern Pacific Railroad. Most of the property between the two S.P.R.R. branches is also owned by Goldblatt/McFadden. The R/W acquisition might be limited to four or five property owners. Additional R/W will also be required on the north side at the easterly end of the project. This shift in alignment should also help the utility location problems.

After consultation with your staff on 7/31/80, I have prepared the recommended Typical Sections of N.E. Circle Boulevard (copies transmitted herewith). These Typical Sections will provide for on-street, Class III (OSHD) Bikeways between ORE 99W and the easterly project terminus. A 10-foot wide sidewalk is provided on the southerly side of Circle between N.W. 9th and ORE 99W to help make the transition between no bikeways and the on-street bikeways. A proposed monolithic curb and gutter with a 6-foot gutter plate is shown with the Typical Sections for use to delineate the on-street bikeways.

If possible,access to the properties should be controlled or limited. The Sizzler has one access drive into their parking lot at the west side of their building. They are presently also using a part of the McRae property on the east side of their building for parking and access. It would be very desirable to limit access to properties on the north between N.W. 9th and ORE 99W to no more than two driveways and to no more than two driveways to the Stoaks property on the south side. Access to the Goldblatt/McFadden property on the south side should be limited to no more than two or three and one to the Schudel property. Access on the north side should be limited to one driveway to the Goldblatt/McFadden property and limited to existing driveways or less on the remainder of the north side properties. All driveways should be constructed to the City's Standard Commercial Driveway Standards to assist ingress and egress to the properties and to cause as little impact as possible on traffic using Circle Boulevard.

The existing traffic signals at both N.W. 9th and ORE 99W intersections will require reconstruction. The proposed construction will provide for left-turn lanes on all approaches to both intersections. Because of the short distance between N.W. 9th and ORE 99W (less than 300 feet between stop lines) it would seem prudent that some type of coordination be provided. Also, the signal at ORE 99W requires railroad pre-emption. The left-turn lane marking between these two intersections should probably be similar to the standard two-way, left-turn lane markings rather than as shown on the plan.

I have noted that the preliminary plan calls for four curb inlet catchbasins to be installed at several locations, i.e., 2+59, 7+90, 21+50, and 26+50. I'm not sure why, but this does seem to be over-doing the drainage. Some type of connection will be required between the storm drainage sump-pump for the Pumlite property and the new storm drain system.

A proposed sanitary sewer extension from the existing manhole just west of the Albany - Toledo Branch westerly to Belvue should be included in the project construction. Information for this proposed extension was given to Bill Cole and Jack Sills. The City understands that this sewer extension will be a non-participating item for State and Federal funding.

N.W. Walnut Boulevard

Transmitted herewith are copies of recommended Typical Sections for N.W. Walnut Boulevard and a marked up print of the preliminary engineering plan. The proposed Typical Sections provide for revised street lane widths and on-street, Class III (OSHD) bikeways. Because of these changes the City hereby requests that the westerly terminus be moved westerly so that the project will begin at the intersection of N.W. 25th Street with N.W. Walnut Boulevard. This will also establish the section to which the City can then design and construct the remaining Substandard Section of Walnut west of 25th Street. The existing 44-foot curbed street section would be widened to the 58-foot section (68-feet at Kings) and sidewalks would be added on both sides as per the Typical Section.

The profile grade on Walnut Boulevard at Kings requires the raising of the Walnut grade by about 1-2 feet. Some reconstruction is also required on Kings Boulevard. This reconstruction should provide for a left-turn lane on Kings Boulevard as well as for left-turn lanes on Walnut. Kings Boulevard is proposed to extend to the north and west at some future time and it would seem appropriate that the intersection curb radius should be included in the design.

The proposed new facilities for the CH2M-Hill headquarters offices is proposed for the area on the southerly side of Walnut Boulevard between N.W. 25th and Kings Boulevard. We would anticipate that their access will be limited only to the side streets and not Walnut Boulevard.

The property lying southerly of Walnut Boulevard and between N.W. Kings and Rolling Green Way is included in the Timberhill Planned Development plans as commercial. Again, we would anticipate limiting access to this commercial property via the abutting side streets and that no access will be permitted directly to Walnut Boulevard. All other access to the Timberhill properties (abuts to Charlemagne and Carter Rawie Additions near N.W. 13th Street) along both sides will be limited to the street intersections as shown.

An attempt was made to construct the intersections of Rolling Green Way, Garryanna Street, 13th Street and Highland Boulevard to match the proposed grades for Walnut Boulevard. Hopefully, these intersections will be able to be used even though the curb returns will not match the new wider section. The odd-looking jog in the southwesterly curb return for Rolling Green Way provides for the future widening from 28 feet to 44 feet with all widening on the westerly side.

The Kings Boulevard, Rolling Green Way and Highland Boulevard intersections are proposed to be signalized in the future. All of these intersections should have the widened section for left-turn lanes on Walnut Boulevard.

A proposed Typical Section for the N.W. 13th to Highland Drive is included with the Typical Sections. As discussed, the eastbound bicycle path will be placed on the existing frontage street and the pedestrian sidewalks will connect to the existing walk on the south side of the frontage street. If necessary, the existing curb on the south side near Highland can be removed and replaced and the bikepath should cross the frontage road and go up behind the curb.

The existing R/W at Lot 11, Charlemagne Addition is pretty well fixed and any additional taking should be avoided if possible. The City had also previously acquired an additional 20-feet of R/W from the Wisconsin Lutheran Church with vehicle access control. The lot (Lot 3) at the S.W. corner of Highland and Walnut has also relinquished their right of access to Walnut. Access for the Northwest District (Nussuuni) Luthern Church should be limited to not more than one access per property and as far away from the Highland intersection as possible.

Most of the new subdivisions have 5-foot or 7-foot utility easements adjacent to and parallel with the street rights-of-way. These easements can be used for slope easements as well. The City will acquire the necessary slope easements except where other right-of-way acquisition is required.

I believe that the above covers most of the items that have been discussed. We stand ready to assist in whatever way we can to see that these projects are expedited so construction can begin in 1981.

A. GORDON WYATT
PROJECT COORDINATOR

gs

cc: Donnie R. Bedford
George C. Wills
W.E. Cole

attachments

1981 NW Kings Blvd.-Highland 9367
Dr. (Corvallis) Sec. of Walnut
Dr. [redacted] #1

C&A 5312 - 4-4-79, 2-25-76, 5-16-75

9367

2

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6-2

July 21, 1980

TO: G. L. Green, Division Administrator
Federal Highway Administration

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Preliminary Engineering (Phase 2)
Item No. M-65
Project No. M-2120(1)
NW Kings Blvd.-NW Highland Dr. (Corvallis) Sec.
Walnut Blvd. (FAU 2120)
Benton County

I request authorization, after statutory requirements have been fulfilled, to proceed with the portion of preliminary engineering, including utility preparatory work, necessary to obtain PS&E approval at an estimated total cost of $10,000 with obligation of $7,800 in Federal Funds.

This request is based on the fact that FHWA's adoption on July 1, 1980 of the Final Environmental Impact Statement titled "Walnut Boulevard" constitutes location/design approval.

JLG:bke

cc: H.S. Coulter
E.S. Hunter
C.O. Fredrickson
John Grassman
Gary Zehner

NOTED
H. S. COULTER

RECEIVED
STATE HWY ENG
JUL 22 '80
REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

9361

2.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:

ENV 3

July 17, 1980

NOTED
E. S. HUNTER

TO WHOM IT MAY CONCERN:

The enclosed copy of the Final Environmental Impact Statement for Walnut Boulevard in Benton County, Oregon, has been adopted by the Federal Highway Administration and filed with the Environmental Protection Agency and is being submitted for your review and comment. This document is being distributed on behalf of the Federal Highway Administration in accordance with 23 CFR 771.

If it is your desire to further explore the impact of this project on the community, please address your comments to the Federal Highway Administration, The Equitable Center, Suite 100, 530 Center Street NE, Salem, Oregon 97310. This office would appreciate a copy of your comments.

Very truly yours,

Gary A. Potter

Gary A. Potter, Manager
Environmental Section
412 Transportation Building
Salem, OR 97310

GAP:ct

Enclosure

RECEIVED
TECHNICAL SERVICES

JUL 17'80

REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

Form 734-3122

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

FHWA-OR-EIS-79-05-F

WALNUT BOULEVARD

Kings Boulevard to Highland Drive Section
of N.W. Walnut Boulevard
Benton County, Oregon

Oregon Project M-2120(1)
City of Corvallis, Oregon

FINAL
ENVIRONMENTAL IMPACT STATEMENT

U.S. DEPARTMENT OF TRANSPORTATION

Federal Highway Administration
and
Oregon State Department of Transportation

Submitted pursuant to 42 U.S.C. 4332(2) (c),
and 23 U.S.C. 128(a) and 49 U.S.C. 1653(f)

5-14-80
Date

E. J. Hunter
Assistant State Highway Engineer

7-1-80
Date

Robert B. Hathaway
Federal Highway Administration Official

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SUMMARY
OF
FINAL ENVIRONMENTAL IMPACT STATEMENT
for
Walnut Boulevard
from Kings Boulevard to Highland Drive
City of Corvallis, Oregon

ADMINISTRATION ACTION

( ) Draft (X) Final
( ) Section 4(f) Statement attached

ADDITIONAL INFORMATION

The following individuals may be contacted for further information concerning the planned and proposed projects and the contents of this environmental impact statement: Comments should be sent to Mr. Gary Potter.

Mr. Glen Green
Division Administrator
Federal Hwy. Administration
Post Office Box 300
Salem, Oregon 97308
Phone: 378-3835

Mr. Gary Potter
Manager
Environmental Section
Oregon State Hwy. Division
Salem, Oregon 97310
Phone: 378-8486

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Program Management Engineer
Oregon State Hwy. Division
Salem, Oregon 97310
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PROJECT PURPOSE AND NEED

The purpose of the proposed project is to complete the development of Walnut Boulevard as a continuous arterial route from Harrison Boulevard to N.W. 9th Street to accommodate traffic needs in a rapidly developing portion of the Corvallis urban area.

ALTERNATIVES CONSIDERED

Build Alternative (Selected)

This alternative has been selected for advancement. It will create a new four lane, 0.75 mile link in the Walnut Boulevard arterial route. It will extend from Kings Boulevard to Highland Drive, and complete the route between Harrison Boulevard and N.W. 9th Street. The project will feature: four traffic lanes throughout its length, additional left-turn lanes at intersections with major cross streets, a bike path on the north side of the roadway, and a walkway on the southside of the roadway.

No-Build Alternative

The No-Build Alternative assumed that the proposed project would not be built. The No-Build Alternative would not preclude traffic control improvements on existing sections of Walnut Boulevard or other streets to mitigate growing traffic and safety problems.

BENEFICIAL AND ADVERSE ENVIRONMENTAL IMPACTS

The beneficial and adverse environmental impacts of the proposed FAU project and the No-Build Alternative are summarized on pages vii and viii. The Build Alternative will provide significant traffic service benefits. The project is the last link in a continuous arterial street route, and is consistent with the Comprehensive Plan for the Corvallis urban area.

The project is in an urban setting. No threatened or endangered plant or animal species inhabit the project area. There are no known historic, archaeologic or paleontologic resources in the project area. No relocations of residents or businesses will be required. There are no properties on the Statewide Inventory of Historic Sites and Buildings and there are no designated Corvallis Historical Landmarks in the project vicinity. The project is consistent with the Oregon State Implementation Plan for air quality.

ENTITIES FROM WHICH COMMENTS WERE REQUESTED

The following agencies, private interest groups, and individuals were provided copies of the Draft Environmental Impcat Statement. Those agencies that submitted comments on the Draft Environmental Impact Statement are denoted with an asterick (*).

SUMMARY OF BENEFICIAL IMPACTS
KINGS BOULEVARD TO HIGHLAND DRIVE

Probable Beneficial Impacts

Type of Impact	Build Project	No-Build Alternative
1. Traffic Service Impact	Reduces travel times; Reduces congestion; Arterial route continuity; Increased arterial capcity; Reduces traffic on other streets; Improved property accessibility; Improved traffic safety.	Reduces traffic on existing sections of Walnut Boulevard.
2. Hydrology/Water Quality Impact	Improved surface drainage and reduction of occasional minor flooding.	None
3. Geology and Soils	None	None
4. Biota/Ecology	None	Retains certain wildlife habitats - probably over short-term only.
5. Social Impact	Improves accessibility to public facilities and major trip attractors; Improves emergency vehicle response times; Avoids traffic intrusion in other neighborhoods.	Avoids loss of neighborhood cohesion due to traffic intrusion along some existing sections of Walnut Boulevard.
6. Land Use Impact	Conforms to Comprehensive Plan - existing and proposed; Supports planned land developments.	Avoids commitment of undeveloped land for street purposes temporarily.
7. Open Space, Parks and Recreation	Improved neighborhood park access; Provides continuous bikeway; Improved access to external recreational areas.	Reduces traffic near neighborhood park.
8. Economic Impact	User cost savings; Future property value gains due to improved accessibility (esp. commercial properties); Improved property values along other streets due to traffic growth.	Avoids minor residential property value loss relating to homes facing Walnut Boulevard.
9. Jurisdictional Impact	See Land Use Impact	None
10. Public Services	Facilitates installation of needed storm drainage system; Improves emergency vehicle response times.	None
11. Air Quality Impact	Reductions in emissions along other streets.	Avoids increase in emissions along Walnut Boulevard.
12. Noise Impact	Minor noise reductions along other streets.	Avoids significant noise increase in undeveloped section (temporarily).
13. Historic, Archaeologic and Paleontologic Resources	None	None
14. Aesthetics	Provides new vistas from the roadway.	Avoids loss of vistas off roadway.
15. Displacements	None	None

SUMMARY OF ADVERSE IMPACTS
KINGS BOULEVARD TO HIGHLAND DRIVE

Type of Impact	Build Project	No-Build Alternative
1. Traffic Service Impact	Minor, temporary traffic disruption during construction.	Increases travel times; Indirect travel; Increases congestion; Lack of arterial street continuity; Increased traffic other residential streets.
2. Hydrology/Water Quality Impacts	Slightly increased surface runoff; Requires special treatment of a spring area.	None
3. Geology and Soils	Minor cuts, and fills; erosion control will mitigate.	None
4. Biota/Ecology	Removes some existing wildlife habitat.	None
5. Social Impact	Detracts from neighborhood cohesion due to traffic intrusion where homes front on Walnut Boulevard.	Reduced accessibility to public facilities and socio-economic opportunities.
6. Land Use Impact	Promotes land development consistent with comprehensive land use plans.	Inconsistent with Comprehensive Plan; May creates pressure for development elsewhere at variance with Comprehensive Plan; May inhibit growth in Walnut corridor over long-term.
7. Open Space, Parks and Recreation	None	Inhibits bikeway usage in Walnut corridor.
8. Economic Impact	Could lower residential property values where increased traffic volumes pass through areas (Aggregate impact is beneficial).	Increases road user costs; Adversely affects land values relating to future developments.
9. Jurisdictional Impact	None	Fails to implement planned project.
10. Public Services	None	Lost opportunity to coordinate installation of utilities with street construction; Longer emergency vehicle response times.
11. Air Quality Impact	Small increase in pollutant concentrations along Walnut Boulevard.	Small increase in pollutant concentrations along other streets.
12. Noise Impact	Increased noise levels on vacant property alongside Walnut Boulevard between Kings Blvd. and Highland Drive	Increased noise on other streets (N.E. Circle, 29th Street, Kings Boulevard).
13. Historic, Archaeologic and Paleontologic Resources	None	None
14. Aesthetics	Disruption of vistas of natural setting from existing neighborhood.	None
15. Displacements	None	None

Federal

*U.S. Environmental Protection Agency
    Federal Energy Administration

*U.S. Department of Energy

U.S. Department of Agriculture
*   Soils Conservation Services
    Siuslaw National Forest

U.S. Department of the Army
    Corps of Engineers

U.S. Department of Commerce
    National Oceanic and Atmospheric Administration

U.S. Department of Housing and Urban Development

*U.S. Department of the Interior
    Environmental Project Review
    Assistant Secretary, Program Policy
    Deputy Assistant Secretary, Environmental Affairs
    Bureau of Outdoor Recreation, Pacific NW Office
    Geological Survey

National Marine Fisheries Services

U.S. Department of Transportation
    Coast Guard

Federal Aviation Administration

U.S. Postal Service, Downtown Corvallis Branch

State

Oregon Economic Development Division

*Oregon Department of Environmental Quality

Oregon Department of Geology and Mineral Industries

Oregon Intergovernmental Relations Division

Oregon Department of Land Conservation and Development

Oregon Department of Transportation
Parks Department
State Historic Preservation Office

Oregon Department of Fish and Wildlife

Oregon Department of Forestry

*Oregon Division of State Lands

Oregon Water Resources Board

Oregon Department of Agriculture
Soul and Water Conservation Commission

Oregon State Library

Oregon State University
Office of the President
University Library
Extension Service, James R. Pease

County

Benton County Commissioners

Benton County Planning Department

Benton County Soil and Water Conservation District

Benton County Public Works Department

Linn County Commissioners

Linn County Planning Department

Linn County Public Works Department

City

Corvallis City Council

Mayor Alan Berg

Corvallis City Planning Commission

Corvallis City Planning Department

Corvallis City Department of Public Works

Corvallis City Parks and Recreation Department

Corvallis City Library

Other Agencies

School District 509J

Linn-Benton Community College

Oregon District 4 Council of Governments

Others

Oregon Environmental Council

League of Women Voters

Corvallis Chamber of Commerce

1,000 Friends of Oregon

Committee for Livable Neighborhoods

Timberhill Homeowner's Associations (3)

Corvallis Home Builders Association

Corvallis Realtors Board

Hewlett-Packard, Inc.

Timberhill Acres Development Corporation

King's View Realty

Harmon Development Corporation

Dorsey Bus Company

R. C. Wilson

Citizens for a Cleaner Corvallis

This Draft Environmental Impact Statement was made available to the Environmental Protection Agency and to the Public on April 27, 1979.

Chapter 1

PROJECT SETTING

Project Need and Background

The need for a major arterial street system around the northwesterly section of the City of Corvallis was first indicated in a planning study conducted for the City in the mid-1940's. Subsequent planning and transportation needs studies performed during the 1950's, 1960's and early 1970's continued to emphasize the need for a peripheral system. The later studies included the Walnut Boulevard route. The most recent of these studies* was adopted by the City Council as a "guideline for future street improvements." The major street network included in the CH2M study was utilized in developing the Federal Aid Urban (FAU) network for the Corvallis Urbanized Area. The FAU Network was approved by the Oregon Department of Transportation and Federal Highway Administration in 1974.

Initial feasiblility studies for Walnut Boulevard was conducted by City engineering staff in 1973. In the same year, the City Council adopted the general plans outlined in these studies and directed the staff to pursue the possibility of obtaining Federal Aid Urban Highway Funds for financing construction of several major projects. The listing of the projects, as approved by the city, county and state indicated that the proposed project on Walnut Boulevard was of the highest priority to meet the transportation needs of the area.

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* Corvallis Urban Area Traffic Safety Study and Recommended Street System Improvements: Cornell, Howland, Hayes and Merryfield (CH2M); 1971

A project assessment for determining the appropriate level of environmental impact analysis for the proposed Walnut Boulevard project was approved in October 1975. The project was classified as "Category 2"* requiring the preparation of an environmental impact statement.

The approval of the Project Assessment was conditioned upon the fact that environmental impact studies would be conducted and Environmental Impact Statements (EIS) be written to cover the entire existing and proposed extensions of Walnut Boulevard from N.W. Harrison Boulevard to N.W. 9th Street, and of Circle Boulevard from N.W. Harrison Boulevard to the Corvallis-Albany Highway. The consulting firm of Wilbur Smith and Associates was retained by the City to do the environmental studies and to prepare separate draft Environmental Impact Statements for the Walnut and Circle Boulevard routes.

The Walnut Boulevard route, extending from N.W. Harrison Boulevard to N.W. 9th Street, is the subject of this document.

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*Category 2 projects include highway improvement projects that utilize existing facility corridors but have significant economic, social, or environmental impact as defined by the

Oregon Action Plan for Transportation Planning.
Proposed Project

The proposed project will extend Walnut Boulevard about 0.75 miles between N.W. Kings Boulevard and N.W. Highland Drive. Construction will take place on vacant land previously dedicated for the route. The project is part of a planned Walnut Boulevard route which extends from N.W. Harrison Boulevard to N.W. 9th Street.

Two other projects along the route were recently completed by the City of Corvallis:

> Construction of a 1.76-mile Walnut Boulevard section between N.W. Harrison Boulevard and N.W. Witham Hill Drive.
>
> Widening of the westerly 4,000 feet of the section of Walnut Boulevard between N.W. Witham Hill Drive and N.W. 25th Street to provide four traffic lanes meeting major arterial street standards. The remaining 2,000 feet will be widened to four traffic lanes at a future date.

The location of each project is indicated in Figure 1.1. Figure 1.2 shows an aerial oblique of the Walnut Boulevard route.

Purpose of Projects

The City of Corvallis proposes to undertake this project for the following reasons:

1) To complete long planned portions of the City's arterial/collector street network;

2) To accommodate an increasing volume of traffic in a safe and efficient manner in developing sections of Corvallis.

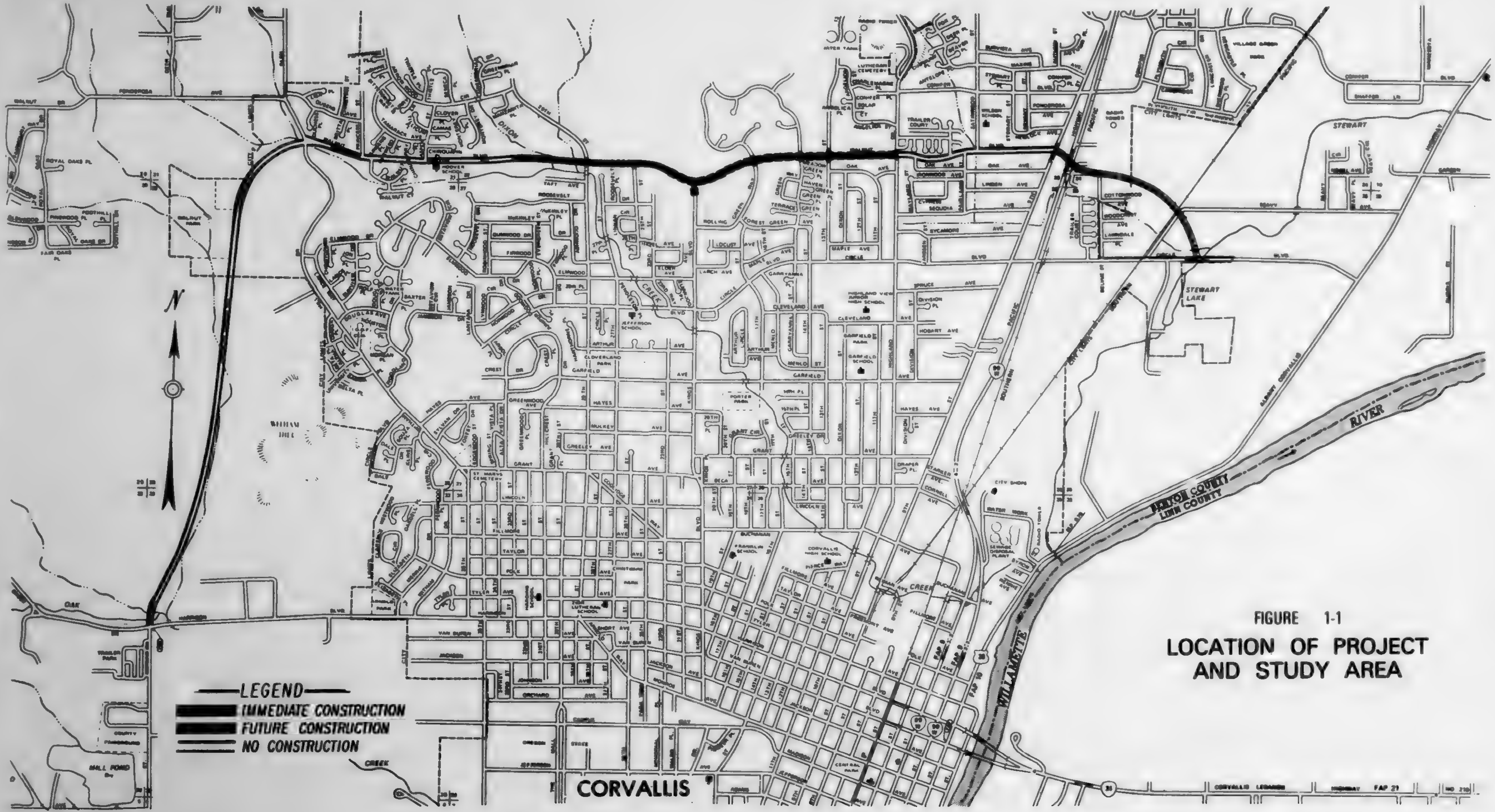

LEGEND
IMMEDIATE CONSTRUCTION
FUTURE CONSTRUCTION
NO CONSTRUCTION
N
CORVALLIS
WILLAMETTE RIVER
BENTON COUNTY
LINN COUNTY
STEWART LAKE
SOUTHERN PACIFIC
CORVALLIS LEBANON HIGHWAY FAP 21

FIGURE 1-1

LOCATION OF PROJECT AND STUDY AREA

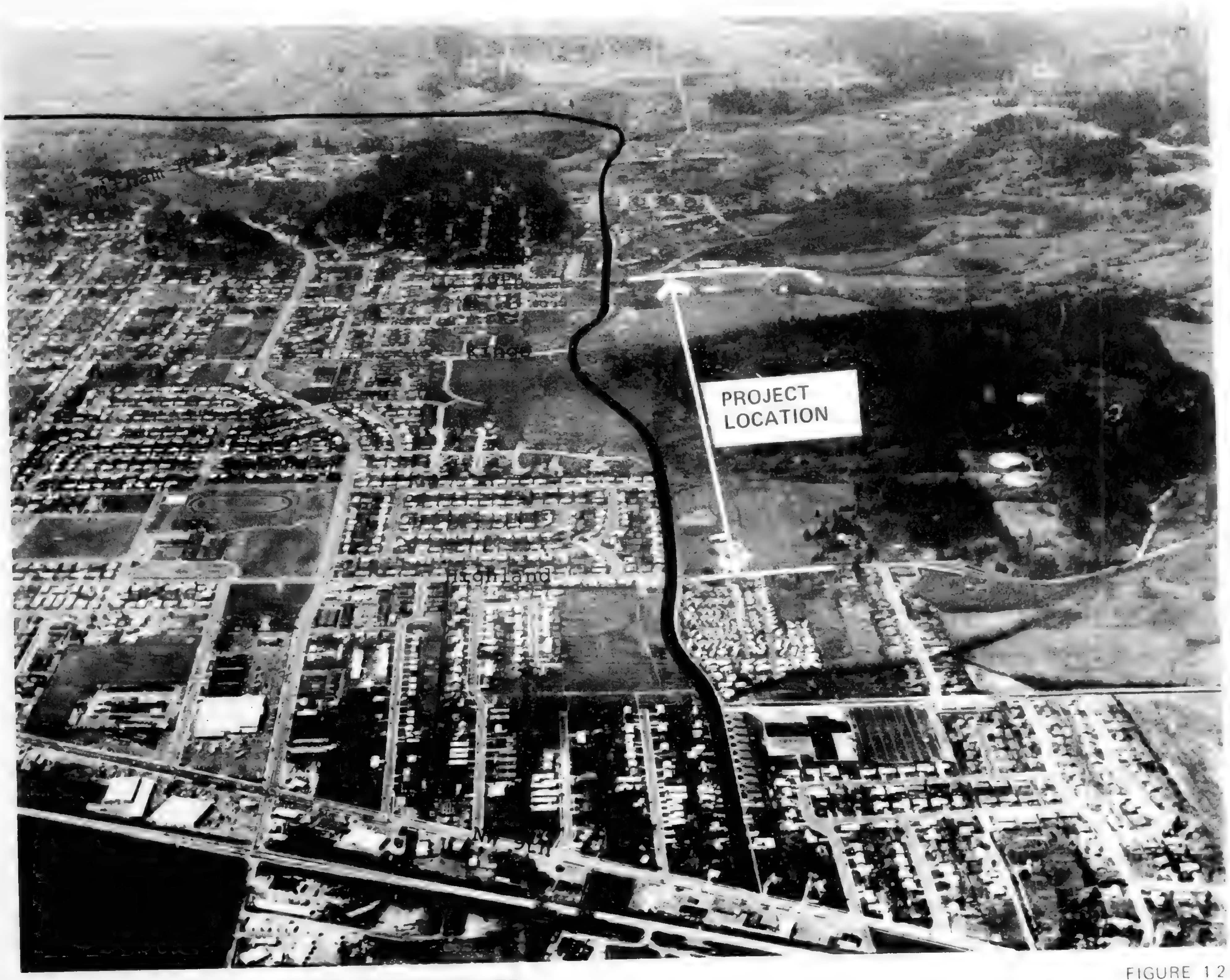

William
Highland
PROJECT
LOCATION

FIGURE 12

AERIAL VIEW OF WALNUT BOULEVARD ROUTE

Comprehensive planning studies for Corvallis and the surrounding area conducted during the 1950's and 1960's have included Walnut Boulevard as part of the circumferential street system in the northwest section of the urban area. Additionally, in-depth transportation studies recommended the completion of Circle Boulevard and Walnut Boulevard through the northwest quadrant of the city. As indicated on Figure 1-1, Walnut Boulevard in the northwest quadrant was completed with city funds in 1978. Circle Boulevard remains to be completed and is the subject of a separate final environmental impact statement now in preparation. These studies provided the basis for obtaining rights-of-way and construction for major portions of these routes as they presently exist. The continued population growth in northwest Corvallis and the resulting increases in traffic will amplify the need for these projects.

Public Hearing Results

The Draft Environmental Impact Statement was made available to the public on April 27, 1979. A combined Public Corridor/Design Hearing was conducted at the Highland View Intermediate School on May 30, 1979. Following a 4:30 p.m. to 7:30 p.m. informal information session, the hearing was opened at 7:30 p.m. with approximately 45 persons in attendance. Written and oral testimony received from 45 persons in addition to petitions containing 114 signatures were overwhelmingly in favor of the proposed project.

Five areas of concern were expressed:

1) Completion of the unfinished easterly 2,000 feet widening improvement project between N.W. Witham Hill Drive and N.W. Kings Boulevard.

2) Construction of the N.W. Lantana Drive to N.W. Witham Drive section of N.W. Circle Boulevard.

3) An interest in rezoning residential property located in the vicinity of 9th Street and Walnut Boulevard to accommodate professional offices.

4) Concern for safety of children crossing major streets.

5) Completion of Walnut Boulevard east from 9th Street to Highway 20.

Copies of the Hearing Study Transcript may be obtained at the City of Corvallis Engineer Division.

Chapter 2

PROJECT ALTERNATIVES

Two alternatives were considered in the draft Environmental Impact Statement, a No-Build Alternative and a Build Alternative. The Corvallis City Council, on 15 October 1979, selected the Build Alternative as the preferred alternative.

Build Alternative - Selected

A new four-lane roadway will connect the existing sections of Walnut Boulevard which presently terminate at Kings Boulevard on the West and Highland Drive on the east. The proposed four lane 0.75-mile long street extension will be aligned in a generally east-west direction. The western section, between Kings Boulevard and Rolling Green Way, traverses presently undeveloped land. A large residential development, Timberhill Southeast-Second Addition, has been approved and development has started immediately adjacent to the north side of the proposed alignment from Rolling Green Way to 13th Street. The remaining section from 13th Street to Highland Drive abuts high density multiple family apartments on the south side, and church properties on the north side.

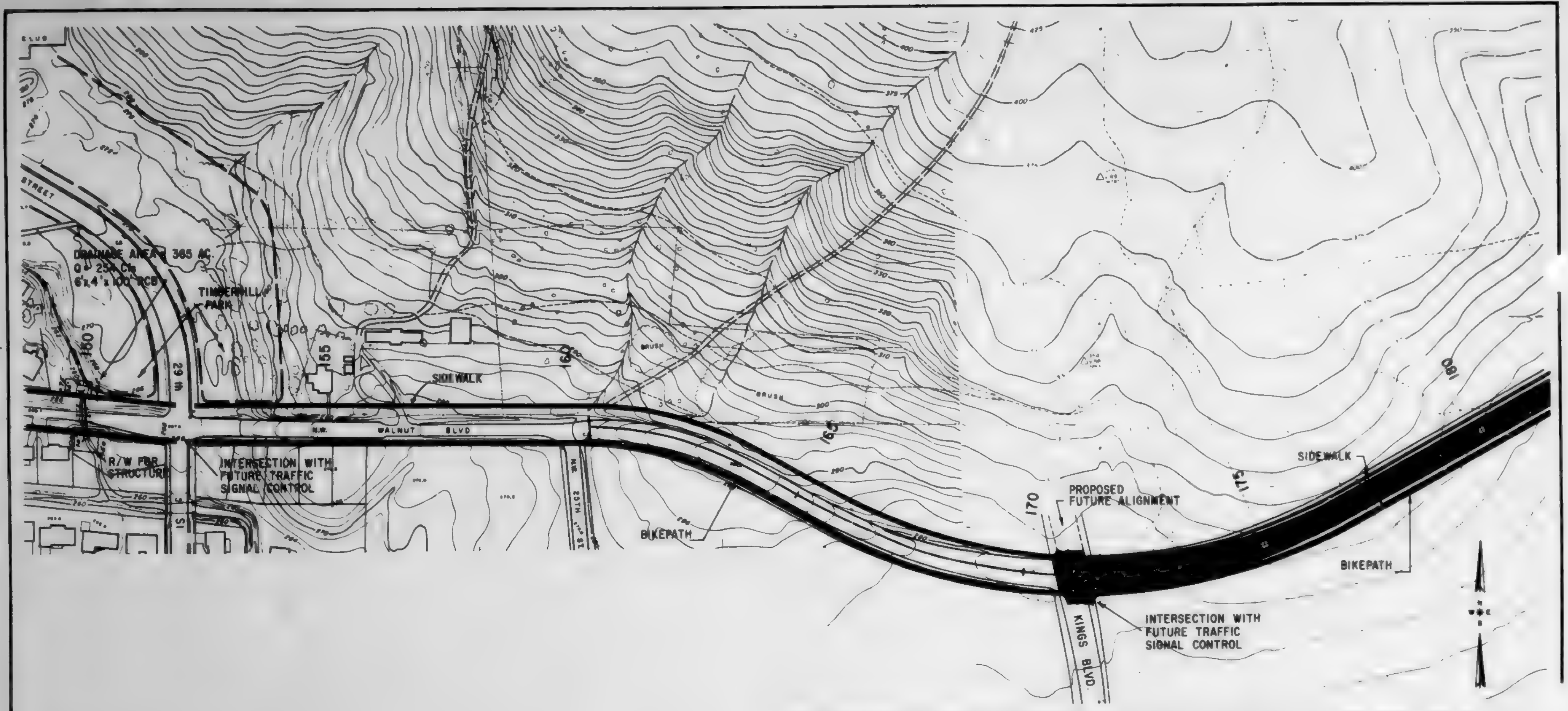
The proposed connection will (1) provide a continuous circumferential arterial route across northwestern Corvallis; (2) facilitate movements to and from the present and planned residential developments along Walnut Boulevard; (3) provide an alternate traffic corridor to the Circle Boulevard route; and (4) become a primary arterial access route to the Good Samaritan Hospital.

The alignment for this section has been established as a result of right-of-way dedications provided with previous subdivision plats. The City intends that all abutting land access will be provided only at the street intersections with Kings Boulevard, Rolling Green Way, Garryanna Street, 13th Street and Highland Drive. A frontage street was constructed in 1974 to provide private driveway access to the residential properties on the south side of Walnut Boulevard between 13th Street and Highland Drive.

The preliminary horizontal and vertical alignment of the proposed new roadway is presented in Figure 2-1, Sheets 1 and 2; typical cross-sections are shown in Figure 2-2.

The typical section will provide a 54-foot wide curbed street with widening to 64 feet at Kings Boulevard, Rolling Green Way and Highland Drive to provide for separate left-turn lanes. A Class I bikeway is planned along the northerly side of the roadway for the entire length. A 5-foot wide walkway throughout the entire length of the proposed project is provided on the south side. A 6-foot wide parkway strip will be provided between the curb, the bikeway, and the sidewalk.

The alignment starting at Kings Boulevard parallels the contour lines of the foothills as close as possible with a succession of gentle left and right curves over a crest with grades of 4.5 percent on the west and up to 6.0 percent on the east


STREET
DRAINAGE AREA 365 AC.
Q= 254 Cfs
6'x4'x100' RCB
TIMBERHILL PARK
29 th
150
155
160
165
170
175
180
SIDEWALK
N.W. WALNUT BLVD
R/W FOR STRUCTURE
INTERSECTION WITH FUTURE TRAFFIC SIGNAL CONTROL
N.W. 25TH ST.
BIKEPATH
PROPOSED FUTURE ALIGNMENT
KINGS BLVD.
INTERSECTION WITH FUTURE TRAFFIC SIGNAL CONTROL
SIDEWALK
BIKEPATH

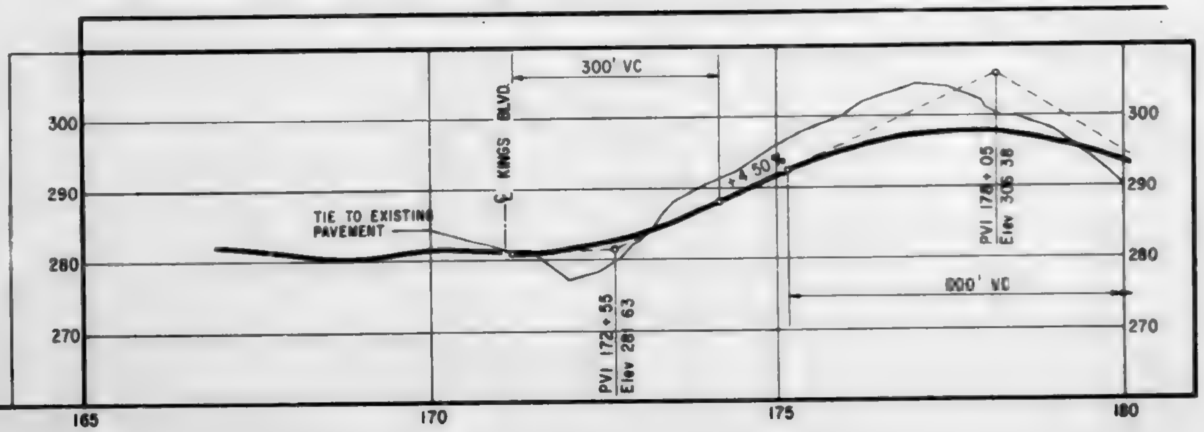


FIGURE 2-1 SHEET 1
PROPOSED ALIGNMENT
WALNUT BOULEVARD

0 100' 200' 300' 400'
HORIZONTAL SCALE
0 10' 20' 30' 40'
VERTICAL SCALE

9/30/77

NOTE: The section of Walnut Boulevard West of N.W. 25th street was widened and improved by the City of Corvallis in 1978 with the bikeway on the North side and sidewalk on the South side of the roadway. The modified configuration would also apply to sections of the route east of 25th street, including the proposed project.

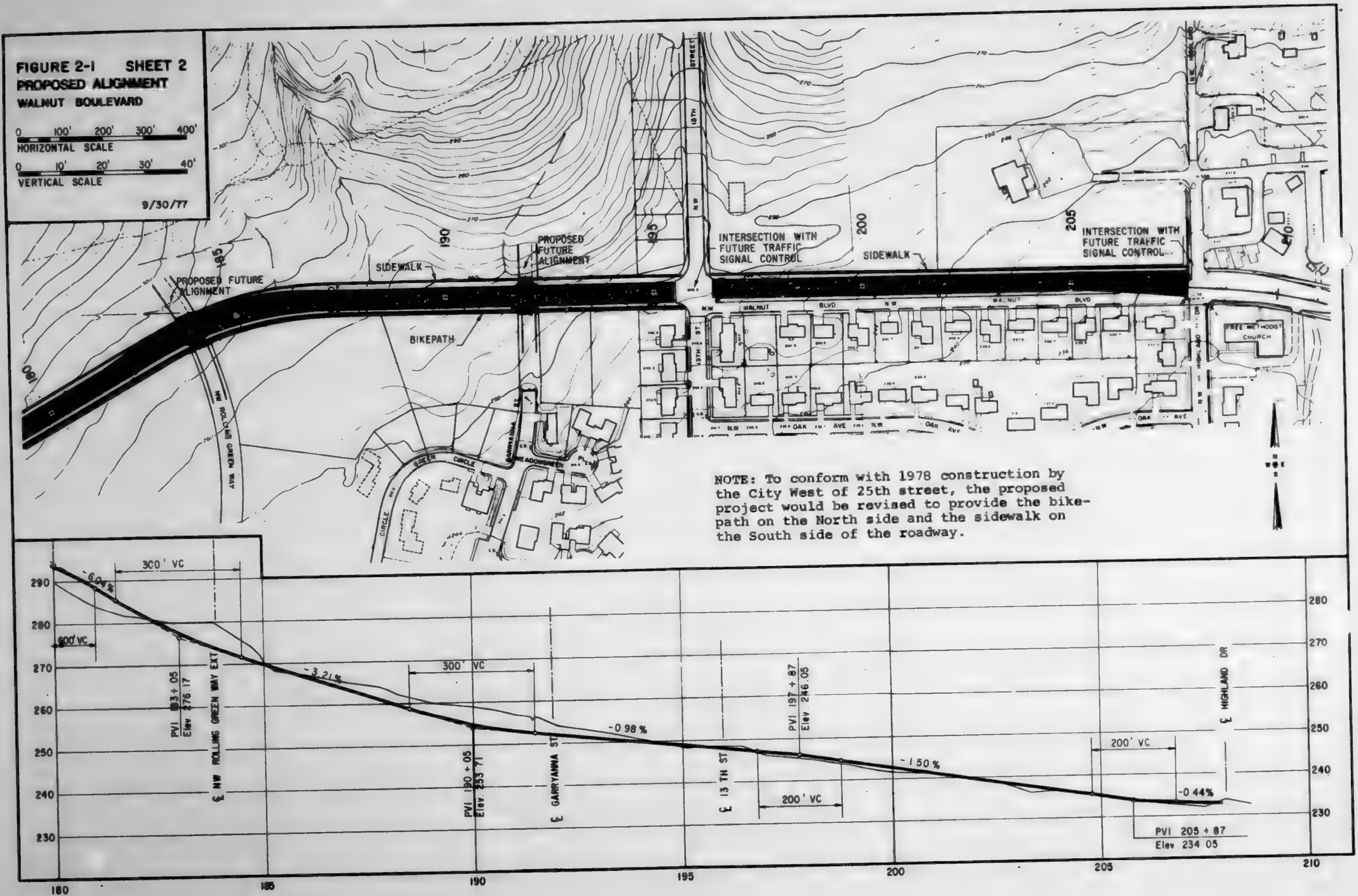


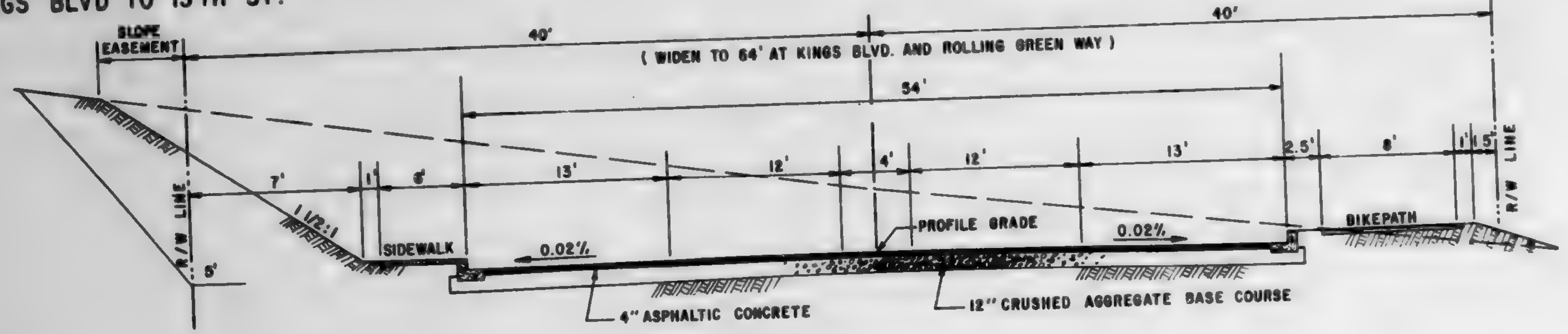
FIGURE 2-1 SHEET 2
PROPOSED ALIGNMENT
WALNUT BOULEVARD

9/30/77

NOTE: To conform with 1978 construction by the City West of 25th street, the proposed project would be revised to provide the bikepath on the North side and the sidewalk on the South side of the roadway.

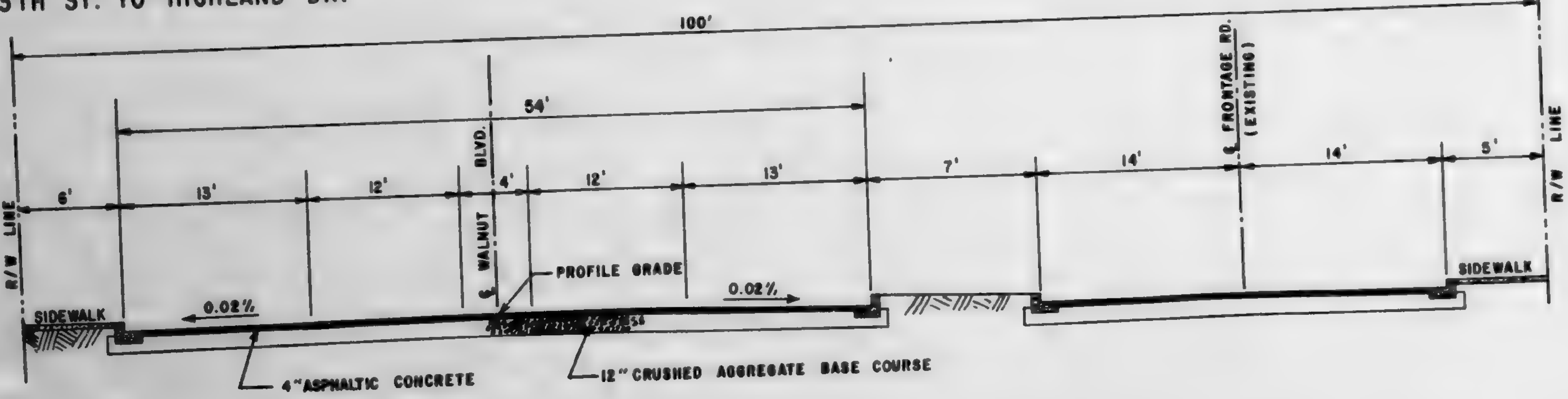
0 100' 200' 300' 400'
HORIZONTAL SCALE
0 10' 20' 30' 40'
VERTICAL SCALE
180
185
190
195
200
205
210
PROPOSED FUTURE ALIGNMENT
SIDEWALK
PROPOSED FUTURE ALIGNMENT
NW 13TH STREET
INTERSECTION WITH FUTURE TRAFFIC SIGNAL CONTROL
SIDEWALK
INTERSECTION WITH FUTURE TRAFFIC SIGNAL CONTROL
BIKEPATH
NW ROLLING GREEN WAY
GARRYANNA ST
GREEN CIRCLE
MEADOWGREEN
NW WALNUT BLVD
NW OAK AVE
NW HIGHLAND DR
FREE METHODIST CHURCH
300' VC
-6.04%
200' VC
PVI 183 + 05
Elev. 276.17
℄ NW ROLLING GREEN WAY EXT
-3.21%
300' VC
PVI 190 + 05
Elev. 253.71
℄ GARRYANNA ST
-0.98%
℄ 13 TH ST
200' VC
PVI 197 + 87
Elev. 246.05
-1.50%
200' VC
-0.44%
PVI 205 + 87
Elev 234 05
℄ HIGHLAND DR
290
280
270
260
250
240
230

KINGS BLVD TO 13TH ST.



40'
40'
SLOPE EASEMENT
(WIDEN TO 64' AT KINGS BLVD. AND ROLLING GREEN WAY)
54'
7'
1'
6'
13'
12'
4'
12'
13'
2.5'
8'
1'
1.5'
R/W LINE
R/W LINE
5'
1 1/2:1
SIDEWALK
0.02%
PROFILE GRADE
0.02%
BIKEPATH
4" ASPHALTIC CONCRETE
12" CRUSHED AGGREGATE BASE COURSE

13TH ST. TO HIGHLAND DR.



100'
54'
℄ FRONTAGE RD. (EXISTING)
6'
13'
12'
℄ WALNUT BLVD.
4'
12'
13'
7'
14'
14'
5'
R/W LINE
R/W LINE
PROFILE GRADE
0.02%
0.02%
SIDEWALK
SIDEWALK
4" ASPHALTIC CONCRETE
12" CRUSHED AGGREGATE BASE COURSE

NOTE: Bikepath-sidewalk configuration to conform with 1978 city construction west of 25th Street.

9/30/77

FIGURE 2-2 Sheet 1
TYPICAL ROADWAY SECTIONS- WALNUT BOULEVARD

side. The section from Rolling Green Way to Highland Drive is generally straight with grades gradually decreasing from 3.2 percent to 0.4 percent near Highland Drive.

Available soils data indicate that there are no foundation problems in this section. The top two feet of material is plastic loam with the top 1.5 feet being top soil. This top soil will be removed and the lower portion of the soft loam will be compacted. The natural drainage will be intercepted into the storm drainage system. Curb inlets, catch basins, and a storm drainage system are required for this entire section of the roadway.

The right-of-way between Kings Boulevard and Highland Drive is presently dedicated as 80 feet in width, as a part of the previous platting of adjacent lands. Additional rights-of-way and easements will be obtained in areas where slope construction entends beyond existing right-of-way limits. The City has obtained and recorded easements for street and utility purposes from the properties along the northerly side of Walnut Boulevard on both sides of N.W. 13th Street. Easements on the northside of Walnut between N.W. 13th Street and Highland Drive will be obtained.

No-Build Alternative

With this alternative, the Walnut Boulevard route would remain unconnected between N.W. Kings Boulevard and N.W. Highland Drive. Access to the residential properties along the south side between those streets would be provided by the north-south streets, and the developers of adjacent properties would probably be required to provide local street connections for access.

Chapter 3

EXISTING ENVIRONMENTAL SETTING

Introduction

The existing environmental setting of the proposed project is described in terms of various characteristics of the physical and human environment. The study area encompasses a corridor of land within approximately one quarter mile of the planned and existing sections of Walnut Boulevard between Harrison Boulevard and N.W. 9th Street. This is the area which would be impacted by the proposed and planned projects.

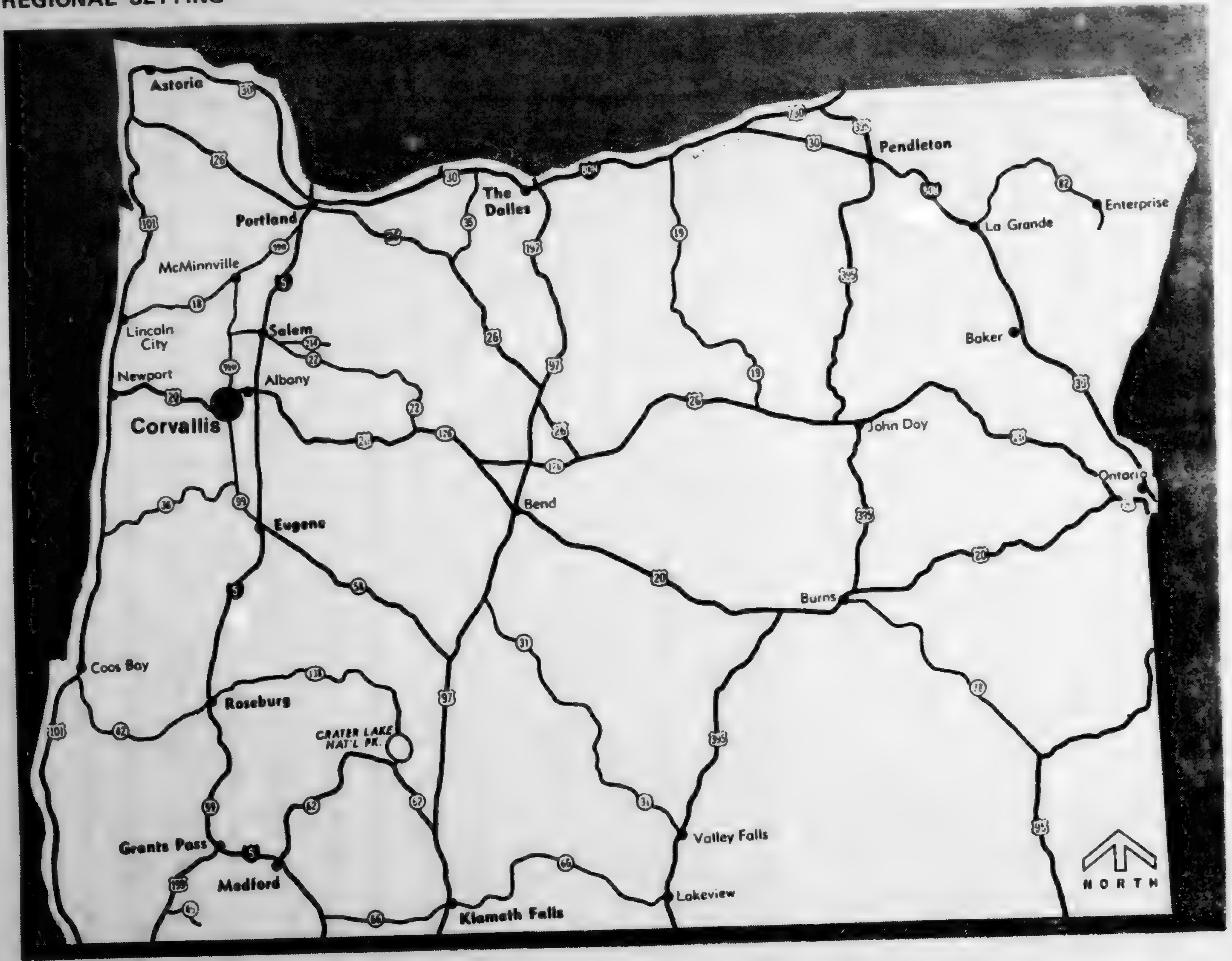
Physical (Natural) Environment

Relevant aspects of the physical environment covered in this study include: geographic setting, climate, topography, hydrology, geology, seismicity, soils, and biota.

Geographic Setting - The City of Corvallis is located on the western side of the Willamette River Valley on a relatively flat alluvial plain occasionally punctuated on the north and west by the foothills of the Coast Ranges. Figure 3-1 shows the regional setting of the City which is about 41 east of the Pacific Coastline and 81 miles south of Portland.

Climate - The climate of the Corvallis area is of a marine type with warm, dry summers and mild, wet winters. Average annual precipitation is about 40 inches with rain occurring mostly during the period from November through March. The annual average snowfall is eight inches; however, accumulations on the

FIGURE 3-1
REGIONAL SETTING


Astoria
Portland
McMinnville
Lincoln City
Salem
Newport
Albany
Corvallis
Eugene
Coos Bay
Roseburg
CRATER LAKE NAT'L PK.
Grants Pass
Medford
Klamath Falls
The Dalles
Bend
Pendleton
La Grande
Enterprise
Baker
John Day
Ontario
Burns
Valley Falls
Lakeview
NORTH

valley floor seldom exceed four inches. Due to marine influences, there are few severe temperature extremes in the Willamette Valley area. The mean monthly temperature varies from 38.3 degrees in January to 66.4 F degrees in July. In the Corvallis area, temperatures of 90 F degrees or more occur on an average of 10 to 15 days per year; temperatures below 32 F occur 60 to 70 days a year.

Except during unusual storm conditions, wind velocity is typically low throughout the year in the Willamette Valley. Prevailing winds are from northerly directions between May and September and from southerly directions during the rest of the year. In the winter, cold air near the surface in conjunction with cloudy skies reduces atmospheric mixing near ground level and results in high concentrations of carbon monoxide. Annual average relative humidity in the area is 89 percent at 4:00 AM, 74 percent at 10:00 AM, 60 percent at 4:00 PM, and 82 percent at 10:00 PM. Exceptionally dry periods occur during temperature extremes in both summer and winter when humidity may drop to about 10 percent.

Average cloudiness (percent of sky covered with clouds) ranges from 88 percent in December to 40 percent in July. Average solar radiation ranges from 612 Langleys* per day in July to 83 Langleys per day in December.

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*One Langley is defined as one calorie of solar energy per square centimeter per minute.

Winter inversions only occur in periods of little or no rainfall and foggy periods; there is usually enough wind and rain to practically eliminate winter inversions. Summer inversions in the Willamette Valley are much more prevalent.

Topography - The topography of the planning area is divided into two distinct sub-areas: the Willamette Valley floor or terraces, and the foothills at the northwesterly periphery of the city. Elevations range from 227 feet at the eastern end of Walnut Boulevard to 507 feet at the top of Cemetery Hill near Sunview Drive, and 491 feet at the top of Witham Hill west of Witham Hill Drive. In the past, elevations below 215 feet have been exposed to floods, but flood control projects in recent years have reduced the frequency of flooding.

Slopes in the flood plain and on the river terraces generally do not exceed three percent. Slopes in the hill areas range from 3 to 12 percent for the lower slopes and up to about 26 percent for the steeper hilly areas near Witham Hill Drive.

Roadway grades and ground slopes along the western section of Walnut Boulevard between N.W. Harrison Boulevard and Walnut Park range up to about 3 percent. East of Walnut Park, a 6 percent grade is required to reach the grade line of Witham Hill Drive. A 6 percent grade will also be required along the proposed new section of Walnut Boulevard between Kings Boulevard and Rolling Green Way, with natural slopes exceeding 10 percent north of the roadway.

Hydrology - Figure 3-2 shows the drainage basins in the Corvallis area. The study area lies within the Sequoia Creek, Sequoia Ditch, Oak Creek, and Dixon Creek Drainage Basins. Sequoia Ditch is a man-made drainage ditch that empties into Sequoia Creek. Below Walnut Boulevard, Dixon Creek follows mostly natural channels through the city to its confluence with the Willamette River. Oak Creek contains water most of the year. However, both Sequoia Creek and Dixon Creek are seasonal in that during the summer the creeks are dry. Dixon Creek does contain a few wet spots where water stands year round. The eastern most fork of Dixon Creek at Timberhill Park, is normally dry. The western fork normally has water at Walnut Boulevard.

The flood plain of the Willamette and Marys Rivers, as defined by the U.S. Corps of Engineers for the 100-year flood period (1 percent annual flooding hazard), is also shown in Figure 3-2. Most drainage problems that exist in the Corvallis area are due to the long periods of rain which occur, and the presence of highly impermeable soils in some areas, particularly those areas along hillsides. The area does contain a few small springs which add to the drainage problem.

Geology and Seismicity - The urban area is divided into two primary geologic zones: 1) the unconsolidated alluvium of the river terraces and creek beds; and 2) the older, generally sedimentary and basic igneous rocks. These rocks have poor permeability and, therefore, yield only small quantities of ground water. The alluvial sand and gravel deposits in the valleys are

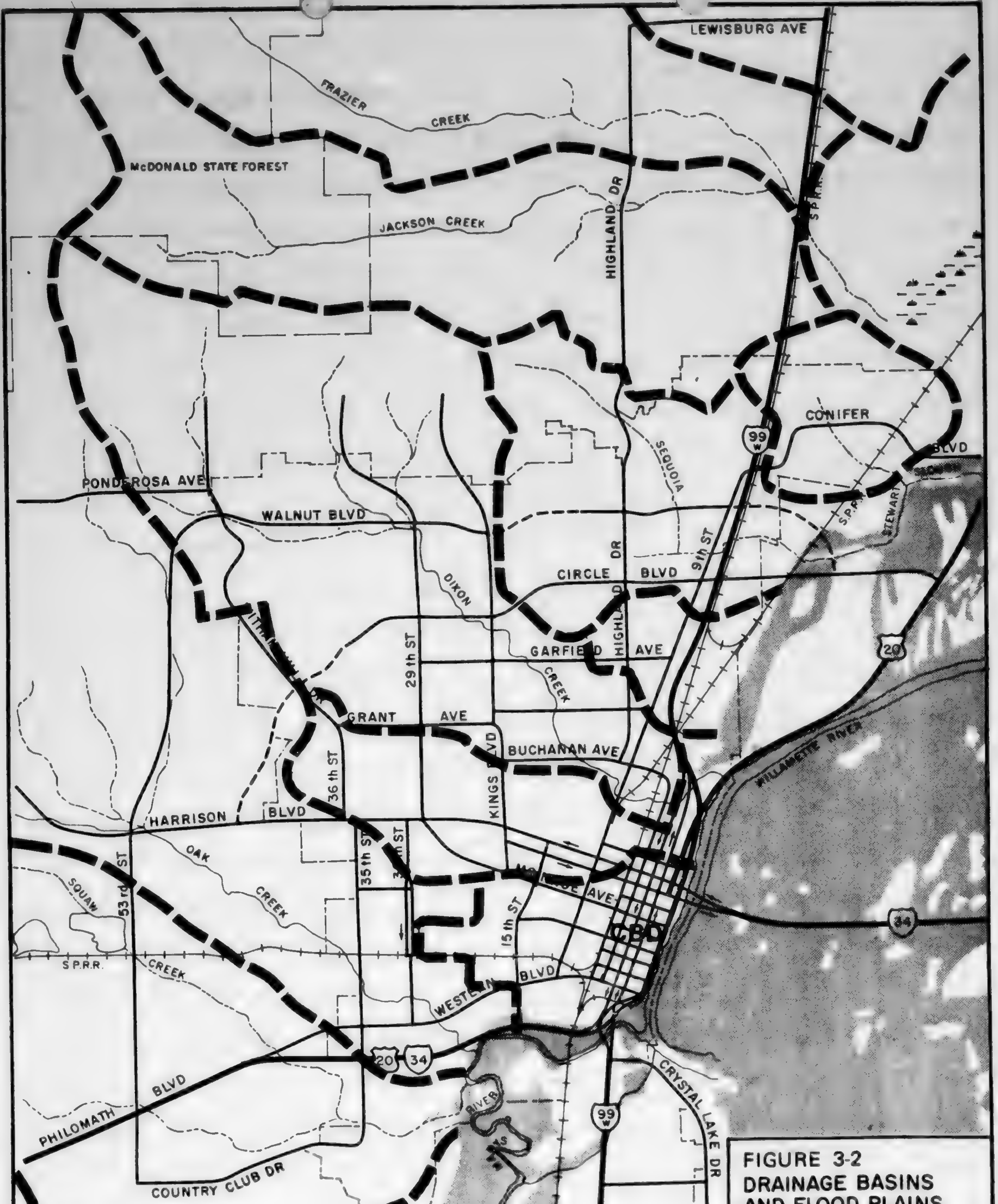

LEWISBURG AVE
FRAZIER CREEK
McDONALD STATE FOREST
JACKSON CREEK
HIGHLAND DR
S.P.R.R.
CONIFER BLVD
99W
SEQUOIA
STEWART
PONDEROSA AVE
WALNUT BLVD
CIRCLE BLVD
DIXON CREEK
9th ST
GARFIELD AVE
20
29th ST
GRANT AVE
BUCHANAN AVE
KINGS BLVD
WILLAMETTE RIVER
36th ST
HARRISON BLVD
35th ST
53rd ST
OAK CREEK
SQUAW CREEK
15th ST
CBD
34
S.P.R.R.
WESTERN BLVD
20
34
CRYSTAL LAKE DR
PHILOMATH BLVD
RIVER
99W
COUNTRY CLUB DR
S.P.R.R.
0
2000
FEET

FIGURE 3-2
DRAINAGE BASINS AND FLOOD PLAINS

LEGEND

▨ FLOOD PLAIN

▬ ▬ DRAINAGE BASIN BOUNDARY

the most productive aquifiers. Most of the soil overburden in the hill areas is caused by extensive clay deposits (see soils).

Earthquakes are rare in the Corvallis region. There are no indications of active fault traces in the study area.

Soils Characteristics - In the study area, there is a predominance of soils with high clay content of the Hazelair series, a non-prime and non-unique soil type. These soils have low permeability and high shrink-swell potential. Soils with low permeability do not readily absorb precipitation, thus increasing the surface run-off rate and peak flows in creek beds and storm sewers. The high shrink-swell potential creates potential foundation problems and indicates that slippages are possible in unprotected road cuts. However, available soils data indicate that there are no foundation problems in this section. The top two feet of material is plastic loam with the top 1.5 feet being top soil.

Biota - The study area has primarily man-made land uses (residences, schools, commercial and light industrial areas). The avilable open space in the area is composed principally of sparse natural oak woodland, a vegetation type common and widely distributed in the Willamette Valley. Other vegetation includes some Douglas fir and Maple trees, grasses, forbs (weeds), and blackberries, and lawns and shrubs in landscaped areas.

No threatened or endangered species exist in the project area. The wildlife species known to inhabit the study area during one or more seasons of the year include 34 varieties of mammals, 69 varieties of birds, and 16 varieties of reptiles and amphibians.

Some fish and other aquatic life can be found in the deeper holes in Dixon Creek.

Human Environment

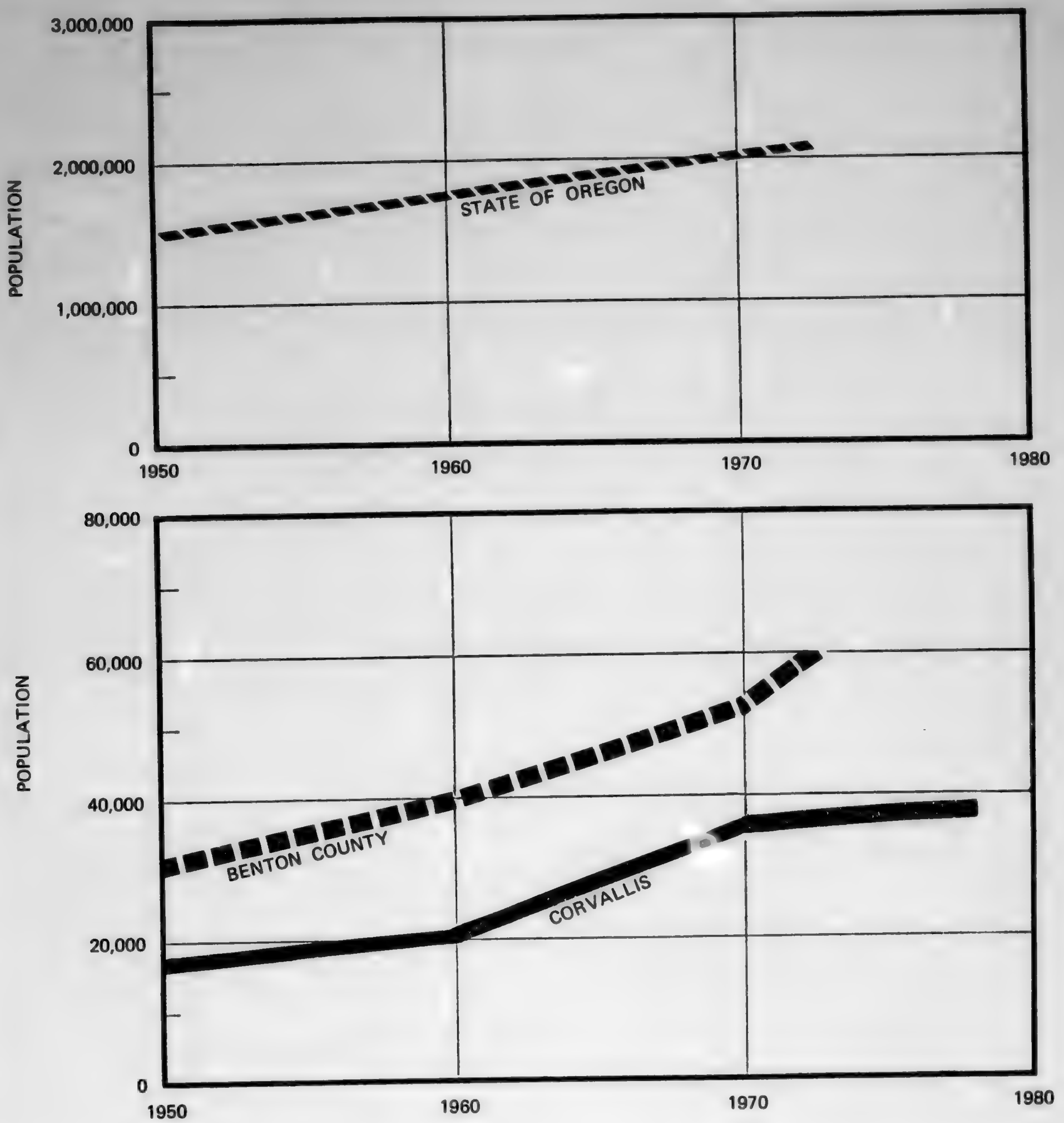
Jurisdictional Framework - The study area encompasses land under jurisdiction of city, county and state authorities. The majority of the study area lies within the corporate limits of the City of Corvallis. The western portion of the study area is located outside the city limits in Benton County, and contains land owned by Oregon State University. The entire study area lies within the boundaries of Corvallis Public School District 509J.

Population - The 1979 population of Corvallis was estimated to be 41,750 persons. During the period 1960 to 1970, the population of Corvallis increased at an annual rate of 5.5 percent, from 20,669 persons to 36,726. Since 1970 the annual rate of increase was declined to 1.3 percent. Figure 3-3 compares recent growth trends in Corvallis, Benton County and the State of Oregon.

The ethnic makeup of the population of Corvallis is predominantly white (96 percent) with four percent of the population classified as non-white. Other ethnic groups include Chinese (1.2 percent), Japanese (1.0 percent), Afro-Americans (0.5 percent), American Indians (0.2 percent), Filipinos (0.1

FIGURE 3-3

POPULATION GROWTH TRENDS



SOURCE: Census of Population, Portland State University
University Population Research and Census Center, Dec. 1977.

percent) and "others" (0.1 percent). In addition, 1.2 percent of the "white" population is classified as Spanish-speaking. The 4 percent minorities in Corvallis is greater than the statewide average of 2.8 percent. Other significant subgroups in Corvallis are university students, who represent approximately 35 percent of the total population, and senior citizens (those 65 and older) who account for 6.6 percent.

Employment and Income - The economy of Corvallis is based upon the presence of Oregon State University. In 1976, the university had a full-time employment of 4,030 persons and a part-time student employment of 3,110. In 1970, the entire Corvallis labor force amounted to about 12,500 persons. The majority of workers in Corvallis fall into three occupational types: professional (3.1 percent), clerical (19.0 percent), and service workers (15.3 percent). Manufacturing employment accounts for only 8.3 percent of the work force in Corvallis, substantially below the statewide average of 21.4 percent. However, the Hewlett-Packard Advanced Products Division, after an initial employment of about 350 persons, is expected to significantly increase manufacturing employment in Corvallis.

Income characteristics of the Corvallis population differ somewhat from those of the state as a whole. Both the median and mean family income levels were slightly higher in Corvallis in 1970 than for the entire state; however, per capita income and the income of all unrelated individuals were somewhat lower in

Corvallis than statewide--a reflection of the large student population in Corvallis.

Public Revenues and Expenses - Approximately 28 percent of Corvallis' general revenues were from non-local governmental sources, approximately 47 percent came from local non-tax revenues such as user charges, fees, fines, forfeitures, interest payments, special assessments and assessments on real properties within the City.

The City's annual budget exceeds $25 million per year. The budget is divided into three main parts: Operating Budget (28 percent), Capital Budget (48 percent) and Other Requirements (24 percent). Funding has been included in the Capital Budget for the Walnut Boulevard FAU project to cover the ongoing preliminary engineering costs which includes this environmental impact study. The City is in the process of developing a comprehensive Capital Improvement Program in conjunction with the Comprehensive Plan.

Land Use - The study area is comprised primarily of relatively new (less than 20 years old), single-family residences and multi-family dwelling units and the attendant land uses that accompany such development (e.g., churches, strip commercial, shopping centers, schools, etc.). Commercial activities in the study area are concentrated mainly in the strip commercial development along N.W. 9th Street. Commercial developments are planned for the area along Walnut Boulevard between Kings Boulevard and Rolling Green Way; a professional office area is proposed between Kings

Boulevard and 25th Street. Industrial development is concentrated in the areas adjacent to Oregon 99W and between Southern Pacific, Westside, and Albany-Toledo Branch railroads. The Hewlett-Packard plant is located southeast of the intersection of Circle Boulevard and Seavy Avenue and due east of the Albany-Toledo Branch Railroad. Public and semipublic land within the study area is composed primarily of schools and parks. Existing land use in the study area is shown in Figure 3-4. The location of community facilities for the study are depicted in Figure 3-5.

Land Values - Information regarding land values in the study area was obtained from the Benton County Tax Assessor's Office. According to these records, the value of an average size lot (8-10,000 sq. ft.) ranges from $15,000, for residential lots in the area immediately west of N.W. 9th Street between Walnut and Circle Boulevards, to $20,000 and up for similar size lots in the newer developing hillside areas. Commercial property in the Walnut Boulevard-N.W. 9th Street area is valued currently at approximately $4.00 to $5.00 or more per square foot.

Adopted Plans - The adopted Urban Area Comprehensive Plan, 1988, for Corvallis and Benton County is the basic planning document for the area and outlines official community development guidelines and policies. The general plan was recently up-dated; the current version was under review during this study and was adopted in December 1978. The general policies governing the major land use categories as delineated in the existing plan are as follows:

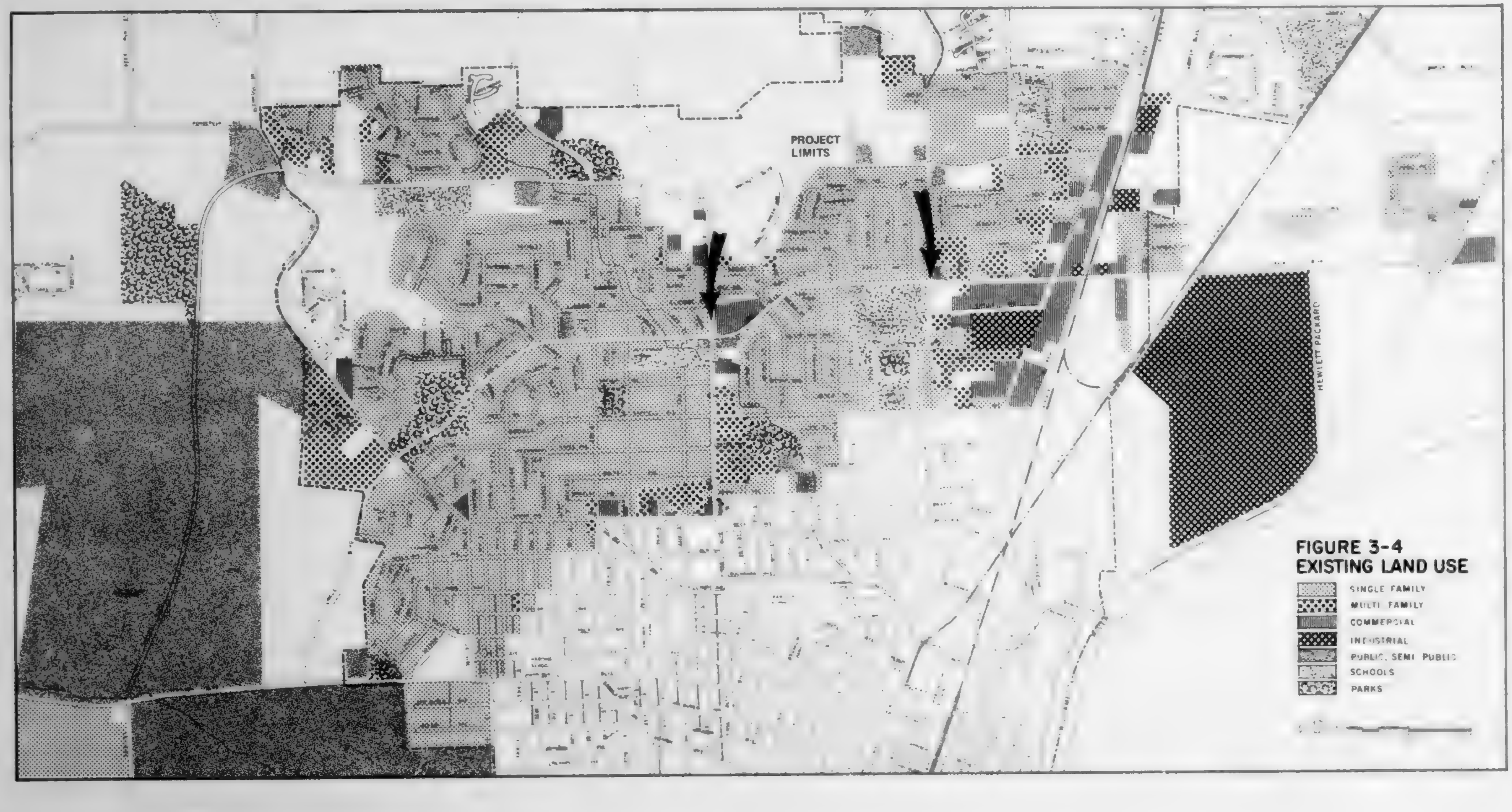


FIGURE 3-4
EXISTING LAND USE

SINGLE FAMILY
MULTI FAMILY
COMMERCIAL
INDUSTRIAL
PUBLIC, SEMI PUBLIC
SCHOOLS
PARKS
PROJECT LIMITS
HEWLETT PACKARD

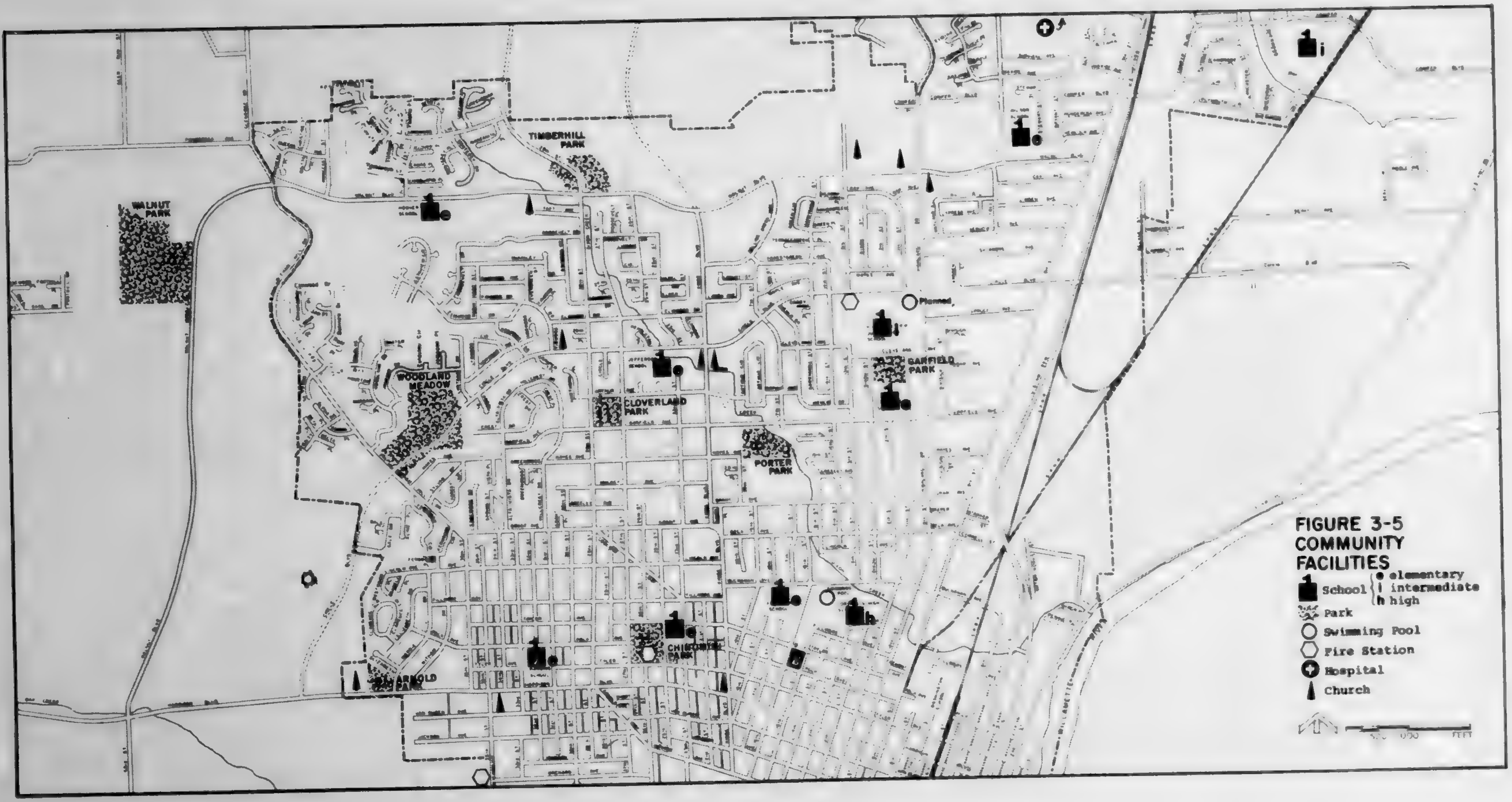


FIGURE 3-5
COMMUNITY
FACILITIES

School
elementary
intermediate
high
Park
Swimming Pool
Fire Station
Hospital
Church
500
1000
FEET
WALNUT PARK
TIMBERHILL PARK
WOODLAND MEADOW
CLOVERLAND PARK
PORTER PARK
GARFIELD PARK
CHINTIMINI PARK
ARNOLD PARK
Planned
i
h

Residential -- Low density residential (nine or fewer units per acre) will continue to be the predominant land use within the Corvallis area; however, the general plan calls for higher density residential development in the central part of the City, in the area adjacent to Oregon State University, and in the northern part of the City adjacent to Highland Drive, and N.W. 9th Street.

Commercial -- The comprehensive plan calls for the retention of the Corvallis Central Business District as the major commercial center for the area, with other smaller commercial areas developing at major crossroads outside the CBD. A specific policy of the plan is to encourage the development of shopping centers, rather than allowing commercial activity to develop haphazardly as strip commercial along the major thoroughfares.

Industrial -- As indicated in the general plan, industrial development will be located primarily in areas adjacent to regional highways and rail lines. A departure from the guidelines of the 1968 general plan has been the construction of the new Hewlett-Packard plant in an area designated residential.

Public and Open Space -- The plan encourages a policy of reserving suitable land for public uses in advance of actual need. The Open Space and Recreation Master Plan concept as adopted by the Park and Recreation Board has developed immediate, intermediate and long-range programs to determine the recreation needs of Corvallis based on population projections. This plan has not been formally adopted; however, it is being considered in the development of the new proposed comprehensive plan.

Relation to Existing Activity Centers - The Oregon State University campus lies approximately one mile south of the study area. The University is the primary activity center in the Corvallis area. The Municipal Airport is approximately four miles south of the City.

Other principal activity centers in the Corvallis area are the Central Business District, situated about 1.5 miles south of the study area adjacent to the Willamette River, and the lineal commercial development located along N.W. 9th Street.

Growth Patterns - Urban development patterns in Corvallis have been heavily influenced by geographic constraints. The City is surrounded on three sides by land that is poorly suited for urbanization. To the east and south are the lowland flood plains of the Willamette and Marys Rivers, and substantial acreages of state-owned property under the control of Oregon State University about the westerly periphery. For these reasons, the direction of growth in Corvallis has been and continues to be to the north and northwest. The study area traverses the path of this rapidly expanding development area. Residential construction is presently underway in several areas within the study area, and continued residential development, especially in the Timberhill area north of Walnut Boulevard, is expected to accelerate in coming years.

Open Space, Parks and Recreation - Two parks are located along the Walnut Boulevard route: Walnut Park and Timberhill Park. Walnut Park is an undeveloped 30-acre parcel of land which lies west of and adjacent to the recently completed extension of Walnut Boulevard between Witham Hill Drive and Harrison Boulevard at 53rd Street. Timberhill Park, a small undeveloped 6-acre park, is located on the north side of Walnut Boulevard at the intersection with 29th Street; the parkland is bisected by 29th Street. This park lies outside the proposed construction limits and would not be adversely affected by the extension of Walnut

Boulevard to N.W. Highland Drive. Although not immediately adjacent to Walnut Boulevard, a new aqua-center (swimming pool) has recently been built near the Circle Boulevard-Highland Drive intersection.

Historic, Archeologic and Paleontologic Resources - There are no properties or facilities within the study area that are listed, nominated or eligible for the National Register of Historic Places. In addition, the State Historic Preservation Office reports no listings from within the study area in the Oregon Statewide Inventory of Historic Sites and Buildings. A field survey revealed no properties with known potential for historic designation within the study area.*

No specific locations of fossil remains (paleontologic resources) within the study area are known at the present time.

Public Services - Electric service in the study area is provided by Pacific Power and Light Company and Consumers Power Company. Natural gas is supplied to the area by Northwest Natural Gas Company. Cable television is provided by the Corvallis TV Cable Company. Telephone service is supplied by Pacific Northwest Bell. The study area is served by publicly-owned, separated storm drainage and sanitary sewers and water systems.

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*See letter from the State Historic Preservation Office dated March 10, 1977, presented in Appendix A.

Two new fire sub-stations are located at N.W. 13th Street and Circle Boulevard, and at S.W. 35th Street and Washington Way (both outside of study area). Any changes and additions to the existing street network will affect fire department response times, especially to locations where improved accessibility would be provided by the proposed project. The Fire Department also operates an area-wide ambulance and cardiopulmonary emergency service from the Central Fire Station located in the Corvallis central business district. Inquiries of the Corvallis Fire Department indicate that there are no severe or unusual fire hazards in the study area. Some fire hazards exist in the open grass fields and brushy areas during the dry summer season.

The Good Samaritan Hospital, largest hospital in the Corvallis-Philomath urbanized area, is located north of Walnut Boulevard along Satinwood Street. Emergency vehicle routes to the areas along the western sections of Walnut Boulevard and along Witham Hill Drive are circuitous at present and would be significantly improved with the extension of Walnut Boulevard.

Schools - Two schools are located in the study area: Hoover Elementary School on Walnut Boulevard near Aspen Street and Wilson Elementary School on Satinwood Street, one-half block north of Walnut Boulevard.

Air Quality - Atmospheric circulation and wind patterns, determined by the marine influence of the Pacific Ocean, play a key role in determining air quality in the Corvallis area since they affect both the rate of generation and the dispersion of man-made pollutants. October to February are high pollution months for carbon monoxide, oxides of nitrogen, and hydrocarbons. During this period, the dispersive power of the atmosphere is reduced. A combination of low mean wind speeds and hampered vertical mixing causes an inversion which traps emissions near ground level. Peak concentrations of carbon monoxide occur around 8:00 A.M. and from 6:00 to 10:00 P.M. at times and places where traffic is heaviest and the atmosphere has minimum dispersion capability. In the summer months, from March to September, photochemical oxidants and ozone are formed as a result of reactions between hydrocarbons, nitrogen oxides, and sunlight. Because oxidants take some time to form in the strong sunlight, their formation reaches a maximum downwind from the original source of emission.

Table 3-1 shows levels of suspended particulates at Corvallis (the only pollutant measured by DEQ at this station) as recorded by the State Department of Environmental Quality. Standards for suspended particulates were not exceeded.

Table 3-1 also shows recent trends in sulfur dioxide concentrations at Corvallis. It may be seen that, although standards have not been exceeded, amounts of SO_2 in the area have increased between 1970 and 1976.

High concentrations of carbon monoxide are mainly a local problem, occurring near areas of heavy auto traffic when

Table 3-1

TOTAL SUSPENDED PARTICULATE AND SULPHUR DIOXIDE PORTLAND INTERSTATE AIR QUALITY CONTROL REGION MID-WILLAMETTE AREA

Station No. and Location	Year	No. of Samples	Days Exceeding		Ambient Air Levels, ug/m^{3*}		
			Secondary Standard	Primary Standard	Geometic Mean	Max 24 hr. Average	Second Highest
Suspended Particulates							
OSU Corvallis 0204006	1970	60	0	0	35.7	121	112
	1971	58	0	0	43.2	116	110
	1972	59	0	0	35.5	97	94
	1973	63	0	0	25.4	68	67
	1974	55	0	0	29.2	113	104
	1975	58	0	0	22.8	92	77
	1976	60	1	0	30.0	180	100
	1977	60	0	0	29.3	100	87
	1978	59	1	0	31.5	155	119

	Year	No. of Samples	24-Hour Maximum	Annual Means	
				Arithmetic	Geometric
Sulphur Dioxide (ug/m^3)					
OSU Corvallis 0204006	1974	78	15	13.1	13.1
	1975	53	75	16.5	14.8
	1976	56	174	21.0	16.4
	1977	51	73	16.1	14.7
	1978	13	15	13.3	13.2

Source: Oregon Air Quality Annual Report 1977, State of Oregon Department of Environmental Quality.

*ug/m^3 = Micrograms per cubic meter

ventilation* is poor. Field measurements of carbon monoxide concentrations were made in 1975 by a consultant for the** Hewlett-Packard Company in assessing their new site location. Among the ten locations at which measurements were taken, two are part of the roadway system included in this project. These are the intersections of N.W. 9th Street and Circle Boulevard and at the Hewlett-Packard site on Circle Boulevard east of N.W. 9th Street. The carbon monoxide concentration in the ambient air should not exceed 40 milligrams per cubic meter (mg/m^3) of air maximum one-hour average, or 10 mg/m^3 of air maximum eight-hour average more than once a year. The highest measured concentrations (recorded in March, 1975) were 8.5 mg/m^3 for a one hour averagomg period and 4.2 mg/m^3 for the eight-hour average at N.W. 9th Street and Circle Boulevard, both well below standards. Concentrations along Walnut Boulevard can be assumed to be lower since traffic densities are lower.

Using the most recent available traffic counts, an area source model and several line source dispersion models for calculating emissions were applied to the project areas in order to estimate present worst-case pollutant concentrations. The following three areas were chosen for the determination of area source concentrations at typical locations:

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*Poor ventilation is a result of little or no wind with an inversion layer which causes pollutants to concentrate near ground level.

**Glen Odell, Consulting Engineers, Air Quality Assessment of the Proposed Hewlett-Packard Company Facility, Corvallis, Oregon, May, 1975, p. 20.

- Area I includes Witham Hill Drive between Walnut and proposed Circle, at Walnut Boulevard;
- Area II centers on Kings Boulevard between Circle and Walnut Boulevards; and
- Area III includes Circle and Walnut Boulevards as they intersect with N.W. Ninth Street and Oregon 99W.

As shown in Tables 3-2 and 3-3, present concentrations are estimated to be within allowable limits as determined by state standards. Of the three areas, Area II is seen to have the highest pollutant concentrations as well as the highest traffic volumes. The highest line source concentrations are on the 9th Street-Oregon 99W link. On Circle Boulevard between Oregon 99W and 9th Street, the 10 milligrams per cubic meter 8-hour standard is nearly exceeded at distances up to 100 feet from the center of the roadway on the downwind side of the street. Line source concentrations on Walnut Boulevard range from 1.7 to 6.1 mg/m^3; well below the 1-hour and 8-hour standards.

Ambient Noise Environment - Noise has become recognized as an environmental problem ranging from a nuisance to a hazard. Noise impacts can range from a mild annoyance to interruption of speech and sleep, or even serious physiological arousals and permanent hearing loss. Three qualities characterize the effects of noise on the listener: (1) the frequencies of the noise; (2) the intensities of the noise; and (3) the time-varying (or changeable) character of the noise.

The human ear is sensitive to a wide range of sound intensities. A logarithmic scale called the decibel (dB) scale,

Table 3-2

EXISTING AIR QUALITY POLLUTANT CONCENTRATIONS, 1978

Pollutant	Air Quality Std. Avging Time	Air Quality Standard[a]	Area Concentrations[c]		
			I	II	III
Carbon Monoxide	1	40	0.03	0.47	0.89
	8 hour	10	0.02	0.32	0.62
Non-methane Hydrocarbons	3 hour (6-9 a.m.)	160	3	32	88
Nitrogen Dioxide	Annual mean	100	1	1	10
	1 hour	500[b]	1	2	44
Sulfur Dioxide	Annual mean	60	1	3	1
	24 hour	200	3	11	6
Suspended Particulate	Annual mean	60	1	1	1
	24 hour	150	1	4	6

[a] State of Oregon standards in micrograms per cubic meter. CO is in milligrams.

[b] Calculated from annual arithmetic mean.

[c] Based on 1 km area centered at the project with average vehicle speed of 25 mph at peak hour conditions expressed and a wind speed of 2 mph. CO is expressed in milligrams per cubic meter.

Note: Impact calculations are based on simplified, manual dispersion calculations and statistical techniques with conservative input values.

Table 3-3

CARBON MONOXIDE CONCENTRATIONS, 1976

Road Link	Roadside Concentration* 1 hr (mg/m^3)
Circle-H-P to ORE 99W	1.2
Circle-Oregon to 9th	12.3
Circle-9th to Highland	10.9
Circle-Highland to Kings	15.2
Circle-Kings to 29th	7.1
Circle-29th to Lantana	1.9
Walnut-9th to Highland	1.9
Walnut-Kings to 29th	2.2
Walnut-29th to Witham Hill	1.7
Kings at Circle	8.8
Highland at Circle	8.8
Witham Hill at Jameson	0.2
Jameson at Woodland	1.0
36th-Harrison to Grant	4.4
29th-Circle to Walnut	1.8
29th-Harrison to Grant	7.4
Harrison at Walnut	6.1
Harrison-35th to 30th	7.4
Harrison-30th to 29th	12.2

*Calculated at 50 feet from roadway for comparative purposes. Amounts are in milligrams per cubic meter at foot receptor level with 2 mph wind at 35° angle to the roadway using Stability Class E. Air quality standard is 40 mg/m^3 for one hour.

is used to compress this wide range. People hear changes in sound intensities in proportion to the logarithm of the intensities. Table 3-4 shows the sound level of typical sources encountered in the environment. The "A" weighting scale, that which most closely resembles human hearing, is used in this assessment and is noted by the symbol (dBA).

In this report the time-varying character of environmental noise is accounted for statistically. The statistical descriptions of the A-level exceeded 10 percent of the time is designated L_{10}. The L_{10} noise levels, the "average peak" level caused by nearby sources of short duration, are generally used in assessing traffic related noise.

In December, 1976, noise levels were recorded at several locations throughout the project area. These noise level readings were used to estimate L_{10}-noise levels at various distances from selected streets as shown in Table 3-5.

The noise levels are directly related to the proximity to noise sources and to the volume of traffic. Highest peak noise levels on Walnut Boulevard are at the intersections with Circle Boulevard, Highland Drive, Kings Boulevard and Harrison Boulevard.

During the daytime, automobile traffic controls the environmental noise near all of the project area streets. Average peak noise levels (L_{10}) are generated by motorcycles, buses, and some truck traffic. Stop-and-go traffic at cross streets and occasional aircraft flyovers also contribute to the L_{10}.

Table 3-4

APPROXIMATE SOUND LEVELS OF COMMON NOISES

DECIBELS	150	Jet Plane at Takeoff - 150
	140	THRESHOLD OF PAIN
	130	Pneumatic Riveter - 130
	120	
	110	Rock and Roll Band - 108-114
	100	Jet Flyover at 1000 feet - 103
		Farm Tractor - 98
		Power Mower - 96
	90	Motorcycle at 25 feet - 90
		Food Blender - 88
		Heavy Street Traffic at 15 feet - 85
		Diesel Truck, 40 mph at 50 feet - 84
	80	Garbage Disposal - 80
		Car, 65 mph at 25 feet - 77
	70	TV Audio, Vacuum Cleaner - 77
		Electric Typewriter at 10 feet - 64
	60	Conversation - 60
		Background Music - 60
		Large Transformers at 100 feet - 50
	50	Light Traffic at 100 feet - 50
		Bird Calls - 44
	40	Urban Ambient Sound - 40
		Very Quiet Radio in Home - 40
		Library - 35
	30	
	20	Broadcasting Studio - 50
	10	Leaves Rustling - 10

Table 3-5

EXISTING SOUND LEVEL READINGS

Location	Year	L_{90}	L_{50}	L_{10}	Notes
Site of future Walnut between Highland and Kings	1976 pm	41	47	49	--
	1978 pm	45	52	57	nearby construction
Site of Woodland Meadows Park	1976 pm	44	50	51	distant traffic
	1978 pm	45	51	52	distant traffic
Walnut at Kings	1976 pm	46	56	70	some buses and trucks
	1978 pm	47	57	70	--
Walnut at Aspen	1976 pm	49	53	65	school in session
Walnut at Witham	1976 pm	56	62	67	ambient construction sounds
	1978 pm	49	57	71	construction again
Walnut Park	1976 pm	40	45	48	--
	1978 pm	41	46	50	--
Harrison at Walnut	1976 pm	63	76	81	several VW's
Walnut at Hwy 9	1976 pm	65	74	80	heavy traffic
Walnut at Highland	1976 pm	62	72	78	VS, motorcycle
	1978 pm	54	56	6[illegible]	medium traffic

When there are lulls in traffic, typical neighborhood noise sources such as power lawnmowers, dogs and birds and even a garbage truck, in addition to distant traffic, contribute to the overall environmental ambient noise.

At night, noise from local traffic decreases but still dominates environmental noise in the study area. Noise generated by distant traffic is more noticeable at night, especially train movements.

Visual Characteristics - The existing street sections and proposed extensions of Walnut Boulevard traverse an area composed primarily of single-family homes and large tracts of open meadow and woodland. Most of the existing and proposed alignment of Walnut Boulevard is relatively flat, although there are hills nearby which offer pleasing vistas from most sections of Walnut Boulevard. This is especially true with respect to views to the north of Walnut Boulevard in the direction of Timberhill, due to the fact that at present there are few man-made obstructions to views in this area. West of 29th Street, the primary visual feature is the tree-covered Cemetery Hill to the south behind Hoover School. North of Walnut Boulevard, the area is composed of relatively new homes and townhouses of contemporary design. Timberhill Park, at the intersection of Walnut Boulevard and 29th Street, is a natural open space of grasses and some trees bordered on the west by the Dixon Creek channel.

As Walnut Boulevard approaches Witham Hill Drive, the landscape is composed primarily of wooded hills on either side with some new contemporary single-family houses to the north. The recently completed section of Walnut Boulevard from Witham Hill Drive to Harrison Boulevard traverses an undeveloped pastoral open space of woods and open grassland. This area includes the OSU lands and the presently undeveloped Walnut Park. The alignment passes through a valley west of Witham Hill and closely parallels a small tributary of Oak Creek. Typical 1977/1978 views of the Walnut Boulevard route are presented in Figure 3-6.

Transportation

Existing Roadway Network - Major regional highways which serve the Corvallis area are the following:

State Route Oregon 99W

U.S. 20

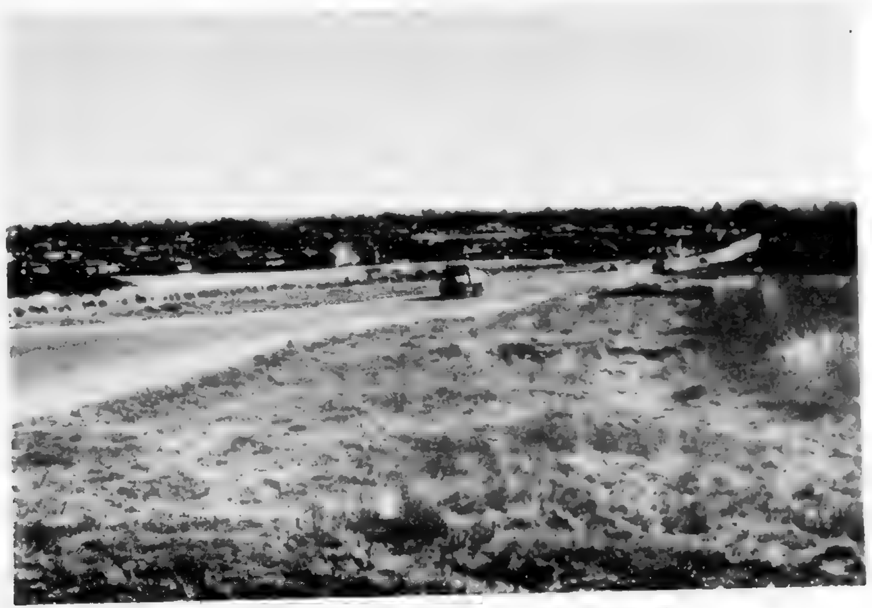
State Route Oregon 34

Oregon 34 provides the major connecting link between Corvallis and Interstate I-5. U.S. 20 and Oregon 34 generally follow the same route through Corvallis and they are coincident with Oregon 99W through the Corvallis CBD area.

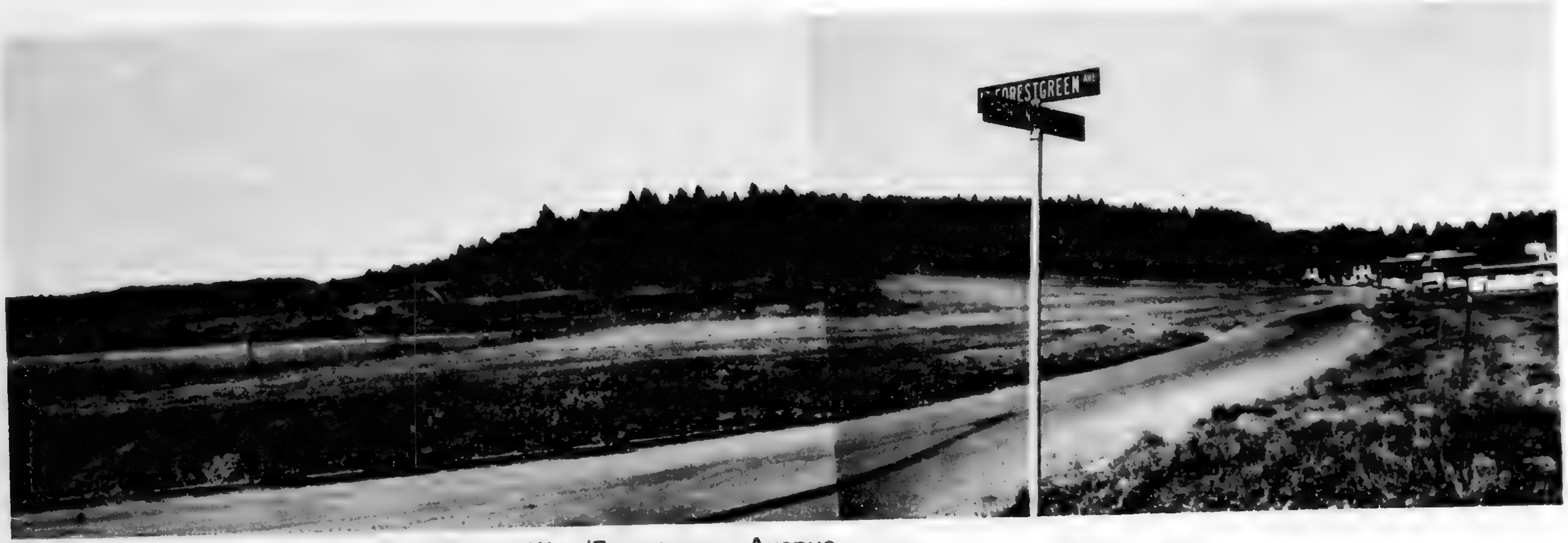
Figure 3-7 shows the state's primary and secondary highway network as located in the Corvallis Urban Area. It also shows the city's major arterial and collector street network. Figure 3-8 is a traffic flow map that shows traffic volumes for most of the streets in the network.

Emergency and Truck Routes - At the present time, Corvallis has no designated truck routes, although some routes

At Kings Boulevard looking easterly



Kings Boulevard south of Walnut Boulevard



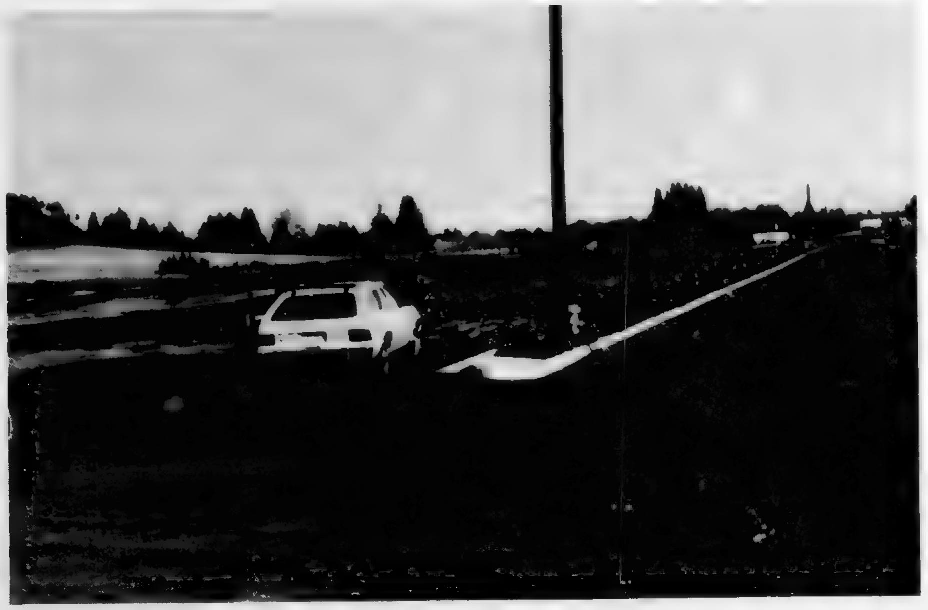
Timberhill area north of Rolling Green Way/Forestgreen Avenue

FIGURE 3-6
Sheet 1

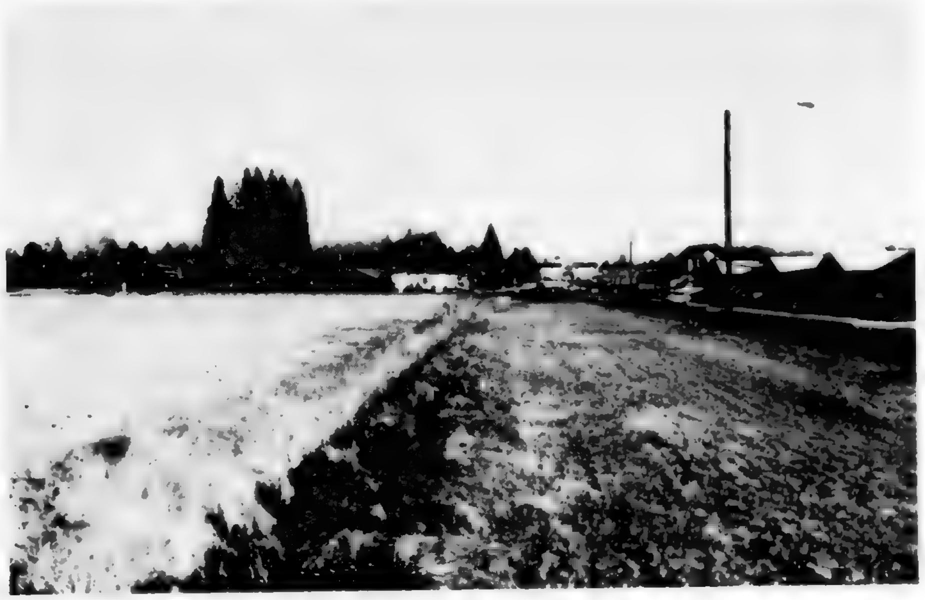
TYPICAL VIEWS - Alignment of Proposed Project

Looking east from Garryanna Street

Looking west from 13th Street



Looking east from 13th Street



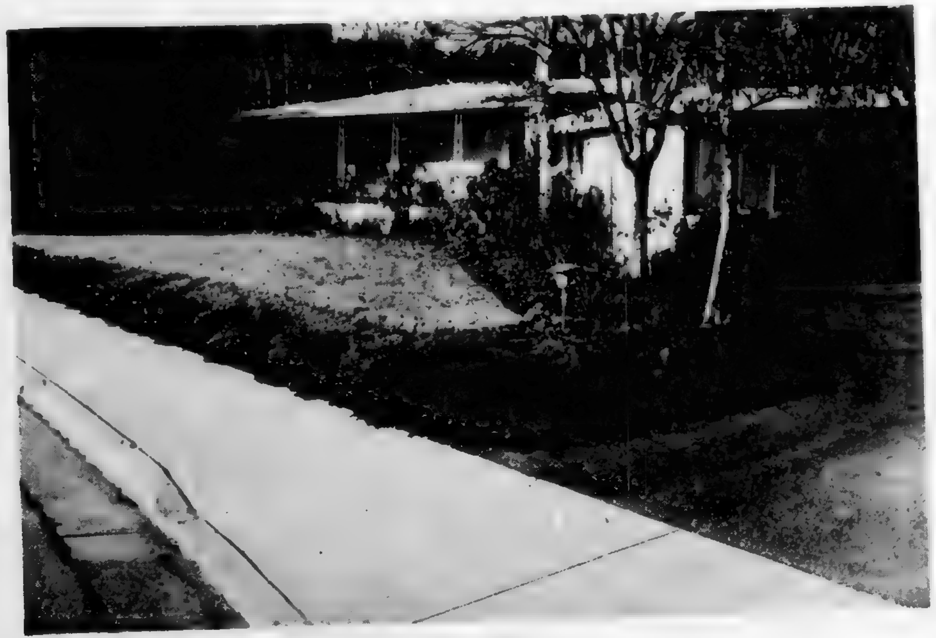
Looking east toward Highland Drive

FIGURE 3-6
Sheet 2

TYPICAL VIEWS - Alignment of Proposed Project

Highland Drive north of Walnut Boulevard

Highland Drive intersection seen from east


Mobil home east of Highland Drive

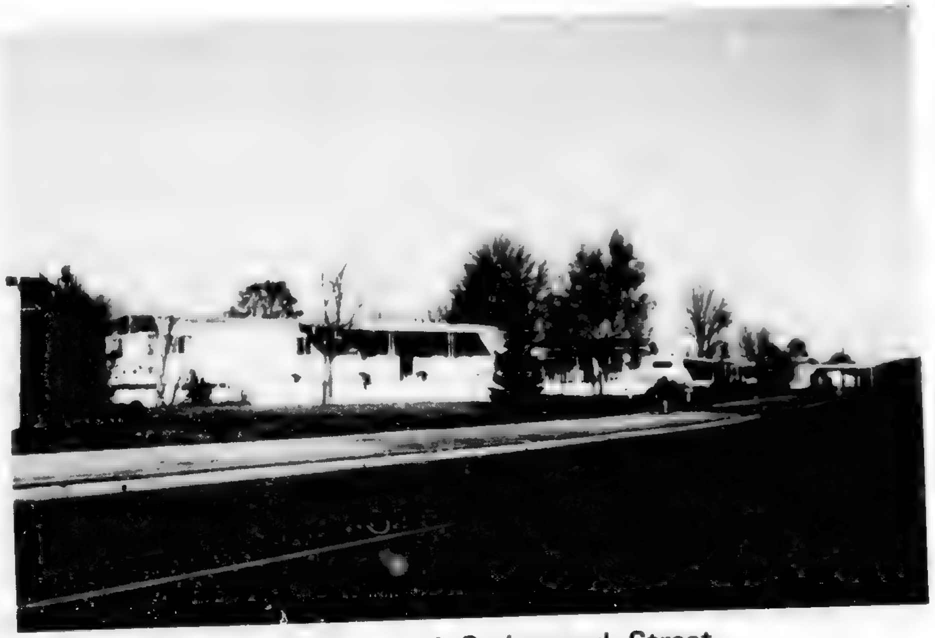

Between Highland Drive and Satinwood Street

FIGURE 3-6
Sheet 3

TYPICAL VIEWS - Walnut Boulevard east of Proposed Project

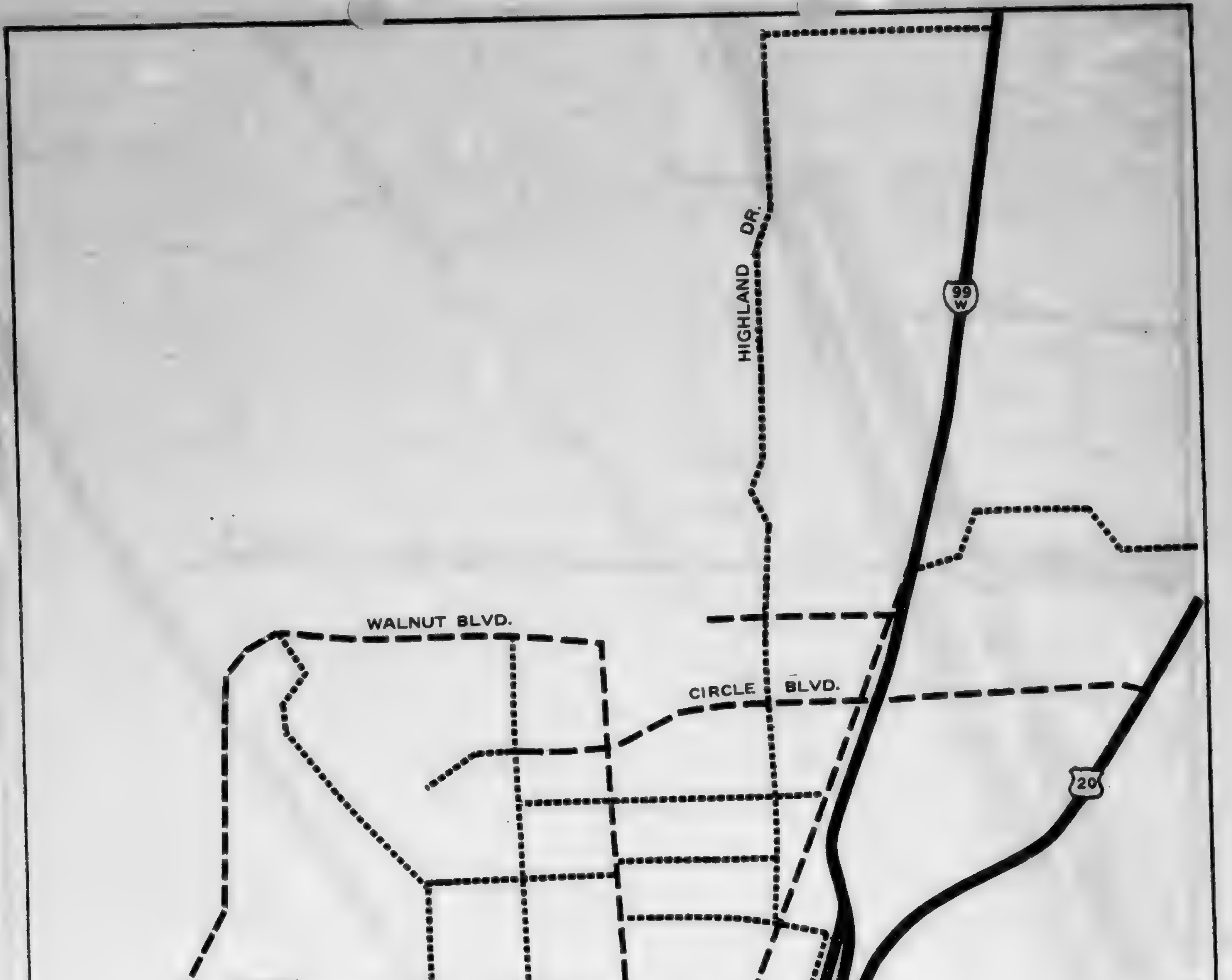


FIGURE 3-7
EXISTING MAJOR
STREET NETWORK

HIGHLAND DR.
99 W
WALNUT BLVD.
CIRCLE BLVD.
20
HARRISON BLVD.
34
20
34
99 W
STATE PRIMARY AND SECONDARY HIGHWAY
MAJOR ARTERIALS
COLLECTORS
0
2000
FEET

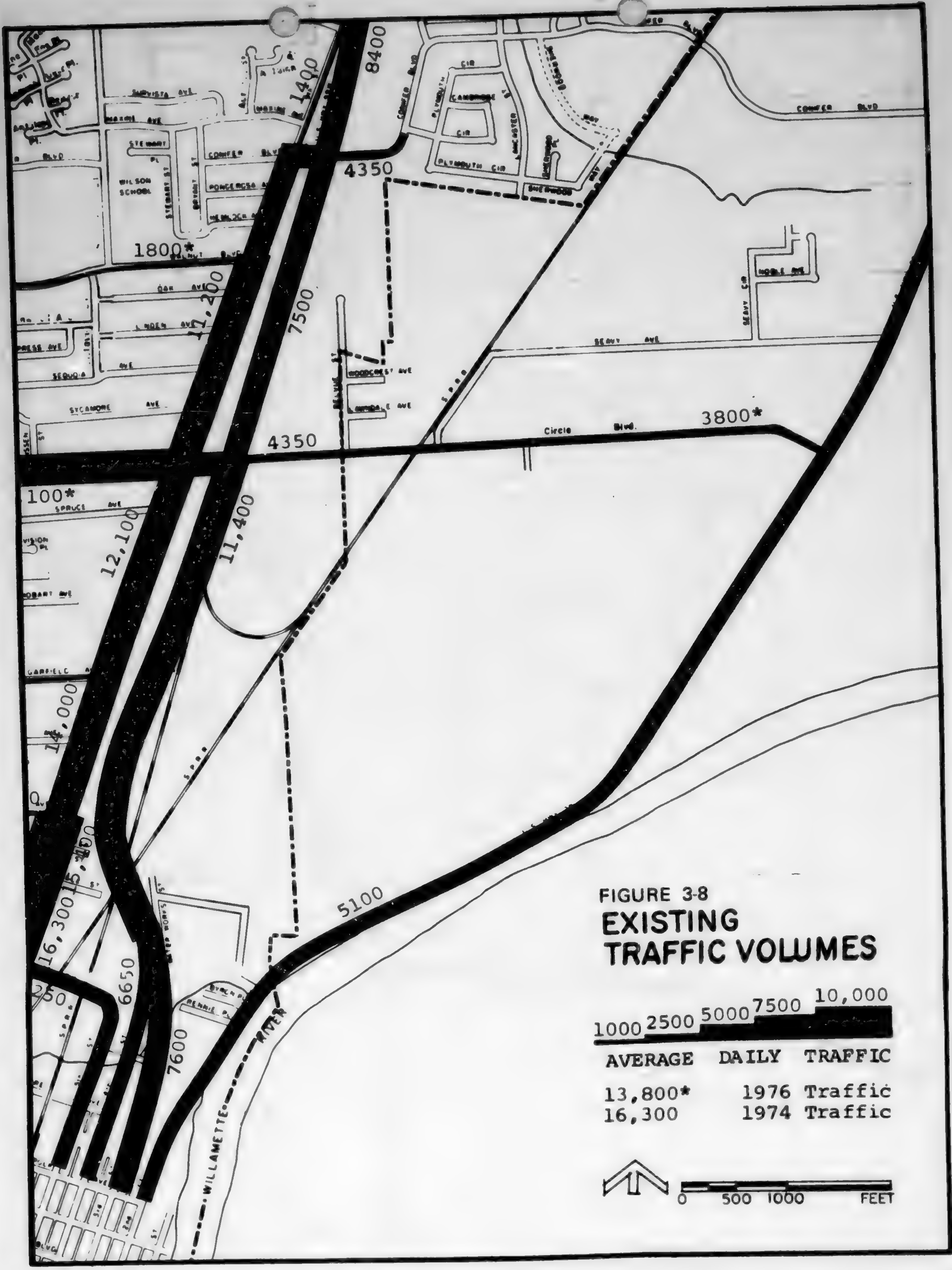

8400
1400
4350
1800*
17,200
7500
4350
3800*
Circle Blvd.
100*
12,100
11,400
14,000
15,100
16,300
6650
250
7600
5100
WILLAMETTE RIVER
Conifer Blvd
Seavy Ave
Sycamore Ave
Spruce Ave
Garfield
1000
2500
5000
7500
10,000
AVERAGE DAILY TRAFFIC
13,800* 1976 Traffic
16,300 1974 Traffic
0 500 1000 FEET

FIGURE 3-8

EXISTING TRAFFIC VOLUMES

(e.g., portions of Circle and Harrison Boulevards) have truck weight restrictions relating to "through truck" traffic. For this restriction, a "through truck" is defined as any truck that does not have an origin or destination within the city.

The City's emergency route system, developed in conjunction with the 1968 Community Shelter Plan, is made up of several major arterial and collector streets and is designed to provide access to emergency shelter facilities. Designated emergency routes in the vicinity of the proposed and planned projects include: N.W. 9th Street and Kings Boulevard between Harrison and Circle Boulevards; Circle Boulevard from Oregon 99W to Kings Boulevard; and Oregon 99W for its entire length.

Traffic Composition - The volume of truck traffic on major streets in the study area is quite low. Actual counts at selected locations between 2:00 and 6:00 P.M. indicate that trucks account for less than three percent of the total traffic volumes. A 24-hour count on Oregon 34 at the Willamette River bridges indicated that trucks comprised seven percent of the total traffic volume at this point.

Temporal Distribution - The hourly distribution of traffic on selected street sections is shown in Figure 3-10. The peaking characteristics are typical for cities of Corvallis' size. Traffic volumes during both the morning peak hour (8:00 to 9:00 A.M.) and lunch hour (12 noon to 1:00 P.M.) represent between 6 and 8 percent of the total 24-hour vehicle movements.

Maximum hourly traffic volumes (8 to 11 percent of the daily total) occur between 5:00 and 6:00 P.M., the evening peak hour.

Accidents and Safety - Locations within the study area at which two or more of the same type accident occurred between January 1970, and December 1976, are as follows:

Walnut Boulevard between 29th Street and Hoover School - 2 loss-of-control accidents, 1 turning accident.

Walnut Boulevard at Kings Boulevard - 3 loss-of-control accidents, 3 turning accidents.

Walnut Boulevard at N.W. 9th Street - 2 angle accidents, 6 turning accidents.

None of the Walnut Boulevard intersections are signalized.

Other Transportation Systems - In addition to the street and highway network, Corvallis is served by a local bus system, taxis, intercity buses, airport limousines, school buses and bikeways. At the present time, the Corvallis Transit Authority operates two 18-passenger vehicles on nine fixed routes within the City of Corvallis. The nine routes are loops which radiate from the CBD to the outlying parts of the city. In August 1980, three new 40-passenger buses will be purchased with Urban Mass Transit monies. The nine routes will be consolidated into six routes. The three new buses will operate over these routes with the two older buses on standby. Three of the six routes operate within the study area serving the Village Green-Good Samaritan Hospital, Circle Boulevard-N.W. 9th Street, and University Park-Ash State areas.

Corvallis also has an extensive bikeway network which crisscrosses the city generally on collector streets rather than the major arterials. Street sections designated as "Phase I Bicycle Routes" in the study area include Walnut Boulevard between Satinwood Street and Highland Drive and 27th Streets.

The "Proposed Bikeway Corridors for the Comprehensive Plan" show extensive changes and additions to the bikeway network in the project area. This preliminary plan shows bikeway extensions on Walnut Boulevard as well as 27th Street, Highland Drive, Circle Boulevard and Garfield Avenue. Streets which would be added to the bikeway network include Cleveland Avenue, Spruce Street, and Oregon 99W where a separate bike path would run adjacent to the Southern Pacific Railroad tracks.

Chapter 4

ENVIRONMENTAL IMPACTS AND MITIGATING MEASURES

Introduction

Environmental impacts of the proposed FAU project involving the construction of N.W. Walnut Boulevard from Kings Boulevard to Highland Drive were assessed in the context of the entire route between Harrison Boulevard and N.W. 9th Street - both existing and planned sections. During the period of this study, construction of the 1.76-mile section between Harrison Boulevard and Witham Hill Drive was completed. The Kings Boulevard-Highland Drive section represents the only missing link in a continuous arterial street route between Harrison Boulevard and N.W. 9th Street.

Many of the impacts of the preferred Build Alternative -- both beneficial and adverse -- relate to increased traffic and traffic service. Accordingly, the development of reliable estimates of future traffic volumes and traffic conditions, with and without the project, was given special emphasis in the study.

TRANSPORTATION IMPACTS

The analysis of transportation impacts was based on estimates of future (1990) traffic demands; estimates of 1990 traffic volumes on Walnut Boulevard and other streets, with and without the proposed project; and evaluations of area-wide levels of traffic service, through traffic, truck traffic and traffic accident potentials.

Future Traffic Demands - Estimates of future traffic demand on major streets and highways throughout the Corvallis urbanized area were developed using conventional computerized traffic estimation procedures. These estimates were based on forecasts of population and employment anticipated by the year 1990 in each of 102 traffic analysis zones. Based on available data, it was estimated that the population of the Corvallis urbanized area (including Philomath), which is now more than 50,000, will increase to about 80,000 persons by the year 1990, and 100,000 persons by 2000. Much of the anticipated growth will occur in areas of northwest Corvallis directly served by Walnut Boulevard.

Forecasts were made using estimated trip generation rates of future travel demands between each pair of traffic zones. It was estimated that about 288,000 vehicle trips will be made in the urbanized area on a typical weekday in 1990, compared to about 170,000 in 1976.

The numerous zone-to-zone movements comprising this total of 288,000 vehicle trips were allocated by computer to six test networks representing various possible assumptions about future major road improvements. Of these six networks, only two are pertinent to this project (Figure 4-1).

Network 1 was defined as the "No-Build" network since it included no improvement projects.

Network 6 included the construction of N.E. Circle Boulevard, N.W. 9th Street-N.E. Seavy Avenue as well as the construction of the proposed project.

With all networks, it was presumed that various collector/arterial street extensions and/or improvements will be made in the future other than the proposed projects; e.g., construction of the planned street network serving the Timberhill developments. However, it was assumed that Harrison Boulevard between 29th and 35th Streets will not be widened or improved to provide left-turn lanes at major intersections, in accordance with City Council actions in 1977. The major improvement projects assumed in each network are listed in Table 4-1.

1990 Traffic on Walnut Boulevard Extensions - With the selected alternative, it is estimated that average weekday traffic on the project section will range between 13,500 and 18,200 vehicles per day by 1990.

Area-Wide Traffic Service Impacts - The proposed improvement, in conjunction with other specified improvements to the major street and highway system in the Corvallis urbanized

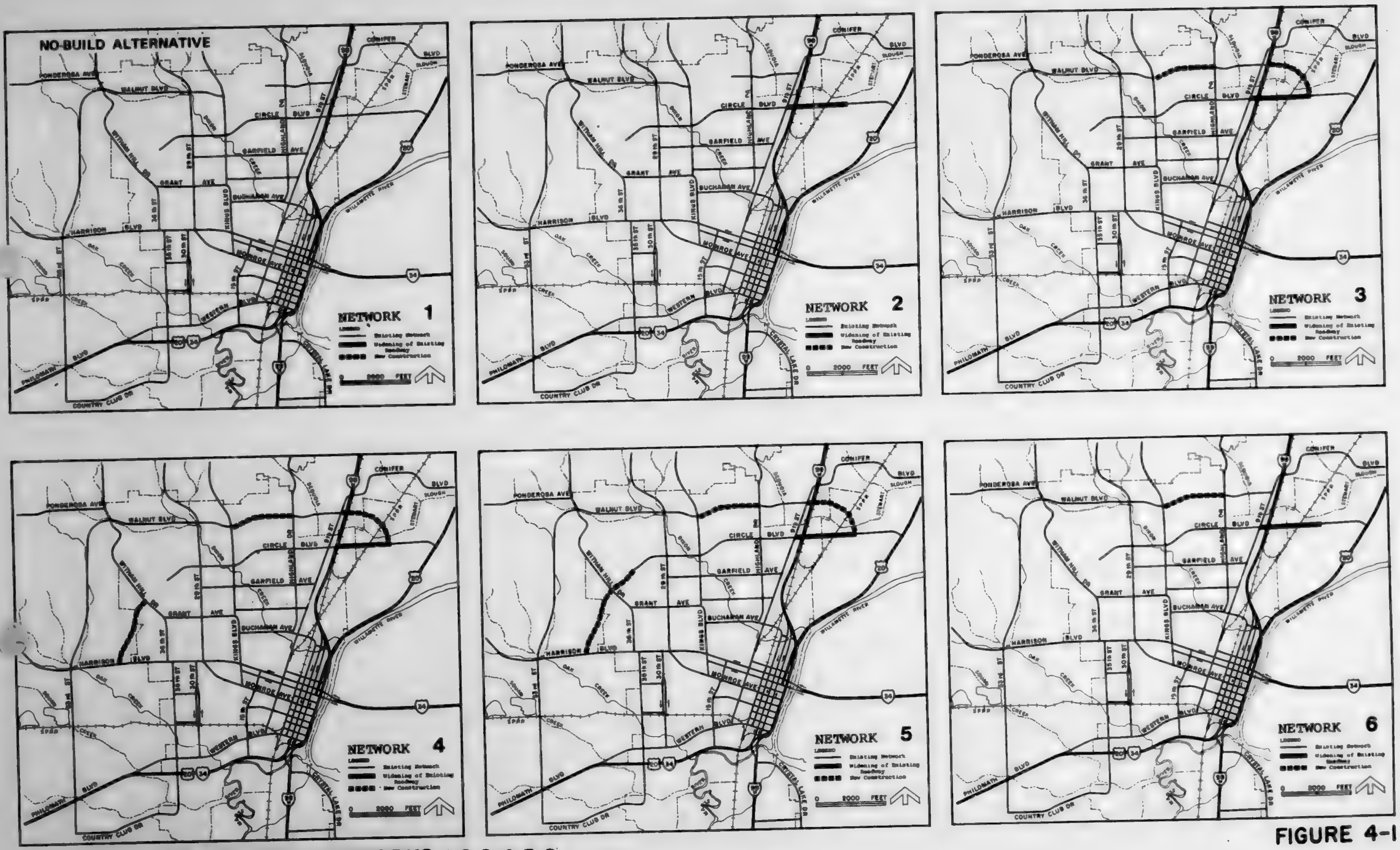

NO-BUILD ALTERNATIVE
NETWORK 1
NETWORK 2
NETWORK 3
NETWORK 4
NETWORK 5
NETWORK 6
LEGEND
Existing Network
Widening of Existing Roadway
New Construction
0 2000 FEET
PONDEROSA AVE
WALNUT BLVD
CONIFER BLVD
SLOUGH
STEWART
CIRCLE BLVD
HIGHLAND DR
9th ST
GARFIELD AVE
GRANT AVE
BUCHANAN AVE
WITHAM HILL DR
29th ST
36th ST
35th ST
30th ST
53rd ST
KINGS BLVD
HARRISON BLVD
MONROE AVE
15th ST
WESTERN BLVD
PHILOMATH BLVD
COUNTRY CLUB DR
CRYSTAL LAKE DR
OAK CREEK
SPRR
WILLAMETTE RIVER
20
34
99

FIGURE 4-1

1990 CORVALLIS HIGHWAY NETWORKS 1,2,3,4,5,6 (MAY 1978)

Table 4-1

MAJOR IMPROVEMENTS INCLUDED IN 1990 CORVALLIS HIGHWAY NETWORKS

FINAL TRAFFIC ASSIGNMENTS

Network	Proposed FAU Highway Projects	Other Circle Blvd. Route Improvements	Other Improvements Outside Project Area
1	None	None	None
6	4-Lane Circle-9th to Seavy	None	None
	4-Lane Walnut-Kings to Highland	None	None

Note: The following major improvement projects were assumed to be part of each of the above 1990 networks: 2-Lane Walnut-Harrison to Witham Hill; 4-Lane Walnut-Witham Hill to Kings; 4-Lane Walnut-Highland to 9th; 4-Lane 53rd-U.S. 20/ORE 34 to Harrison; 2-Lane improved Witham Hill-Walnut to Grant; CBD-Bypass (Central Corridor Alternative); 4-Lane extension of 9th to Western.

area, will improve the general quality of traffic service in the area. These beneficial impacts, comparing Network 6 with Network 1 (the "No-Build" option), will include savings at 1990 traffic levels amounting to about 16,000 vehicle-miles per day and 1,600 vehicle-hours per day. Average travel speed will be improved by about 1.1 miles per hour and the extent of traffic congestion will be significantly reduced from levels which would otherwise develop in 1990 (see Table 4-2).

Increased Traffic on Walnut Boulevard - The selected alternative will increase traffic on existing sections on Walnut Boulevard (see Table 4-3). The increases will be quite small, even at 1990 traffic levels, for the new and improved sections between Harrison Boulevard and 29th Street (1,000 to 2,000 vehicles per day). On the other hand, 1990 traffic on the 29th-Kings section will be 5,000 to 6,000 vehicles per day higher with the proposed project than without it, and traffic on the Highland-N.W. 9th sections will be 6,000-8,000 vehicles per day higher with the project. These projected volumes will all be well within the design capacity of the planned 4-lane facility. It should be noted that the required capacity east of Highland Drive will require either the removal of existing on-street parking or roadway widening within the existing 80-foot right-of-way.

Traffic Removed from Other Streets - The proposed extension of Walnut Boulevard between Kings and Highland will result in a continuous Walnut Boulevard circumferential route around north/northwest Corvallis, which will attract some traffic

Table 4-2

AREA-WIDE TRAFFIC SERVICE IMPACTS OF WALNUT BOULEVARD EXTENSION

Area-Wide Measure of 1990 Traffic Service	Build (Network 6)[1]	No Improvement Projects (No-Build Network 1)[1]	Impacts (Difference) Network 6 less 1
Daily Vehicle-Miles	595,484	605,859	-10,375
Daily Vehicle-Hours	25,742	26,945	- 1,203
Average Veh. Speed (mph)	23	22.5	+ 0.6
Average Trip Length (mi.)	2.14	2.18	- 0.04
% Veh.-Miles Above Capacity	17.2	21.9	- 4.7
% Road Miles Above Capacity	7.9	11.4	- 3.5

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[1] See Volume II, Traffic Analysis, for a detailed description of networks and traffic forecasts.

Table 4-3

1990 DAILY TRAFFIC IMPACTS ON WALNUT BOULEVARD

Roadway Section	No Improvement Projects (No-Build Network 1)	Build (Network 6)
Harrison-Witham Hill	6,900-6,700	7,400-7,100
Witham Hill-29th	7,600-8,800	8,500-9,900
29th-Kings	4,800	10,600
Kings-Highland	-----	14,600-18,400
Highland-9th	7,900-4,800	11,800-5,800

Note: Range of traffic volumes indicate the western end (1st number) of the section and the eastern end (2nd number).

which would otherwise use other less desirable routes. For example, the continuous Walnut Boulevard route will significantly reduce traffic along N.W. Circle Boulevard east of 29th Street (see Table 4-4). However, traffic on N.W. Circle between Arbol Place and 29th Street will be virtually unaffected.

Several other major streets will also benefit from traffic reductions due to the usage of the continuous Walnut Boulevard route, as follows:

29th Street, Circle to Walnut: 2,500-4,000 vehicles per day reduction

Kings Boulevard, Circle to Walnut: 3,100-4,000 vehicles per day reduction

Accessibility Impacts - The proposed Walnut Boulevard extension will improve the accessibility for existing areas and for developing new residential areas north of Walnut Boulevard, such as the Timberhill development. In addition, the proposed project will improve the accessibility of the Good Samaritan Hospital, (located north of Walnut Boulevard on Good Samaritan Drive) and the shopping and employment centers (located along the eastside of N.W. 9th Street. These accessibility benefits will result from the provision of a direct and continuous route between areas of trip generation (residential area) and key areas of trip attraction (centers of employment, shopping and public activity). With the No-Build Alternative, accessibility to major activities would be impaired, particularly for residential areas north of Walnut Boulevard.

Table 4-4

ESTIMATED 1990 TRAFFIC VOLUMES ON N.W. CIRCLE BOULEVARD WITH AND WITHOUT WALNUT BOULEVARD EXTENSION

Location	No Improvement Projects (No-Build Network 1)	Build (Network 6)
Arbol Place-29th Street	1,000-3,200	1,100-3,200
29th Street-Kings Boulevard	10,000	7,600
Kings-Highland	15,700-17,100	7,800-9,300
Highland-9th Street	11,100-12,100	12,600-14,600

Note: Range of traffic volumes indicate the western end (1st number) of the section and the eastern end (2nd number).

Temporary Construction Traffic Impacts - During the project construction period, very minor and short-term disruptions of traffic can be expected when work is undertaken at the intersections of Walnut Boulevard with Kings Boulevard, 13th Street and Highland Boulevard.

Construction traffic will also impact existing streets providing access to the project site for limited periods during one construction season.

Traffic Accident Hazards - The proposed Walnut Boulevard project will have both beneficial and adverse impacts with respect to traffic safety. The potential for accidents on existing sections of Walnut Boulevard will increase as a result of increased traffic along this route. However increased traffic safety benefits can be expected on N.W. Circle Boulevard and other streets which will be carrying lower traffic volumes with less congestion in peak periods. Traffic safety benefits can be expected as a result of improved distribution of traffic on the major street system and fewer turning movements. The net impact of the project on traffic safety is expected to be positive.

Through Traffic - The percentage of through trips on Walnut Boulevard will not exceed three percent of all 1990 trips with any of the networks tested. For purposes of this study, through trips are defined as trips which pass through the Corvallis urbanized area without stopping. With the No-Build Alternative, through traffic would not exceed one percent of all trips using existing sections of Walnut Boulevard.

Truck Traffic - The proportion of heavy truck traffic potentially using Walnut Boulevard would not be significantly affected by the selected Build Alternative. Most heavy truck traffic passing through the Corvallis area could be expected to use alternative routes via designated State and Federal route highways. The City of Corvallis will impose a truck restriction as they have done on other streets.

IMPACTS ON THE NATURAL ENVIRONMENT

The proposed Walnut Boulevard extension and the No-Build Alternative would impact the "natural" environment with respect to hydrology, geology (erosion), wildlife (biota), air quality and noise.

Hydrologic and Water Quality Impacts - The new roadway construction associated with the selected Build Alternative may result in slightly increased runoff flow rates into Sequoia Ditch during periods of heavy rains. The use of drainage discharge velocity controls such as baffles, sills or rip-rap will not be required.

"Short-term" hydrologic impacts such as increased siltation and turbidity levels in the creek could be caused by heavy rain in cleared areas during construction (graded slopes), mucking, and placement of fill. During the design stage, standard provisions will be made as necessary for such methods of control as adequate culvert openings and sediment control basins.

The long-term impact of the proposed project on drainage, surface water, flooding, ground water and water quality will be insignificant. The storm drainage facilities included in the proposed project will reduce occasional flooding and erosion from overland run-off.

During the construction phase, any springs which are located in the right-of-way will be diverted to the storm sewer drainage facility.

With the No-Build Alternative, minor erosion due to overland drainage and occasional flooding due to heavy rains, would continue to occur.

Geologic Impacts - The primary geologic impacts with the selected Build Alternative will be those that result from excavation and modifications to the embankment slopes and existing topography. These modifications are expected to be minor since the proposed alignment generally follows existing land surface contours. Other minor geologic impacts will be those associated with the hydrologic impacts discussed above, erosion and siltation.

Since no actual roadway construction would occur with the No-Build Alternative, there would be no direct impacts on land form, slope stability, erosion and soils. Indirect impacts would be attributable to continued minor erosion due to overland drainage, occasional flooding, lack of drainage systems, and increased surface water run-offs of some adjacent land undergoing development.

Biota Impacts - The selected Build Alternative will introduce vehicular traffic into areas which are presently in a natural state. It will have a minor negative impact upon the various species of plants and wildlife which occasionally inhabit the area insofar as it displaces and disturbs the natural habitat. However, the entire Walnut Boulevard corridor is expected to be urbanized whether or not the proposed street extension is implemented. For this reason, the impact of the proposed project may be seen as a small part of the overall urban growth process. No endangered species inhabit the area.

The No-Build Alternative would include no new street construction and, therefore, require no removal of the natural habitat in the area. The effect upon vegetation and wildlife within the roadway rights-of-way resulting directly from the No-Build Alternative would be insignificant.

Wetlands Impacts - Wetlands vegetation can be found in the vicinity of Dixon and Sequoia Creeks in the Walnut Boulevard corridor. However, the selected Build Alternative will not impact these areas. Any impacts which might occur will relate primarily to planned residential developments in the surrounding neighborhoods which are expected to occur with or without the project.

Air Quality Impacts - Short-term direct impacts of the selected Build Alternative on surrounding air quality will result from the grading and construction which takes place. However, total exhaust emissions from heavy equipment will be insignificant, even if not dispersed by winds, because project construction will be intermittent and phased over several months.

A secondary impact will result from possible increased traffic congestion and delays during construction. Such delays will increase automobile exhaust emissions by increasing idling time, lowering speeds and causing some drivers to take longer routes to avoid the construction area. However, because alternative routes are available, this impact is not anticipated to be significant.

An analysis of carbon monoxide concentrations and emissions indicate that no violation of air quality standards will occur for either the selected Build Alternative or the No-Build Alternative (see Table 4-5). All area source and line source tables predict conditions essentially the same as at present or, in many cases, a reduction in concentrations. With the project, CO concentrations (1 hour) for Network 6 in Area II (the project area) will be 0.5 milligrams per cubic meter in 1990 compared to 0.4 for the No-Build Alternative (Network 1); these levels are insignificant in relation to the standard (40 mg/m^3).* The CO concentrations expected in the project area will be very low in spite of traffic increases, due to the continuing federal automobile emission control program.

The emission of sulfur oxides, while violating no standards, does have some adverse effect on both plants and people. It is possible that the use of catalytic devices to clean up car exhaust can also produce a most undesirable sulfuric acid mist as well as metallic aerosols. As higher sulfur content fuels and lubricating oils are burned, the sulfur dioxide problem will continue to develop.

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*mg/m^3 = Milligrams per cubic meter

Table 4-5

AIR QUALITY IMPACT SUMMARY

AREA SOURCES, 1990-AREA II (WALNUT PROJECT AREA)

Pollutant	Air Quality Std. Avging Time	Air Quality Standard[a]	(Network 1)	(Network 6)
Carbon Monoxide	1 hour	40	0.4	0.5
	8 hour	10	0.2	0.3
Non-methane Hydrocarbons	3 hour (6-9 a.m.)	160	27	24
Nitrogen Dioxide	Annual mean	100	5	4
	1 hour	500[b]	20	16
Sulfur Dioxide	Annual mean	60	1	1
	1 hour	200	3	3
Suspended Particulate	Annual mean	60	1	1
	24 hour	150	3	3
Lead	24 hour	3	0.14	0.15

[a] State of Oregon standards in micrograms per cubic meter. CO is in milligrams.

[b] Calculated from annual arithmetic mean.

Note: Impact calculations are based on simplified, manual dispersion calculations and statistical techniques with conservative input values.

Since there is no reliable method for predicting the production of oxidants several hours and sometimes several miles downwind from non-methane hydrocarbon emissions, the emission factors themselves are used as an indication of potential oxide formation under stable air conditions. Predicted maximum non-methane hydrocarbons (Table 4-5) are only 15 percent of the concentration level necessary to exceed the 3-hour standard for Area II (the project area).

Lead emissions were calculated for traffic conditions in 1978 and 1985. Lead is not foreseen to be an air quality problem because lead emissions decrease as leaded fuel is phased out. Lead emissions are less than 10% of the standard for the project area in 1990.

Neither the proposed project nor the No-Build Alternative is expected to have a significant effect on regional air quality conditions in the Corvallis region since neither will induce new traffic, but will merely alter existing or new traffic flows from present or 1990 no-project conditions. The net effect on regional air quality, will be notable only in that vehicle speeds will be slightly higher with the proposed project which will result in slightly lower emission rates for most pollutants.

In summary, the determining factor of levels of air pollution in the project area in 1990 will be federal auto exhaust regulations rather than traffic resulting from the proposed project. Minor determinants will be vehicle speeds. For additional details concerning air quality impacts, see Volume II, - Air Quality Assessment for the Circle Boulevard-Walnut Boulevard Environmental Impact Statement.

The state has prepared an Air Quality Implementation Plan, which is a set of policies and regulations to attain compliance with national ambient air quality standards mandated by the Federal Clean Air Act of 1970. The proposed project has been found by the Department of Environmental Quality on October 12, 1979, to be consistent with this plan.

In 1975, the Hewlett-Packard Company was issued an indirect source permit by the Mid-Willamette Valley Air Pollution Authority. Nothing is noted in the permit that is directly related to the highway and street improvement projects under consideration in this document.

Noise Impacts - Traffic noise predictions were made with the National Cooperative Highway Research Program Report 174 traffic noise prediction model. This model computes noise levels using auto volume, truck volume, vehicular speed, and distance from the roadway. Traffic data used in the analysis corresponds with the peak vehicular hour (9.5% of the average daily traffic, with 0% heavy trucks). The percentage of heavy trucks is zero since the city of Corvallis has agreed to mitigate traffic noise by imposing a truck restriction ordinance in effect on this route. The ordinance will be the same as truck restrictions on other select streets in the city.

The predicted future traffic noise levels are shown in Table 4-6. Noise level contour maps showing 1978 conditions and 1990 "worst case" conditions without mitigation are provided in Appendix E (DEIS), while the noise level contour maps comparing 1990 networks are provided in Appendix F (DEIS).

Table 4-6 shows the noise levels 100 feet off the proposed roadway centerline for measured conditions in 1978 and predicted conditions in 1990. The section between Witham Hill Drive and Harrison Boulevard is now in operation but was not when the measurements were taken. The section between Highland Drive and Kings Boulevard is currently vacant, being the area the proposed

TABLE 4-6

COMPARISON OF 1990 NOISE LEVELS (L_{10} in dBA)*

	1978 Network	1990 Networks
	Net. 1	Net. 3**
N.W. 9th St.-Highland Dr.	68	67
Highland Dr.-Kings Blvd.	49, 57	67
Kings Blvd.-N.W. 29th St.	68	66
N.W. 29th St.-Witham Hill Dr.	67	65
Witham Hill Dr.-Harrison Blvd.	48, 50	64

*Calculated at 100 feet from center of road.

**Network 3 results in largest volume of vehicles on Walnut Boulevard as a result of connecting Walnut Boulevard at Ninth Street with N.E. Circle Boulevard near the Hewlett-Packard facility (See Figure 4-1).

route will cross. On the sections open to traffic in 1978, noise levels are predicted to be slightly lower through 1990. This is due to the effect of banning heavy trucks on the overall route. Without the truck ban, noise levels would be 6-7 dBA higher. On those sections not open to traffic in 1978, noise levels will substantially increase, but will still be within design noise levels for the affected land uses. Numbers of affected receptors, by category, are listed in Table 4-8.

TABLE 4-7

LOCATION OF THE DESIGN NOISE LEVEL CONTOUR IN 1990 ($L_{10}70$ dBA)

	Distance from Road Centerline	
	No-Build Alt.*	Build Alt.**
N.W. 9th St.-Highland Dr.	140 ft.	200 ft.
Highland Dr.-Kings Blvd.	--	200 ft.
Kings Blvd.-N.W. 29th St.	75 ft.	140 ft.
N.W. 29th St.-Witham Hill Dr.	100 ft.	140 ft.
Witham Hill Dr.-Harrison Blvd.	85 ft.	100 ft.

*Traffic Network 1.

**Traffic Network 3, worst case, without mitigation proposed for project (truck ban).

TABLE 4-8

TRAFFIC NOISE IMPACTS IN 1990

	No-Build Alt.*	Build Alt.**	Build Alt.***
Single-family Residences	71	86	48
Duplexes	18	20	18
Apartment Buildings (Approx. Number of Units)	19 (61)	25 (100)	14 (71)
Schools	1	1	0
Churches	1	1	0
Parks	2	2	0

*Traffic Network 1.
**Traffic Network 3, worst case. See Table 4-6.
***Traffic Network 3 with truck ban in effect.

Construction Noise Impacts

Areas adjacent to the project will also be exposed to additional noise during construction. This noise will be emitted by various pieces of construction equipment. Although of a temporary nature, the additional noise can be quite annoying. This is especially true during the quieter nighttime hours.

Sound level increases of about 3 dBA can be assumed to be the smallest change detectable by people. A 10 dBA increase is usually perceived as a doubling of loudness.

Resource Commitments - The major resources which will be committed to the selected Build Alternative will be land, materials and labor. Motor fuel consumption will be slightly less with the project than with the No-Build Alternative.

The extension of Walnut Boulevard will require about 7.3 acres of land which is presently undeveloped. The No-Build Alternative would require no land.

Most of the materials used in constructing the projects will be irretrievable after use. This will include crushed aggregate, asphaltic concrete, portland cement concrete and other construction materials. Approximate construction quantities are shown in Table 4-9.

Public funds will be required to construct the selected Build Alternative. Cost estimates for the project were prepared on the basis of recent Corvallis area unit costs. A summary of these cost estimates is presented in Table 4-10.

Vehicle fuel consumption will be lower with the selected Build Alternative than with the No-Build Alternative. This is because area-wide vehicle-miles of travel will be slightly reduced from about 605,900 vehicle miles per day (Network 1 - No-Build) to 595,500 (Network 6 - Build). There will also be reduced congestion, reflected in a one mile per hour average speed increase with the proposed project, which will further reduce fuel consumption.

TABLE 4-9

ESTIMATED CONSTRUCTION MATERIALS REQUIRED FOR WALNUT BOULEVARD PROJECT BUILD ALTERNATIVE

Item		Units	No. Units
1.	Clear & Grub	Lump Sum	1
2.	Excavation	Cu.Yd.	25,000
3.	Embankment	Cu.Yd.	2,000
4.	Crushed Aggregate Base Course	Tons	17,000
5.	Asphaltic Conc.	Tons	5,000
6.	Sidewalk and/or Bikepath	Sq.Ft.	52,000
7.	Curb & Gutter	Lin.Ft.	7,000
8.	Seeding & Mulching	Acre	3.0
9.	Misc. Drainage	Lump Sum	--
10.	Curb Inlet	Each	16
11.	24" RC Pipe	Lin.Ft.	700
12.	30" RC Pipe	Lin.Ft.	700
13.	48" RC Pipe	Lin.Ft.	1,000
14.	Manholes	Each	6

TABLE 4-10

ESTIMATED CONSTRUCTION COST

	Total
Construction	$520,000
Traffic Control	187,000
Engineering	83,000
Right-of-Way	20,000
TOTAL	$810,000

IMPACTS ON THE HUMAN ENVIRONMENT

Land Use Impacts - The selected Build Alternative will be consistent with the existing and proposed Comprehensive Plans, (See figure 4-2) and will support and encourage planned land developments, such as the Timberhill development, in the Walnut Boulevard corridor. The areas traversed by Walnut Boulevard are expected to be intensively developed as the Corvallis area grows in population as projected by local planning officials.

With the No-Build Alternative, the resulting lack of arterial street capacity could tend to inhibit development over the longer term. The lack of convenient arterial street access and growing congestion would constitute a deterrent to planned commercial development as well as some long-range residential development projected in the corridor. The ultimate effect on residential development is likely to be minor, however, since attractively located land which can be developed cost-effectively is becoming scarce in the Corvallis area. The effect on commercial development would be to make other areas relatively more attractive (including downtown Corvallis).

Increased traffic on north-south major streets between Circle Boulevard and existing sections of Walnut Boulevard (i.e., Kings Boulevard and 29th Street) would tend to make residential uses along these streets less attractive, and create pressures for transition to a mixed-use pattern of land use over the long-term. Again, the effect is unlikely to be significant.

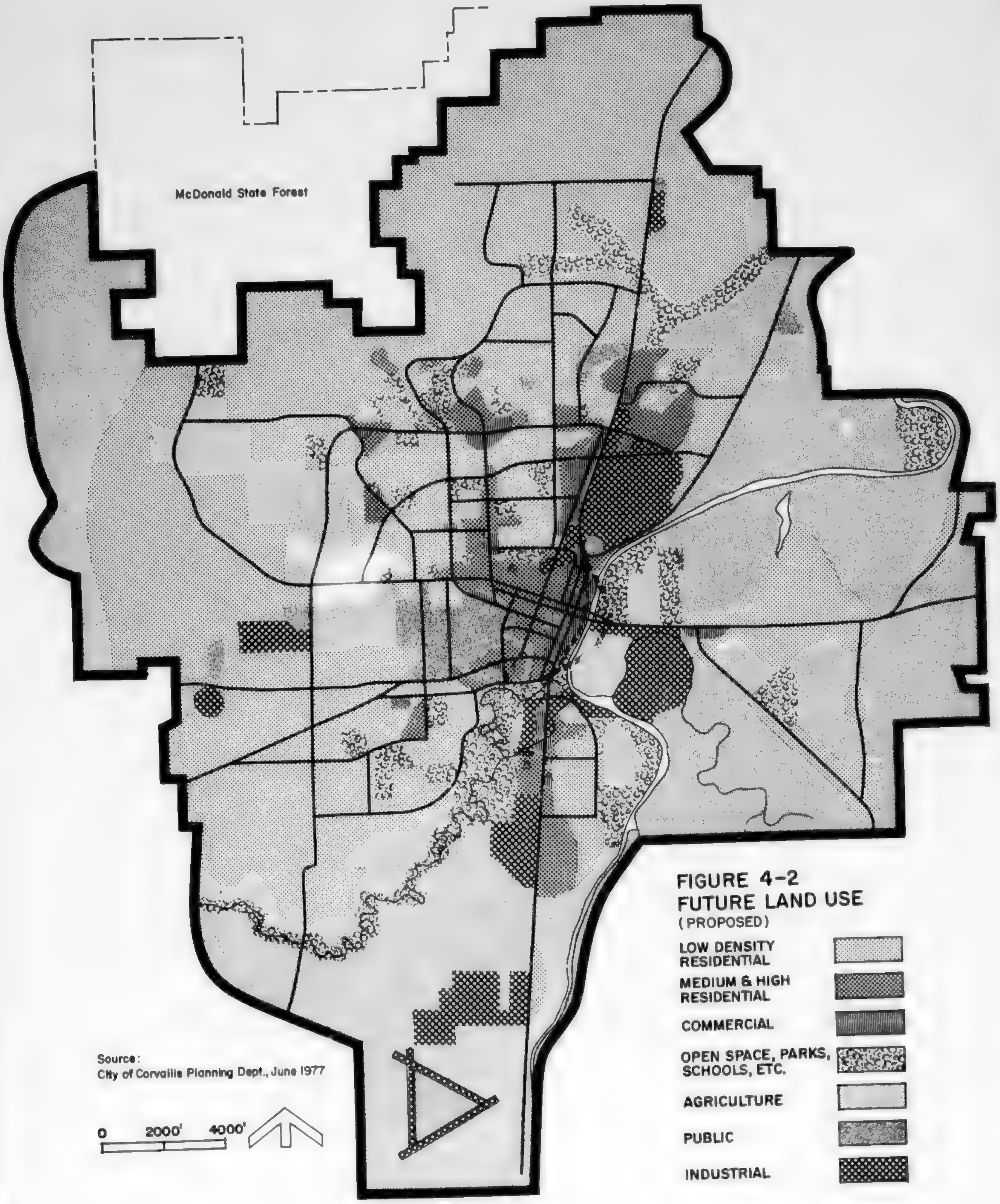
McDonald State Forest
LOW DENSITY RESIDENTIAL
MEDIUM & HIGH RESIDENTIAL
COMMERCIAL
OPEN SPACE, PARKS, SCHOOLS, ETC.
AGRICULTURE
PUBLIC
INDUSTRIAL
0
2000'
4000'

FIGURE 4-2
FUTURE LAND USE
(PROPOSED)

Source:
City of Corvallis Planning Dept., June 1977

In the short-term, the No-Build Alternative would have little effect on land use. For example, the Timberhill development would not be delayed merely by the absence of the Kings-Highland link of the Walnut Boulevard route because access to this project would be via planned extensions of various north-south streets and because traffic congestion is not yet a serious problem. Nevertheless, these developments would be adversely affected with respect to accessibility.

Displacement and Relocation Impacts - The construction of the selected Build Alternative will not require any displacements or relocations of existing residences or business. Similarly, no displacement or relocation of persons or structures would be necessary for the No-Build Alternative.

Impacts on Open Space, Parks and Recreation - The extension of Walnut Boulevard from Kings Boulevard to Highland Drive passes through an area that presently exists in a natural state. This area is not designated as open space and it is not used or planned for recreation. With the selected Build Alternative, noise levels along the new roadway resulting from increased traffic will be substantially higher than those existing today (10 to 18 dBA). This area is now vacant and planned for residential development, which will alter the existing character of the area, with or without the proposed street extension. Future noise levels are not expected to exceed design noise levels in this area.

The No-Build Alternative would have no direct impact on open space, parks or recreational facilities. On the other hand, noise levels due to traffic growth could be slightly higher on 29th Street near Timberhill Park with the No-Build Alternative, unless the city of Corvallis imposed a truck ban. A ban would substantially (6-7 dBA) lower noise levels. Noise impacts relating specifically to either alternative will be small and the difference will be imperceptible to park users.

The selected Build Alternative will also include a bikeway which will facilitate the recreational use of bicycles and bicycle access to the neighborhood park.

Social Impacts -The Walnut Boulevard extension will improve the accessibility of existing and future residential areas along and north of Walnut Boulevard to jobs, community facilities and shopping areas. These would include health services at the Good Samaritan Hospital; jobs at the Hewlett-Packard plant and future job opportunities along N.W. 9th Street and N.E. Circle Boulevard; and planned shopping opportunities along Walnut Boulevard as well as existing shopping opportunities at Circle and N.W. 9th Street. These beneficial effects will relate to all social groups residing in the study corridor, including the elderly and the handicapped.

With the No-Build Alternative, access to these community facilities and activities would be less direct for many residents in the developing residential areas. No unique circumstances were revealed which would require that special consideration be given to any distinct ethnic or racial group; the ethnic, racial and social makeup of the population would be unaffected by either alternative.

It has been shown that the selected Build Alternative will increase traffic volumes on some existing sections of the route. Where existing residences front directly on Walnut Boulevard, the increased traffic will be disruptive to the neighborhood. This impact will be greatest from Satinwood Avenue to 9th Street when traffic warrants four traffic lanes. The four traffic lanes would require widening of the existing roadway or elimination of curb parking. On the other hand, with the No-Build Alternative, similar adverse impacts would be experienced by the residents of other nearby neighborhoods. For example, traffic volumes and traffic intrusion in neighborhoods along 29th Street and Kings Boulevard north of Circle Boulevard would be greater with the No-Build Alternative than with the proposed project.

Economic Impacts - The economic impacts of the selected Build Alternative will relate to the prospects for new job opportunities; beneficial and adverse impacts on property values; impacts on the community tax base; and economic benefits to road users.

The effects of the selected Build Alternative on area-wide employment will be quite small. In the short-term, there will be a small amount of employment associated with construction of the facility. The project will also encourage and support the projected long-term growth of the urban area -- particularly the areas directly served along and north of the Walnut Boulevard route. However, it is unlikely that overall economic growth in the Corvallis urban area would be significantly different, with or without the project.

The selected Build Alternative could slightly lower values residential property fronting directly on existing sections of Walnut Boulevard, although in relative terms only. It is equally possible that improved traffic flow conditions could actually enhance residential property values--particularly with the reduced noise from the elimination of heavy trucks. The values of undeveloped tracts zoned for future residential development will be enhanced somewhat by improved accessibility. (Future developments would not be designed with Walnut Boulevard frontages.) Property values relating to planned commercial developments along Walnut Boulevard will be enhanced by the improved accessibility afforded by the project. The net result will be a beneficial impact on property values and the community tax base over the long-term.

The No-Build Alternative would have a minor, adverse impact on growth and development -- particularly in the Walnut Boulevard corridor. It is unlikely, however, that overall long-term economic growth would be significantly affected. The No-Build Alternative would adversely affect the potential values of residential properties along sections of 29th Street and Kings

Boulevard and planned commercial developments along Walnut Boulevard due to adverse traffic impacts. Some retail activity would likely be diverted to other Corvallis shopping centers as significant levels of congestion develop in future years; the net adverse impact for the area as a whole would be quite small.

The selected Build Alternative will provide significant benefits to road users in Corvallis -- savings relating primarily to a reduction in vehicle-miles of travel amounting to 16,000-19,000 vehicle-miles per day at 1990 traffic levels. The value of this saving will exceed $3,000 per day, or about $1.0 million per year (1978 dollars).

Impacts on Public Services - Implementation of the selected Build Alternative will facilitate the installation of needed utilities for the developing areas adjacent to this section of Walnut Boulevard, through coordination of street and utility construction. However, increased public utility services will be needed as growth continues in the Walnut Boulevard corridor. These services will be provided regardless of the action taken relative to the proposed project. The cost of providing some of these services, especially storm and sanitary sewers, could be slightly higher with the No-Build Alternative since utility construction would not be coordinated and combined with street construction.

Response time and access by emergency vehicles to areas served by Walnut Boulevard will be significantly better with the selected Build Alternative than with the No-Build Alternative.

The adverse effects of the No-Build Alternative on public services could be significant, especially with respect to fire protection and ambulance services. Response times by emergency vehicles to areas which would be served by the proposed Walnut Boulevard extension would be longer with the No-Build Alternative. Without the proposed project, emergency vehicles would be forced to use circuitous routes and residential streets in order to reach many areas which would be more directly served with the project.

Impacts on Historic, Archaeologic, and Paleontologic Resources - There are no historic, archaeologic, or paleontologic resources within the study areas that would be disturbed by either the proposed project or the No-Build Alternative. An archeological survey conducted by a professional archeologist on May 6, 1980 found no sites. An earlier survey and record search revealed no historic properties in the project area. It is concluded that the proposed project will have no effect on properties or sites on or eligible for the National Register of Historic Places. This conclusion of no effect is concurred in by the State Historic Preservation Officer (SHPO). Correspondence recording coordination with SHPO is reproduced in Appendix A.

Impact on Aesthetics - The construction of the new roadway will have a deleterious effect on vistas and the present aesthetic character of the presently undeveloped area traversed by the proposed Walnut Boulevard extension. The area traversed will be developed with or without the proposed street improvement and the existing natural state of the area is unlikely to remain. The use of foliage and other plant-material screening methods will mitigate the visual impacts of the roadway and traffic to some extent. Furthermore, the proposed project will provide new vistas from the roadway for motorists.

The No-Build Alternative would entail no actual construction and would, therefore, have no physical effect on views, vistas or aesthetic values, insofar as they preserve those that presently exist.

Chapter 5

MITIGATING MEASURES

Adverse impacts of the proposed extension of Walnut Boulevard between Kings Boulevard and Highland Drive relate primarily to the introduction of traffic into a presently undeveloped area and the inducement of additional traffic on existing sections of Walnut Boulevard. In addition, the proposed project would require the removal of some existing wildlife habitats. There would also be several unavoidable short-term impacts caused by project construction, including minor traffic disruptions and noise, as well as the creation of small-scale cuts and fills which could cause a minor degree of erosion. Construction of a roadway would also result in a slight increase in surface water run-off during periods of heavy rains.

Mitigation of Adverse Traffic Impacts

The selected Build Alternative will increase traffic on existing sections of Walnut Boulevard. The increased traffic relate primarily to 15 homes between 13th Street and Highland Drive and about 30 homes between Satinwood and N.W. 9th Street; one church in this area will also be affected. Noise increase from this traffic will be mitigated by imposing a ban on heavy trucks using this route.

The increased traffic along Walnut Boulevard which can be attributed to the selected Build Alternative will result in a 6,000-7,000 vehicle per day increase in traffic between Highland

Drive and N.W. 9th Street. The increase in traffic in the vicinity of the 15 homes between 13th and Highland will be greatest since there is little traffic there at present. The increased traffic on Walnut Boulevard could increase the hazards of traffic accidents along this route, although the incidence of accidents in the Corvallis area as a whole (all streets) will not be affected significantly and could actually be reduced.

Various measures can be taken to mitigate the traffic impacts along Walnut Boulevard. A number of alternatives exist:

1) Left-Turn Lanes - Left-turn provided at the intersections with Kings Boulevard, Highland Drive and N.W. 9th Street.

2) Intersection Traffic Controls - Traffic signals installed or improved as warranted at all intersections with arterial streets, as well as at Aspen Street. The traffic signals at Aspen and Satinwood Streets would include pedestrian signals to protect school children crossing Walnut Boulevard to Hoover and Wilson Elementary Schools.

3) Speed Controls - The presently posted designated speed of 35 mph could be extended to the new sections of Walnut Boulevard. Temporary designated speeds of 20 mph would apply before and after class hours at the school crossings when children are present at Aspen and Satinwood Streets, as required by state laws.

4) Truck Traffic Restrictions - Through-truck traffic is not expected to be significant on Walnut Boulevard, but might increase to significant levels if 53rd Street south of Harrison Boulevard is improved. Through truck traffic restrictions will be imposed, as the City has done elswhere.

5) Develop Greater Usage of other Transportation Modes - Developing greater use of transit, ride-sharing and bicycles for essential travel.

Which of these measures are warranted will be fully evaluated during preparation of project plans, specifications and estimates, and subject to separate approval at that time.

If the recommended short-term improvements contained in the recent Linn-Benton Transit Development Plan are implemented, the estimated ridership would increase to about 375 person trips per day - a minor share of total travel demand. Long-range transit improvements, with increased and new service to the northern and western parts of the urbanized area, would undoubtedly increase the daily transit ridership, but the percentage of all trips by transit will probably remain relatively small.

Employment characteristics at Hewlett-Packard and OSU lend themselves to car-pooling and possible company-sponsored van-pooling. The implementation and usage of these para-transit services would probably be related to the extent of possible future fuel shortages and energy conservation programs, and increasing private vehicle costs. Other company or agency incentives could be implemented to promote car and/or van-pooling programs.

Mitigation of Adverse Impacts of the Natural and Man-Made Environment

Various measures will be taken to mitigate adverse effects on hydrological considerations and soil erosion; air quality and noise levels; neighborhood cohesion, residential property values and neighborhood character; and land use. Many of these measures are the same as outlined in the foregoing section on traffic impacts.

Hydrologic and Water Quality Impacts - During the design stage, provision will be made as necessary for such methods of control as adequate culvert openings and sediment control basins. The storm drainage facilities included in the proposed project will reduce the effects of runoff and erosion during heavy rains. Any springs which are located in the right-of-way will be diverted to the storm drainage facility.

Standard engineering design practices will be applied to minimize the impacts of the project on the physical environment. In addition to these design treatments, limitations will be placed on construction activities to minimize erosion. Contract provisions will be written for seeding and mulching and the provision of sediment detention basins which will produce acceptable effluent discharges.

Biota Impacts - The primary measure that would mitigate impacts on biota would be the purchase of an equivalent acreage as a natural wildlife habitat, however, funds are not available for this purpose. The use of trees or other plantings along the roadway will afford partial mitigation.

Noise Impacts - Reduction of sound levels may be accomplished with:

1) Traffic Management - restrictions on certain vehicle types, modified speed limits, time-use restrictions, etc.

2) Alternative Road Designs - changing horizontal alignment to increase distances to activity areas or changing vertical alignment to gain acoustic shielding effects from cut/fill sections.

3) Sound Barriers - suitable walls or earthen berms high enough to break the view between the sound source and the sound receiver and long enough or situated to prevent the flanking of sound around the ends of the barrier.

4) Structural Alterations of Public Buildings - adding ventilation or air conditioning systems so windows can remain closed, use of double-pane windows (these actions affect only the interior noise levels.)

Traffic Management Techniques - Traffic management techniques can significantly reduce traffic noise levels along Walnut Boulevard. Heavy trucks were initially anticipated to be 5% of the total vehicular volume. As discussed under Noise Impacts, the elimination or reduction of trucks will substantially reduce noise levels.

Eliminating heavy trucks will decrease noise levels about 6-7 dBA. Table 5-1 shows the predicted traffic noise levels with 0% trucks for the worst Build Alternative (Network 3). The project section from Highland Drive to Kings Boulevard will still experience traffic noise level increases that are 10-18 dBA above the No-Build Alternative level, because it will be open to traffic now using other routes.

Table 5-2 shows the number of traffic noise impacts. As shown, the number of impacts is greatly reduced by imposing a truck restriction. The remaining impacts are all located between N.W. 9th Street and Rolling Green Way.

Alternative Road Designs - Changing horizontal or vertical alignments is not a practical method of mitigation. The alignment presented is the result of the locations of existing sections of Walnut Boulevard and the terrain in between. In addition, the right-of-way has already been dedicated.

TABLE 5-1

EFFECT OF TRUCK RESTRICTION ON 1990 TRAFFIC NOISE LEVELS (L_{10})*

	NETWORK 1 NO BUILD ALTERNATIVE	NETWORK 3 Without Truck Restriction	NETWORK 3 With Truck Restriction
N.W. 9th St.-Highland Dr.	72	74 dBA	67 dBA
Highland Dr.-Kings Blvd.	***	74 dBA	67 dBA
Kings Blvd.-N.W. 29th St.	68	72 dBA	66 dBA
N.W. 29th St.-Witham Hill Dr.	70	72 dBA	65 dBA
Witham Hill Dr.-Harrison Blvd.	69	70 dBA	64 dBA

*Calculated at 100 feet from the road centerline.
**Assuming 0% trucks.
***1976-1978 is 49-57 dBA.

TABLE 5-2

TRAFFIC NOISE IMPACTS IN 1990 FOR THE BUILD ALTERNATIVE*

	Without Truck Restriction	With Truck** Restriction
Single-family Residences	86	48
Duplexes	20	18
Apartment Buildings (Approx. Number of Units)	25 (100)	14 (71)
Schools	1	0
Churches	3	0
Parks	2	0

*Traffic Network 3.
**Assuming 0% trucks.

Traffic noise impact mitigation using sound barriers was investigated in four locations. Table 5-3 shows the locations, designs, and noise level reductions. These are not recommended because of their overall cost, adverse effect on aesthetics and only partial effectivness of the six foot walls. What follows is a summary of the sound barrier analysis.

Sound barriers with heights of six feet and ten feet were considered at each location. Noise levels are predicted to be seven to twelve dBA lower at a first floor apartment level with barriers (see Table 5-3). For the majority of the residences and first floor apartments, noise impacts would be eliminated. Barriers 14 to 16 feet high would be required to mitigate noise impacts at the second floor apartment level. The noise impacts at residences and apartment units located near the ends of the noise barriers would not be eliminated, but would be partially reduced by 2-5 dBA.

The estimated cost of the four sound barriers are given in Table 5-5. As shown, the cost of a timber wall is about one-half the cost of a concrete wall. But the life expectancy of a timber wall is 20 years, compared to 50 years for a concrete wall. Maintenance cost is anticipated to be higher for the timber wall than the concrete wall, though the actual difference has not been estimated. An economic analysis shows an annual cost of $8.02 per lineal foot for wood construction compared to $12.32 per lineal foot for concrete construction.

Table 5-3

SOUND BARRIER DATA

Barrier	Height	Length	Noise Reduction Level
Rolling Green Way-Garryanna St.	10 ft.	650 ft.	12 dBA
	6 ft.	650 ft.	7 dBA
Garryanna St.-N.W. 13th St.	10 ft.	320 ft.	10 dBA
	6 ft.	320 ft.	7 dBA
N.W. 13th St.-Highland Dr.	10 ft.	810 ft.	11 dBA
	6 ft.	810 ft.	7 dBA
Oak-Fairlawn	10 ft.	800 ft.	12 dBA
	6 ft.	800 ft.	7 dBA

*Maximum reduction in noise level,smaller reductions are anticipated toward the ends of the sound.

Table 5-4

TRAFFIC NOISE LEVELS (L_{10}) IN IMPACTED AREAS

	No-Build Alternative	Build Alternative		
		w/o Truck Restriction	With Truck Restriction w/o Barrier	With Truck Restriction w/Barrier
Rolling Green Way-Garryanna St.	Approx. 49-57 dBA	78 dBA	71 dBA	64 dBA
Garryanna St.-N.W. 13th St.	Approx. 49-57 dBA	78 dBA	71 dBA	64 dBA
N.W. 13th St.-Highland Dr.	Approx. 49-57	78 dBA	71 dBA	64 dBA
Oak-Fairlawn	76 dBA	78 dBA	71 dBA	64 dBA

Note: Calculated at 50 feet from road centerline.
Calculated using a sound barrier 6 feet high.

Table 5-5

SOUND BARRIER PRICE ESTIMATES

Sound Barrier	CONCRETE CONSTRUCTION Barrier Height	CONCRETE CONSTRUCTION Total Cost	TIMBER CONSTRUCTION Total Cost
Rolling Green-Garryanna	6 ft.	$ 75,000	$36,000
	10 ft.	110,000	55,000
Garryanna-N.W. 13th	6 ft.	37,000	18,000
	10 ft.	55,000	27,000
N.W. 13th-Highland	6 ft.	45,000	*
	10 ft.	185,000	
Oak-Fairlawn	6 ft.	95,000	45,000
	10 ft.	140,000	70,000

*Timber construction not recommended due to safety considerations.

Structural Alterations - With the truck restriction implemented, the remaining noise impacts involve only private residences. Since they are not public buildings, structural alterations cannot be used to reduce interior noise levels.

Traffic Noise Mitigation Conclusions - A truck restriction on Walnut Boulevard is recommended to mitigate traffic noise impacts. The city will impose a truck restriction upon project completion. It will be similiar to an existing truck restriction ordinance on four streets in the Corvallis Ordinances listed under Section 30A. Paragraph (1) of this section restricts the operation of a vehicle or combination of vehicles (other than school buses) weighing 12,000 pounds or more. This restriction is recommended for entire length of Walnut Boulevard between N.W. 9th Street and Harrison Boulevard.

The sound barriers evaluated are not recommended for this project due to:

1. Cost of the barriers would add approximately 28% to the total cost of the project.
2. The ten-foot walls would detract from the aesthetics of the area.
3. The six-foot walls do not provide sufficient noise level reduction.

Future developments along Walnut Boulevard should be designed with the following building construction principles:

1. Minimize window exposure to heavily traveled streets, solid walls act as good noise barriers,
2. Accoustically rated glazing should be used,

3. Air-tight, full depth insulation and an extra layer of sheetrock should be used,

4. Set buildings back from the roadway.

Mitigation of noise impacts occuring during construction of the project shall include the following time constraints in the construction specifications:

> "Construction activities within 1,000 feet of any occupied residence will not be allowed on Sundays, legal holidays, or on other days between 10:00 p.m. and 6:00 a.m. Exceptions to this provision can be provided by the resident engineer."
>
> "Pile driving or blasting activities within 3,000 feet of any occupied residence will not be allowed on Sundays, legal holidays, or on other days between 8:00 p.m. and 8:00 a.m. Exceptions to this provision can be provided by the resident engineer."

Aesthetic Impacts - The use of foliage and other plant material screening methods will minimize the visual impact of the new roadway.

Open Space, Parks and Recreation of Impacts -Timberhill Park will not be adversely affected by increased traffic and noise levels on Walnut Boulevard. The restriction of heavy truck traffic on the proposed route will keep noise levels below FHWA design levels. Another measure which will help reduce adverse noise conditions is the placement of noise sensitive uses in locations remote from the roadway, with less sensitive uses closer to the roadway. Such steps will be the responsibility of the city of Corvallis.

No-Build Alternative

The No-Build Alternative would entail some of the same types of adverse impacts as the selected Build Alternative. Whereas increased traffic will develop on Walnut Boulevard with the Build Alternative, the No-Build Alternative would cause increased traffic loads on sections of N.W. Circle Boulevard, 29th Street and Kings Boulevard. Some increase in noise and pollutant concentrations in these areas would result. The types of measures to mitigate these traffic-related impacts outlined above for the Build Alternative could also apply with the No-Build Alternative.

The primary focus would need to be on traffic control measures relating to major turning movements on Circle at Kings, 29th and Highland; and the development of greater usage of alternative modes of travel.

Chapter 6

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The purpose of this section is to summarize the irreversible effects of the selected Build alternative on potential uses of the environment. These effects will include the use of land, labor, energy and materials for construction of the roadway and secondary effects on future use of open space for urban development.

Completion of the long planned Walnut Boulevard route with the extension between Kings Boulevard and Highland Drive will irreversibly commit 7.3 acres of presently undeveloped land to street traffic purposes. This project will also tend to encourage future land development in undeveloped areas, although such development will be consistent with the Comprehensive Plan for the Corvallis urban area. It is likely that most or all of this future development will eventually occur even without the proposed project, assuming no basic change in the present or proposed Comprehensive Plan or city policy on growth.

The selected Build Alternative is not expected to have much effect on total travel in Corvallis as compared with the No-Build Alternative. Consequently, very little effect on energy use for motor vehicle travel is anticipated. A reduction in motor fuel consumption can be expected, primarily due to a slight reduction in total vehicle-miles of travel as a result of more direct travel for some trips. There will also be less congestion in the area.

The Walnut Boulevard project will cost about $810,000 (1978 dollars). Construction labor and materials will be committed to the project and unavailable for other uses.

Chapter 7

SHORT-TERM USES vs LONG-TERM PRODUCTIVITY

The purpose of this section is to identify the trade-offs to be considered between short-term environmental gains at the expense of long-term environmental losses, and vice-versa.

The short-term losses will relate primarily to construction activities (traffic, disruption, noise, etc.); these will be relatively minor considerations. There will also be some short-term loss of non-critical wildlife habitat within the roadway right-of-way, although this will not be extensive. The long-term gains will include traffic service benefits (reduced congestion, etc.) and improved accessibility to key centers for jobs, public services and shopping opportunities in the Walnut Boulevard travel corridor. These long-term traffic service benefits will accrue to several thousand residents each day. There will also be shortterm gains relating to construction employment. The long-term losses will include the loss of 7.3 acres of presently undeveloped land (which is likely to be lost to urban uses in any case).

With the No-Build Alternative, the trade-offs would be mainly between short-term gains and long-terms losses in productivity, although there would also be some long-term gains. The short-term gains would include the avoidance of project costs and construction period adverse impacts on environmental quality. Long-term losses in productivity would relate to traffic service disbenefits; reduced accessibility to jobs, public facilities and shopping areas served by Walnut Boulevard; increased emergency vehicle response times; and increases in traffic in neighborhoods other than those directly served by Walnut Boulevard (N.W. Circle Boulevard, 29th Street, Kings Boulevard). The long-term gains would include the continuance of small volumes of traffic in neighborhoods along existing sections of Walnut Boulevard; avoidance of disruptions of wildlife habitats located within the right-of-way and the value from the use of FAU funds elsewhere.

COMMENTS AND RESPONSES

The Draft Environmental Impact Statement was made available to the Environmental Protection Agency and the public on April 27, 1979. Comments were solicited from several federal, state, county, city and private organizations as listed in the summary, page iii. Comments were received from six agencies. The responses to these comments are made on pages 87 to 89. Copies of the written communications received from these agencies are contained in the letters section.

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COMMENTS AND RESPONSES

Commentor	Response
U.S. Environmental Protection Agency	p. 86
U.S. Department of Energy	p. 87
U.S. Department of Agriculture, Soils Conservation Services	p. 87
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Department of Environmental Quality	p. 88
Division of State Lands	p. 89

Response to Comments Received on the Draft Environmental Impact Statement

U.S. Environmental Protection Agency

Comment: The effect of additional storm drains and paved areas on downstream water quality and flows should be addressed in greater detail. The statement that this will reduce flooding is never explained. It appears possible that some of these projects, such as the new Circle Boulevard up the draw through Woodland Meadow Natural Park, could increase the potential for downstream flash flooding by increasing the rate of runoff. The increased pollutant load from road runoff, which will include oil and lead, and possible mitigation should be discussed.

Response: Additional discussion of storm drains, paved areas, etc., is included in the Final Environmental Impact Statement.

Comment: The use of the Hewlett-Packard monitors should be better justified, particularly since they are located at a distance from the actual project area. Also, since population and employment is increasing, the current background levels for analysis.

In summary, any future EIS should provide complete, up-to-date, relevant information, including measured data representative of the site, current pollution levels, and justified model parameters. However, in this case, the described project impacts are considerably lower than the NAAQS. Therefore, even if the analysis is corrected, and results in a change in the predicted values by a factor of three, these projects would still be consistent with the Clean Air reqirements and the State Implementation Plan.

Response: These monitors were the only ones available in the city of Corvallis during the study phase. Growth in the Corvallis area has not increased as rapidly in recent years as auto emissions have decreased; measured levels are therefore conservative.

Comment: We strongly recommend that as many as possible of the suggested mitigation measures in Section

IV of the Acoustical Assessment be implemented both during the design and construction of this project.

Response: A complete disucssion of noise mitigation evaluated and proposed is found on pages 71-78 of this document.

U.S. Department of Energy

Comment: The Department of energy commented that the draft EIS didn't consider the issues of energy use in construction activities, annual project energy use, energy consumed by maintenance activities or energy savings by use of alternate materials.

Response: A project of this size which is designed to meet a specific transportation need does not consider energy issues as a major decision making concern. The U.S. Department of Energy has estimated the amount of energy required to construct the proposed project at 70 billion BTU's. If this energy requirement is divided by the energy saved by the use of less fuel (shorter trip distance), it is found that use of the new facility for three years is required to offset this initial energy expenditure. Maintenance activities on this short section of roadway would also be completely offset by the energy savings realized by the new facility. The use of alternate (low energy) materials in the construction phase will be governed by federal and state material specifications. The use of new materials which require less amounts of energy to produce is an ongoing objective in road construction. It is anticipated that excessive energy consumpiton will result from the proposed construction--standard engineering practices will ensure this. Renewable resources will be used where deemed qualitatively and economically feasible.

U.S. Department of Agriculture, Soil Conservation Services

Comment: The proposed project will require about 7.3 acres of land. Is any of this prime or unique farmland?

Response: The proposed project is within the city limits of Corvallis (see Figure 3-4). The land, which has been provided as a result of right-of-way dedications from previous subdivisions, was originally farmland. However, the area is within the urban growth boundary and therefore is not zoned for agricultural purposes. The soil is classified as Hazelaire series, which is neither prime nor unique.

U.S. Department of the Interior

Comment: Page 32, par. 1. This paragraph states that "No threatened or endangered species exist in the project area." This conclusion is questionable since Bradshaw's desert parsley (Lomatium bradshawii), which is proposed for endangered status, has been located north of Corvallis. Preparation of the final statement should include efforts to determine the presence or absence of this species in the project corridor and provide appropriate discussion. If additional information and assistance is needed, the project sponsors may wish to request an informal consultation with the Endangered Species Team, Fish and Wildlife Service, 4620 Overland Road, Room 238, Boise, Idaho 83705.

Response: While this species has been located in the greater Corvallis area, its existence has not been discovered in the project area.

Department of Environmental Quality

Comment: (1) We generally agree with the noise mitigation proposals outlined in the DEIS. However, more consideration should have been given to the construction of noise barriers for protection of residential property. Specific locations and designs for noise barriers should have been set out and discussed in the DEIS.

Response: The Final Environmental Impact Statement includes a new, up-to-date noise analysis which considers noise barriers, but recommends against their use on cost and aesthetic grounds.

Comment: (2) We recommend a noise barrier be constructed for the federally funded Walnut Boulevard street section between 13th Street and Highland. An acoustical wall located between the existing street (which becomes a frontage road) and the new street would reduce the noise impact to the home south of Walnut Boulevard.

Response: The new noise report considered a noise barrier in this location, but recommends it not be constructed.

Comment: (3) Several times in the noise investigation discussion, the DEIS stated that an area was zoned for industrial use and that noise mitigation measures were not needed. Some existing residential properties are located within these industrial zones. Unless it can be shown that these properties will be converted to industrial or commercial use in the near future, they should be considered for noise mitigation as any other residential property.

Response: There are no residences within the area presently zoned for industrial use. Noise mitigation has been considered for all applicable uses.

Comment: (4) Since a large amount of land along Circle and Walnut Boulevards is presently vacant, the implementation of land-use controls is very important for mitigation of the noise impacts. We support the land-use controls outlined in the DEIS. We recommend the local planning department be informed of these control measures as soon as possible.

Response: A copy of this statement will be sent to the city planning department.

Division of State Lands

Comment: If the project would require the removal, fill or alternation of 50 cubic yards or more of material within the banks of the waterway(s), we urge the application to apply for state fill or removal permits well in advance of construction deadlines to prevent unnecessary project delays. Specific information on the need for permits may be obtained from the Division of State Lands' office at 1445 State Street, Salem, OR 97310. Phone 378-3805.

Response: The comment is noted. Permits will be applied for as necessary.

AGENCY COMMENTS RECEIVED

ON DRAFT ENVIRONMENTAL IMPACT STATEMENT

U.S. Department of Agriculture, Soil Conservation Service	31 May 1979
U.S. Department of Energy	12 June 1979
Department of Environmental Quality	18 June 1979
Division of State Lands	18 June 1979
U.S. Environmental Protection Agency	20 June 1979
U.S. Department of the Interior	6 July 1979

United States Department of Agriculture

Soil Conservation Service

1220 S. W. Third Avenue
16th Floor
Portland, OR 97204

ENVIRONMENTAL SECTION
June 4, 1979

cc: E. S. Hunter
D. H. Moehring
J. H. Versteeg
F. E. Terpin
Walter Hart
C. O. Fredrickson
H. C. Johnson
Eddie Welsh
Paul Riedl (FHWA)
Glen Green (FHWA)

May 31, 1979

Mr. Gary A. Potter, Manager
Dept. of Transportation
Highway Division, Transportation Bldg.,
Salem, OR 97310

Dear Mr. Potter:

The Soil Conservation Service has reviewed the draft environmental impact statement for Walnut Boulevard, Kings Blvd., to Highland Drive Section, of N. W. Walnut Blvd., Benton County, Oregon.

The proposed project will require about 7.3 acres of land. Is any of this prime or unique farmland?

Our field office located in the Executive Building, 663 Jackson Street, Corvallis, can assist you with this determination.

We appreciate the opportunity to review and comment on this draft.

Yours truly,

Hillebrandt Acting
Guy W. Nutt
State Conservationist

cc: Director, Office of Federal Activities (Mail Code A-104) (5)
Environmental Protection Agency
Room 537, West Tower
401 M. Street, S. W.
Washington, D. C. 20460

Administrator, SCS, Wash., D.C. (1)

ENVIRONMENT[illegible]TION
JUNE 18, 19

cc: E. S. Hunter
D. H. Moehring
J. H. Versteeg
F. E. Terpin
Walter Hart
C. O. Fredrickson
H. C. Johnson
Eddie Welsh
Paul Riedl (FHWA)
Glen Green (FHWA)

Department of Energy
Region X
1992 Federal Building
915 Second Avenue
Seattle, Washington 98174
(206) 442-7285

June 12, 1979

Mr. Gary Potter
Manager
Environmental Section
Oregon State Highway Division
Salem, Oregon 97310

Dear Mr. Potter:

The Department of Energy (DOE) appreciates the opportunity to comment on the Draft Environmental Impact Statement (EIS) for Circle and Walnut Boulevards, Benton County, Oregon (FHWA-OR-EIS-79-04-D and 05-D).

Four of the responsibilities assigned to the DOE when Congress enacted the DOE Organization Act (42 USC 7101) were:

(1) To promote efficiencies in the use of energy resources USC 764 (b)(7));

(2) To promote maximum possible energy conservation measures in connection with the activities within the jurisdiction of the heads of other Federal Departments and agencies (42 USC 7112(2));

(3) To place major emphasis on the development and commercial use of solar, geothermal, recycling and other technologies utilizing renewable energy resources (42 USC 7112 (6)); and,

(4) To provide for the cooperation of Federal, State, and local governments in the development and implementation of national energy policies and programs (42 USC 7112 (11)) (emphasis added).

This Regional Office is utilizing the EIS comment process as one way to fulfill these responsibilities assigned to the DOE by Congress. This Office, therefore, reviewed the referenced Draft EIS to determine not only the specific impact of the alternatives on energy consumption, but also to assess: (1) the adequacy of the EIS's broad consideration of energy use, (2) the type and nature of energy use, and (3) the consideration given to energy conservation/efficiency and renewable energy resource use. We found that the EIS generally does not demonstrate a consideration of the issues of energy use, energy conservation or use of renewable energy resources associated with the alternatives considered and proposed mitigative measures.

More specifically, the EIS does not presently include a consideration of the energy invested in the material which would be used to construct the alternatives and the energy consumed by construction activities. In order to make some energy comparisons, this Office has performed some rough calculations of the energy requirements of the "build" alternatives, using general conversion factors between construction costs, type of construction, and energy use (see the DOE's State Energy Conservation Plan Handbook, pp. 61-80, enclosed). Results of these calculations follow:

N.W. 9th St. to Seavy Avenue.........	45 billion Btu.
Seavy Avenue to Hwy. U.S. 20.........	35 billion Btu
Harison Blvd. to Witham Hill Drive...	55 billion Btu.
Witham Hill Drive to Arbol Place.....	30 billion Btu.
Walnut Boulevard Project............	70 billion Btu.

Note that the level of energy investment for these five alternatives combined could be considered significant. For example, the total amount of energy invested could heat approximately 2,400 single-family dwelling units for one year.

The EIS also does not consider and specify the energy effects associated with the completed project. As noted in the draft EIS despite a high initial energy investment, the completed project may result in a net energy saving over the long-term, if annual energy use that would otherwise occur is significantly reduced because of the project, (ie. more direct routes, better traffic flow). A comparison of the trade-off between the initial construction energy investment and long-term energy use should be made for each alternative and considered in your decision-making. Futhermore, the energy consumed by maintenance activities might warrant consideration.

We would appreciate a demonstration of the consideration of the potential for the use of alternative materials, as well as the existing consideration of alternative projects, in the Final EIS. The Final EIS should also present an indication that the potential for the use of alternative construction techniques and procedures was considered. Some procedures can greatly alter energy consumption during construction (e.g., specifying a higher moisture content and lower temperature in hot mix asphalt, requiring higher loading efficiencies for earth moving equipment, maximizing use of on-site materials, utilizing standardized and repetitive dimensions to permit maximum reuse of forms, and encouraging carpooling by construction employees).

Additionally, the EIS should indicate what measures will be taken to mitigate excessive or potentially unnecessary energy consumption due to the design, construction, use, and maintenance of the eventual proposed action. Any potential for substitution of renewable energy reources for nonrenewable energy resources should also be addressed in the Final EIS. Finally consumptive impacts should be noted in the sections titled "Probable - Adverse Environmental Impacts Which Cannot be Avoided" and "Irreversible and Irretrievable Commitments of Resources", and the consideration of energy investment in the section "Impacts on the Natural Environment", Resource Commitments" could be expanded and enhanced, as appropriate.

This Office again thanks you for the opportunity to review and comment on your Draft EIS. We hope our comments will be helpful to you in the preparation of a more specific and quantitative Final EIS, and in your further consideration of the alternatives. If we can be of further assistance, please do not hesitate to contact us.

Sincerely,

Robert B Hackman

Robert B. Hackman, Director
Office of Assessment & Integration

Enclosures
cc:
Lee Johnson, Acting Director, External Affairs Division, Region X, DOE

Dr. Robert Stern, Acting Director, Division of NEPA Affairs, Office of the Assistant Secretary for Environment, NDOE

F.A. Leone, Division of NEPA Policy and Planning, Office of the Assistant Secretary for Conservation and Solar Applications, NDOE

- Paul Brumby, Director, Federal Programs Office, Office of the Assistant Secretary for Conservation and Solar Applications, NDOE

- David Philbrick, Director, Renewable Resource Programs, Oregon Department of Energy.

The Department of Environmental Quality
Noise Pollution Control Section Comments
D.E.I.S. Circle Blvd. and Walnut Blvd. Hwy. Projects
Corvallis, Oregon
(7904-4-1070)

This Draft Environmental Impact Statement was commissioned to address the impacts from the construction of the following Corvallis City Streets:

(1) Extension of NW Circle Blvd., between Witham Hill and Lantana;

(2) Improvement of NE Circle Blvd. east of 9th Street to a point near the Hewlett-Packard plant.

(3) Extension of NW Walnut Blvd. between Kings and Highland.

These three arterial street sections are the final parts of a major Corvallis street construction project on Circle and Walnut Blvds. In order to adequately assess the impacts from these three small street sections, the D.E.I.S. addressed the impacts from the total Circle/Walnut Blvd. street project.

The noise impacts associated with Circle and Walnut Blvds. were adequately presented in the D.E.I.S. For the most part, the discussion of the noise mitigation measures was also adequately presented (i.e., Volume II). However, we have the following comments:

(1) We generally agree with the noise mitigation proposals outlined in the D.E.I.S. However, more consideration should have been given to the construction of noise barriers for protection of residential property. Specific locations and designs for noise barriers should have been set out and discussed in the D.E.I.S.

(2) We recommend a noise barrier be constructed for the federally funded Walnut Blvd. street section between 13th Street and Highland. An acoustical wall located between the existing street (which becomes a frontage road) and the new street would reduce the noise impact to the home south of Walnut Blvd.

(3) Several times in the noise investigation discussion, the D.E.I.S. stated that an area was zoned for industrial use and that noise mitigation measures were not needed. Some existing residential properties are located within these industrial zones. Unless it can be shown that these properties will be converted to industrial or commercial use in the near future, they should be considered for noise mitigation as any other residential property.

(4) Since a large amount of land along Circle and Walnut Blvds. is presently vacant, the implementation of land-use controls is very important for mitigation of the noise impacts. We support the land-use controls outlined in the D.E.I.S. We recommend the local planning department be informed of these control measures as soon as possible.

Norman L. Jette/pw
6/1/79

ā i

STATE CLEARINGHOUSE

Intergovernmental Relations Division
306 State Library Building, Salem, Oregon 97310
Ph: 378-3732

A-95 STATE REVIEW

RECEIVED
APR 26 1979
DIVISION OF STATE LANDS

Project #: 7904-4-1070   Return Date: [illegible]

ENVIRONMENTAL IMPACT REVIEW PROCEDURES

1. A response is required to all notices requesting environmental review.
2. OMB A-95 (Revised) provides for a 30-day extension of time, if necessary. If you cannot respond by the above return date, please call the State Clearinghouse to arrange for an extension.

ENVIRONMENTAL IMPACT REVIEW
DRAFT STATEMENT

( ) This project does not have significant environmental impact.

(✓) The environmental impact is adequately described.

( ) We suggest that the following points be considered in the preparation of a Final Environmental Impact Statement regarding this project.

( ) No comment.

REMARKS

If the project would require the removal, fill or alteration of 50 cubic yards or more of material within the banks of the waterway(s), we urge the applicant to apply for state fill or removal permits well in advance of construction deadlines to prevent unnecessary project delays. Specific information on the need for permits may be obtained from the Division of State Lands' office at 1445 State Street, Salem, OR 97310. Phone 378-3805.

Thank you for the opportunity to comment on this project.

Lands   by Earl Van Johnson
Agency

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION X
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

ENVIRONMENTAL SECTION
June 22, 1979

cc: E. S. Hunter
D. H. Moehring
J. H. Versteeg
F. E. Terpin
Walter Hart
C. O. Fredrickson
H. C. Johnson
Eddie Welsh
Paul Riedl
Glen Green

REPLY TO ATTN OF: M/S 443

JUN 20 1979

Gary Potter, Manager
Environmental Section
Oregon State Highway Division
Salem, Oregon 97310

Dear Mr. Potter:

We have completed our review of the draft Environmental Impact Statements (DEISs) for the Walnut Boulevard and the Circle Boulevard projects. Because the DEISs contain much of the same information and their analysis is based on the same assumptions and methods, this single letter will contain our comments to both statements. Unless noted, all of our comments apply equally to both statements.

Generally we found these DEISs to be well prepared and to contain some very worthwhile possible mitigation measures. We hope that many of these measures are incorporated into the actual project or implemented in applicable city plans and ordinances.

WATER QUALITY

The effect of additional storm drains and paved areas on downstream water quality and flows should be addressed in greater detail. The statement that this will reduce flooding is never explained. It appears possible that some of these projects, such as the new Circle Boulevard up the draw through Woodland Meadow Natural Park, could increase the potential for downstream flash flooding by increasing the rate of runoff. The increased pollutant load from road runoff, which will include oil and lead, and possible mitigation should be discussed.

AIR QUALITY

The assumptions used in the air quality impact analysis appear to result in the EIS understating the impact of the proposed project. The parameters used in the modeling are not consistently provided in all of the tables, and thus interpretation is difficult, but the assumptions appear to produce a conservative case rather than a probable worst case.

Some of the unjustified input parameters are: the model was calibrated using data from a season when CO concentrations are not the highest; a Class E stability was used instead of Class F stability; an ambient temperature greater than the CO problem season average was used; and, most importantly, the model used a wind angle of 35° instead of the full range of 0° to 90°.

The models should also be based on using a receptor no farther than the edge of the right-of-way. Most of the calculations used a receptor 50 feet from the center of the roadway, though the right-of-way is generally 80 feet or less. One area of particular concern is the planned residential area north of Walnut Boulevard.

The use of the Hewlett-Packard monitors should be better justified, particularly since they are located at a distance from the actual project area. Also, since population and employment is increasing, the 1975 measurements should have been adjusted to provide more current background levels for analysis.

In summary, any future EIS should provide complete, up-to-date, relevant information, including measured data representative of the site, current pollution levels, and justified model parameters. However, in this case, the described project impacts are considerably lower than the NAAQS. Therefore, even if the analysis is corrected, and results in a change in the predicted values by a factor of three, these projects would still be consistent with the Clean Air Act requirements and the State Implementation Plan.

For your information, an annually updated inventory of pollutant sources is available through the State of Oregon Department of Environmental Quality.

NOISE

The Acoustical Assessment in Volume 2 presents a thorough and well considered discussion of impacted areas and possible remedies.

As mentioned in the DEIS, the L_{10} levels in many sections of Circle Boulevard are and will continue to be above the L_{10} 70 level recommended for residential areas. In addition, at least one site along Walnut Boulevard, has a predicted increase of approximately 6 dBA which should be considered a significant impact.

We strongly recommend that as many as possible of the suggested mitigation measures in Section IV of the Acoustical Assessment be implemented both during the design and construction of this project.

ALTERNATIVES

The only alternatives considered in these DEISs are the build and no-build alternatives. Because the building of Circle Boulevard through Woodland Meadow Natural Park is controversial, we feel that alternative alignments should have been considered if a connection to Withram Hill Drive is necessary. Some possibilities would be to follow the perimeter of the park rather than dividing it, or to improve some parallel road so that the impacts of increased use could be mitigated. We realize that the steepness of the area may limit some of these alternatives.

From the standpoint of the Environmental Protection Agency's areas of concern and expertise, we are rating this statement LO-1 (LO - Lack of Objections; 1 - Adequate Information). This rating will be published in the Federal Register in accordance with our responsibility to inform the public of our views on proposed Federal actions under Section 309 of the Clean Air Act, as amended.

We appreciate the opportunity to review this draft environmental impact statement. Please do not hesitate to contact me or Judi Schwarz of my staff, should you have questions or desire further information regarding our comments. We can be reached at (206) 442-1285 or (FTS) 399-1285.

Sincerely,

Alexandra B. Smith

Alexandra B. Smith, Chief
Environmental Evaluation Branch

reproduction of:
United States Department of the Interior
Office of the Secretary
Washington, D.C. 20240

ER 79/419

Dear Mr. Green:

This is in response to the request for the Department of the Interior's comments on the draft environmental statement for Circle Boulevard-Walnut Boulevard, Corvallis, Benton County, Oregon.

GENERAL COMMENTS

In general, the document adequately covers the subjects for which this Department has jurisdiction and review expertise. There are several areas, however, that need clarification and the final statement would be improved through attention to the following comments.

ENVIRONMENTAL STATEMENT COMMENTS

Walnut Boulevard

Page 32, par. 1. This paragraph states that "No threatened or endangered species exist in the project area." This conclusion is questionable since Bradshaw's desert parsley (*Lomatium bradshawii*), which is proposed for endangered status, has been located north of Corvallis. Preparation of the final statement should include efforts to determine the presence or absence of this species in the project corridor and provide appropriate discussion. If additional information and assistance is needed, the project sponsors may wish to request an informal consultation with the Endangered Species Team, Fish and Wildlife Service, 4620 Overland Road, Room 238, Boise, Idaho 83705.

Page 90, par. 2. It appears the proposed work may have direct or indirect impacts on fish habitat through possible installation of baffles, sills, or riprap. Accordingly, our comments do not preclude an additional and separate evaluation by the U.S. Fish and Wildlife Service, pursuant to the Fish and Wildlife Coordination Act (16 U.S.C. 661, et seq.), if eventual project development requires a permit from the U.S. Coast Guard and/or the Corps of Engineers, U.S. Army (Section 9 and 10 of the River and Harbor Act of 1899 and Section 404 of P.L. 92-500). All such permits are subject to separate review by the Service under existing statutes, executive order, memorandum of agreement and other authorities. In review of permit applications, the Fish and Wildlife Service may concur, with or without stipulations, or object to the proposed work, depending on specific construction practices which may impact fish and wildlife resources.

Sincerely,

LARRY E. MEIEROTTO

Assistant Secretary of the Interior

Mr. Glen L. Green
Division Administrator
Federal Highway Administration
Post Office Box 300
Salem, Oregon 97308

cc: Mr. Robert A. Burco
Director
Oregon State Department of Transportation
State Highway Building
Salem, Oregon 97310

ROBERT W. STRAUB
GOVERNOR

Department of Transportation
STATE HISTORIC PRESERVATION OFFICE
Parks and Recreation Branch
525 TRADE STREET S.E., SALEM, OREGON 97310

March 10, 1977

A. Gordon Wyatt
Principal Engineer
Corvallis City Hall
501 SW Madison Ave.
Corvallis, OR 97330

Dear Mr. Wyatt:

In regard to the Walnut Boulevard and Circle Boulevard project in Corvallis, the Historic Preservation Office has no record of historic properties in the project area. Neither the National Register of Historic Places nor the Statewide Inventory of Historic Sites and Buildings shows any listing in the area. A field survey and interviews with local citizens also indicated no historic resources involved in the project.

We therefore feel that the area of the project contains no properties of historic significance and there would be no impact on historic resources. I understand an archeological survey will be scheduled and completed prior to construction. This letter comments only on historic properties.

Sincerely,

Paul B Hartwig
Paul B. Hartwig
Historic Preservation Coordinator

PBH/EL:ko

APPENDIX A
CORRESPONDENCE

Department of Environmental Quality

522 SOUTHWEST 5TH AVE. PORTLAND, OREGON

MAILING ADDRESS: P.O. BOX 1760, PORTLAND, OREGON 97207

RECEIVED
OCT 14 1979
Environmental Section

October 12, 1979

Mr. Gary Potter
Oregon Department of Transportation
412 Transportation Building
Salem, OR 97310

Re: Kings Boulevard to
Highland Dr. Section
Walnut Boulevard
City of Corvallis
Determination of Consistency

Dear Mr. Potter:

Based upon the Department's review of the Air Quality Assessment for the above referenced project, we have determined that it would be consistent with the State Implementation Plan.

With respect to the analysis, we believe that projection of future ozone concentrations, based upon EKMA, is an exercise in futility. For our purposes, projection of hydrocarbon emissions with and without a given proposed project would suffice.

Please refer any questions to me at 229-6086.

Sincerely,

Howard W. Harris

Howard W. Harris, Coordinator
Transportation Control Program

HWH:nlb

9362

U. S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

5 - 30 - 80

FEDERAL AID PROJECT NO.: 2120(1)

STATE PROJECT NO.: See below

COUNTY NAME: Benton

PROGRAM NO.:

ITEM NO.: M-65

PROGRAM STAGE (Check) ☐ 1. ☐ 2.

FROM:
G. L. Green, Division Administrator
Salem, Oregon

TO:
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

6/4.
[illegible]

RECEIVED
STATE HWY ENGR
JUN 4 '80
REFER TO
[illegible]
FOR

Info	Inves	R/D	D/R	Sign	Act	File

DATE PS&E APPROVED:

DATE AUTHORIZATION EFFECTIVE: 5-1-80

FEDERAL ROUTE NUMBER: FAU 2120

STATE ROUTE NUMBER: City Street

GENERAL LOCATION:
N. W. Kings Blvd. - N. W. Highland Drive Section

GENERAL DESCRIPTION OF WORK:
Program Change

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY

☐ PRELIMINARY ENGINEERING FOR SURVEY AND PLAN PREPARATION

☒ OTHER *(Specify)*
Program Change

☐ ACQUISITION OF RIGHT-OF-WAY

☐ CONSTRUCTION - ADVERTISE FOR RECEIPT OF BIDS

☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of 5-16-80 this will confirm the advance approval date of 5-1-80 for the program change adding to the character of proposed work archeological salvage and to proceed with the work at a TEC of $750 - Federal Funds $585. A signed copy of the Agreement is returned herewith.

(The above authorization does not require additional obligation of funds)

DATE	SIGNATURE OF APPROVING OFFICIAL	TITLE
5-30-80	G. K. Hossner	for Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U.S. GOVERNMENT PRINTING OFFICE: 1978-631-885

9367

Eugene

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6-2

May 16, 1980

TO G. L. Green, Division Administrator
Federal Highway Administration

Original Signed By
D. E. Swan

FROM D. E. Swan
Operation Programming Engineer

SUBJECT Minor Program Change
Item No. M-65
Project No. M-2120(1)
NW Kings Blvd.-NW Highland Dr.Section
City Street(FAU 2120)
Benton County

I request confirmation of Mr. Riedl's verbal authorization for a minor program change to add archeological salvage including any or all of the three phases of work set forth in FHPM 7-7-4 (PPM 20-7) to the subject project.

It is understood your confirmation of the preceding request will result in authorization to proceed with the work. The estimated total cost of $750 is included in my request of May 8, 1980 for an increase in preliminary engineering expenditures. Reimbursement will be claimed on an actual cost basis.

I further request confirmation of Mr. Riedl's verbal authorization to proceed as of May 1, 1980 which is the date the University of Oregon started the work.

Attached are two copies of form "Archeology Authorization" for the project for your approval. Upon approval please return one signed copy for our files.

JLG:
Attachments
cc: Gary Potter
Gary Zehner

Form 734-3122

ARCHEOLOGY AUTHORIZATION

- Under the terms of the Oregon Department of Transportation - University of Oregon contract dated 16 Oct 1975 and the specifications of PPM 20-7 (March 31, 1971) and supplements thereto, the following project work is authorized:

M-2120(1)

NW Kings Boulevard-NW Highland Drive		302-1939-923 (Use code 126)
Project Name		Prefix
FAU 2120		Benton
Highway	M.P. to M.P.	County

Scope and Description of Work:

Archeological Studies	2nd Quarter Starting Date--5-1-80
Archeology Phase(s)	When will work be done QTR-Year
5.5 man-days	$750
Est. of man-days to accomplish	Estimate of cost

Detailed description of work (if applicable): Record and field survey for potential archeological sites in project affected area. Preparation of report for FHWA-ODOT.

Funding:

Is any part of this proposed archeology work not attributable to the highway project? No
Yes-No

If so, what percentage is to be charged to the highway project? 100%
%

ATTACHMENTS:

Identify any plans, letters or proposed budgets and estimates which form part of this agreement:

Detail Maps, project description

Action initiated by	Marjorie Banks, Name	Environmental Specialist, Title	5/1/80. Date
Acceptance of terms by University of Oregon	C. Melvin Aikens, Name	Asst. Director OSMA, Title	5-1-80 Date
Approved by OSHD	, Name	Research Coordinator, Title	1 May 1980 Date
Approved by FHWA	, Name	, Title	. Date

Comments or Conditions

Contact: Gordon Wyatt
Public Works Department
501 SW Madison Avenue
Corvallis, OR 97330

Phone: 757-6903

9367

5-15-80

1

U. S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

FEDERAL AID PROJECT NO. M-2120(1)

STATE PROJECT NO. See below

COUNTY NAME Benton

PROGRAM STAGE *(Check)* ☐ 1. ☐ 2.

FROM:
G. L. Green, Division Administrator
FHWA - Oregon Division

PROGRAM NO.

ITEM NO. M-65

TO:

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

DATE PS&E APPROVED

DATE AUTHORIZATION EFFECTIVE 5/15/80

FEDERAL ROUTE NUMBER FAU 2120

STATE ROUTE NUMBER City Street

GENERAL LOCATION:

NW Kings Blvd. - NW Highland Drive

GENERAL DESCRIPTION OF WORK:

Program Change

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY

☐ PRELIMINARY ENGINEERING FOR SURVEY AND PLAN PREPARATION

☒ OTHER *(Specify)* Program Change
See Below

☐ ACQUISITION OF RIGHT-OF-WAY

☐ CONSTRUCTION - ADVERTISE FOR RECEIPT OF BIDS

☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of 5/8/80 I approve the revised Preliminary Engineering costs to a TEC of $106,999 with Federal participation limited to $83,565.

(Increase TEC $43,552 - Federal funds $34,052)

5/21
[illegible]

RECEIVED
STATE HWY ENGR
MAY 21 '80
REFER TO.
FOR

Info	Inves	P/D	D/R	Sign	Act	File

DATE 5/15/80

SIGNATURE OF APPROVING OFFICIAL

TITLE for Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U. S. GOVERNMENT PRINTING OFFICE: 1976-631-865

9367

2-80

Benton County

Noise Study Report
for the
Final Environmental Impact Statement

Highland – Kings
Walnut Boulevard Project

Benton County

1 Versteeg
Anderson
Christensen
2 Olson
Sullivan
Terpin
Trout
Wakerlig

RECEIVED
AUG 4 1981
ROAD DESIGN SECTION

Do Not File ☐
Return To
Bring /
Action

Prepared by
Oregon Department of Transportation
Technical Services Branch
Steven Lindland

February, 1980

I. Project Description

The proposed project will construct a four-lane road from Highland Drive to Kings Boulevard. This is the final road section needed to make Walnut Boulevard continuous from Harrison Boulevard to N.W. 9th Street. Previous city construction projects have widened Walnut Boulevard from N.W. 29th Street to Witham Hill Drive and have extended it from Witham Hill Drive to Harrison Boulevard. Figure 1 shows the location of the FAU project and the city projects. Appendix A gives a detailed description of the construction sections.

Due to the effect this project has on traffic volumes along Walnut Boulevard, the study area will extend from Harrison Boulevard to N.W. 9th Street.

This project is classified as a Type 1-A (partial control of access) as defined in FHWA FHPM 7-7-3.

II. Land Use

The land use along Walnut Boulevard between N.W. 9th Street and Rolling Green Way is primarily residential. (Specific housing types include single-family residences, duplexes, apartments, and mobile homes.) In addition, three churches are located along this section. An undeveloped area lies north of the proposed road between N.W. 13th Street and Rolling Green Way.

Both sides of the roadway are undeveloped between Rolling Green Way and N.W. 25th Street.

Single-family residences, duplexes, and apartments comprise most of the development between N.W. 25th Street and Witham Hill Drive. Non-residential uses include Timberhill Park, Hoover School, and a church. Undeveloped areas are located just west of N.W. 25th Street and just east of Witham Hill Drive.

Only one residence is currently located along Walnut Boulevard between Witham Hill Drive and Harrison Boulevard. In addition, Walnut Park is situated along the westerly side of the road. The remainder of the road frontage is undeveloped with Oregon State University owning the majority of the land.

Most of the undeveloped areas along Walnut Boulevard are planned for residential development. In some areas roads

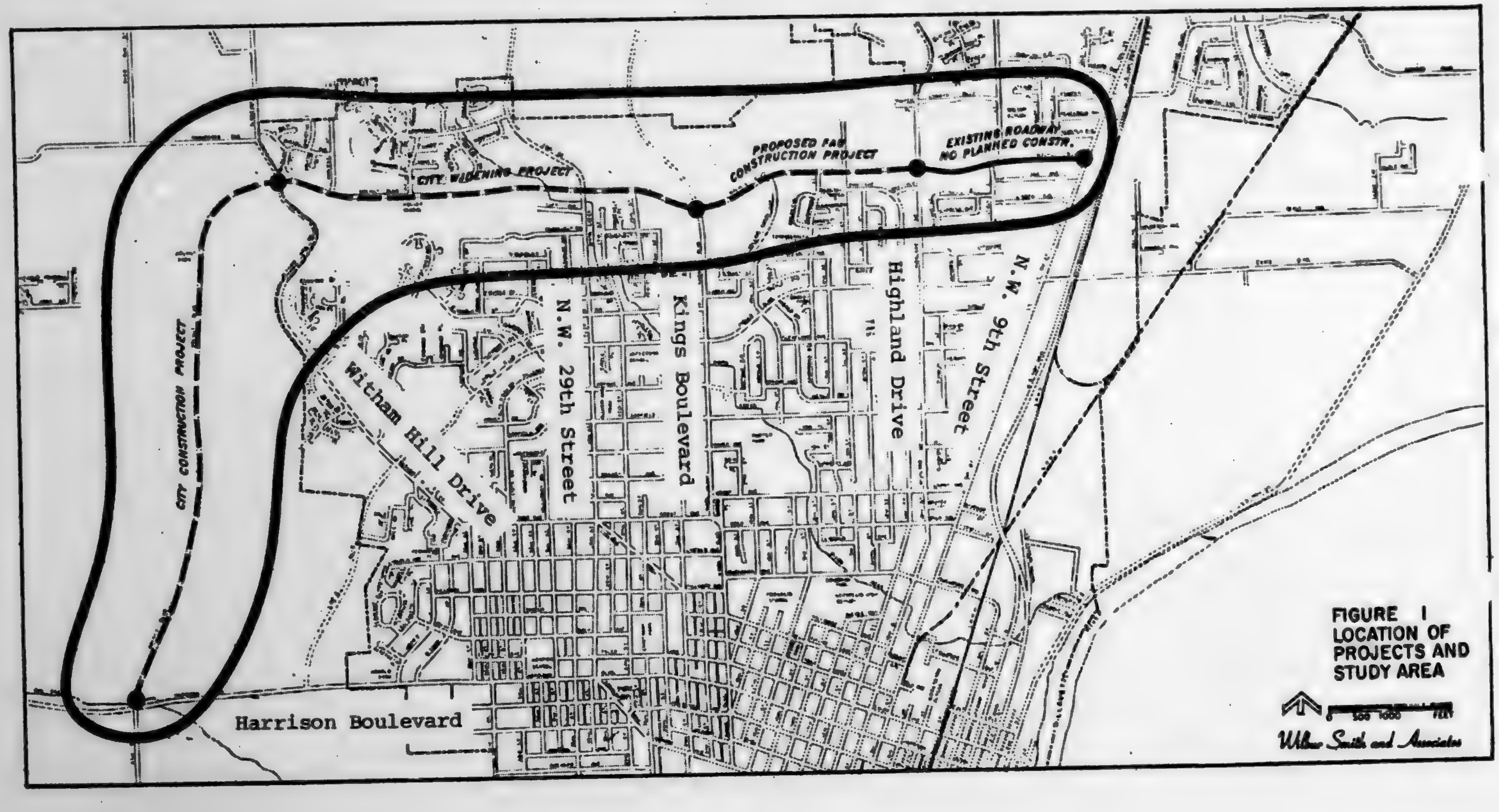
CITY WIDENING PROJECT
PROPOSED FAP CONSTRUCTION PROJECT
EXISTING ROADWAY NO PLANNED CONSTR.
CITY CONSTRUCTION PROJECT
N.W. 29th Street
Kings Boulevard
Highland Drive
N.W. 9th Street
Witham Hill Drive
Harrison Boulevard
0 500 1000 FEET

FIGURE 1
LOCATION OF
PROJECTS AND
STUDY AREA

Wilbur Smith and Associates

have already been constructed. Thus, undeveloped land along Walnut Boulevard is rapidly becoming residential.

III. Existing Sound Environment

Measurements of the sound environment were taken in December 1976 and June 1978. A listing of the measurement sites and the recorded sound levels are given in Table 1.

The measured sound levels ranged from L_{10} 48-81 dBA. (Figure 2 helps to put the measured sound levels into perspective, while Appendix B provides a general discussion on sound.) Generally, sound levels were traffic generated. The louder sites are typically located near roads with high traffic volumes. The quieter sites are either along low volume roads or are quite distant from any road. In addition to the traffic noise, other sounds could be heard at times. These sounds were generated by aircraft, power lawn mowers, construction activities, dogs, and birds.

IV. Traffic Noise Analysis

The evaluation of traffic noise is required by the Federal Highway Administration through the Federal-Aid Highway Program Manual 7-7-3.* There are two methods by which traffic noise impacts can be determined. These are discussed below.

1) Design Noise Levels - Design noise levels are established according to various types of land use (see Figure 3). Activity Category "B" is of special concern since it includes the exterior noise levels at residences, churches, schools, and parks. The design noise level for this category is L_{10} 70 dBA.

2) Noise Increase Criteria - When the predicted traffic noise substantially exceeds the existing

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*For a more detailed discussion on traffic noise acceptability criteria see Appendix C.

TABLE 1

CORVALLIS NOISE MEASUREMENT LOCATIONS
AND SOUND LEVEL READINGS*

Location	Year	L_{90}	L_{50}	L_{10}	Notes
Site of future Walnut between Highland and Kings	1976 pm	41	47	49	--
	1978 pm	45	52	57	nearby construction
Site of Woodland Meadows Park	1976 pm	44	50	51	distant traffic
	1978 pm	45	51	52	distant traffic
Walnut at Kings	1976 pm	46	56	70	some buses and trucks
	1978 pm	47	57	70	--
Walnut at Aspen	1976 pm	49	53	65	school in session
Walnut at Witham	1976 pm	56	62	67	ambient construction sounds
	1978 pm	49	57	71	construction again
Walnut Park	1976 pm	40	45	48	--
	1978 pm	41	46	50	--
Harrison at Walnut	1976 pm	63	76	81	several VW's
Walnut at Hwy. 9	1976 pm	65	74	80	heavy traffic
Walnut at Highland	1976 pm	62	72	78	VW, motorcycle
	1978 pm	54	56	69	medium traffic

*Measurement locations are 25 feet from roadside in most cases.

FIGURE 2

TYPICAL A WEIGHTED SOUND PRESSURE LEVELS

	140	(THRESHOLD OF PAIN)
50 HP SIREN (100')		
	130	
JET TAKEOFF (200')		
	120	(UNCOMFORTABLY LOUD)
ROCK-N-ROLL BAND		
RIVETING MACHINE	110	
	100	(VERY LOUD)
FARM TRACTOR		
MOTOR CYCLE (25')	90	
DIESEL TRUCK 40 MPH (50')		
GARBAGE DISPOSAL	80	(MODERATELY LOUD)
VACUUM CLEANER (10')	70	
PASSENGER CAR 65 MPH (25')		
AIR CONDITIONING UNIT (20') NORMAL CONVERSATION	60	
PRIVATE BUSINESS OFFICE	50	(QUIET)
	40	
SOFT WHISPER (5')		
RUSTLING OF LEAVES	30	(VERY QUIET)
STUDIO FOR SOUND PICTURES	20	
	10	(JUST AUDIBLE)
	0	(THRESHOLD OF HEARING) 1000- 4000 HZ

SOUND LEVEL,
dBA

FIGURE 3

DESIGN NOISE LEVEL/ACTIVITY RELATIONSHIPS 1/

Activity Category	Design Noise Levels - dBA 2/ $L_{eq}(h)$	$L_{10}(h)$	Description of Activity Category
A 3/	57 (Exterior)	60 (Exterior)	Tracts of land which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks, open spaces, or historic districts which are dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet.
B 3/	67 (Exterior)	70 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, and parks which are not included in Category A and residences, motels, hotels, public meeting rooms, schools, churches, libraries, and hospitals.
C	72 (Exterior)	75 (Exterior)	Developed lands, properties or activities not included in Categories A or B above.
D	--	--	For requirements on undeveloped lands see paragraphs 11a and c.
E 4/	52 (Interior)	55 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

1/ See Paragraph 8 for method of application.

2/ Either L_{10} or L_{eq} (but not both) design noise levels may be used on a project.

3/ Parks in Categories A and B include all such lands (public or private which are actually used as parks as well as those public lands officially set aside or designated by a governmental agency as parks on the date of public knowledge of the proposed highway project.

4/ See Paragraphs 8c, d, and e for method of application.

sound levels, by 15 dBA, a traffic noise impact is said to occur.*

Both sets of criteria are applied in this report.

Traffic noise projections were made with the National Cooperative Highway Research Program Report 174 traffic noise prediction model. This model computes noise levels using auto volume, truck volume, vehicular speed, and distance from the roadway. Traffic data used in the analysis corresponds with the peak vehicular hour (9.5% of the average daily traffic, with 5% trucks). Traffic data is given in Appendix D. Six sets of traffic data (networks) are shown for 1990. Networks 1 and 2 represent the traffic conditions projected for the No-Build Alternative. (Network 2 reflects some traffic changes due to a construction project on Circle Boulevard.) Networks 3-6 represent traffic conditions for the Build Alternative, taking into account traffic changes due to other construction projects on Circle Boulevard. Appendix A lists the assumptions made for each network.

The predicted future traffic noise levels are shown in Table 2. Noise level contour maps showing 1978 conditions and 1990 "worst case" conditions are provided in Appendix E, while the noise level contour maps comparing 1990 networks are provided in Appendix F.

Table 2 shows that traffic noise along most sections of Walnut Boulevard will moderately increase (0-4 dBA) from 1976/1978 to 1990 with the No-Build Alternative. The section from Witham Hill Drive to Harrison Boulevard will experience a large increase (19-21 dBA) -- practically all of this is a result of the project which has already been constructed by the city.

The Build Alternatives are generally expected to moderately increase (1-5 dBA) traffic noise above the 1990 No-Build levels. An exception is the Highland Boulevard to Kings Boulevard section of Walnut Boulevard. A very large increase (17-25 dBA) is anticipated for this area. This increase is due to the intrusion of traffic noise (created by the extension of Walnut Boulevard), into an area which currently has little or no traffic noise.

*Sound level increases of about 3 dBA can be assumed to be the smallest change detectable by people. A 10 dBA increase is usually perceived as a doubling of loudness.

TABLE 2

COMPARISON OF TRAFFIC NOISE LEVELS (L_{10} in dBA) FOR SIX ALTERNATIVES*

	1976	1990 Networks					
	1978	1	2	3	4	5	6
N.W. 9th St.-Highland Dr.	68	72	71	74	74	74	73
Highland Dr.-Kings Blvd.	49, 57	-	-	74	74	73	74
Kings Blvd.-N.W. 29th St.	68	68	67	72	72	71	72
N.W. 29th St.-Witham Hill Dr.	67	70	70	72	72	70	71
Witham Hill Dr.-Harrison Blvd.	48, 50	69	69	70	69	69	70

*Calculated at 100 ft. from center of road.

Traffic noise predictions show that both the No-Build and the Build Alternatives will create noise levels that are above the design noise level as calculated at the road right-of-way (typically 40 ft.). Table 3 shows the location of the L_{10} 70 dBA contour in 1990 for the worst case of the No-Build Alternatives (Network 1) and the Build Alternatives (Network 3). From this information, the number of impacted existing activities was estimated. Table 4 lists the number of impacts.

V. Evaluation of Alternative Abatement Measures

Reduction of sound levels may be accomplished with:

1) Traffic Management - restrictions on certain vehicle types, modified speed limits, time-use restrictions, etc.

2) Alternative Road Designs - changing horizontal alignment to increase distances to activity areas or changing vertical alignment to gain acoustic shielding effects from cut/fill sections.

3) Sound Barriers - suitable walls or earthen berms high enough to break the view between the sound source and the sound receiver and long enough or situated to prevent the flanking of sound around the ends of the barrier.

4) Structural Alternations of Public Buildings - adding ventilation or air conditioning systems so windows can remain closed, use of double-pane windows (these actions affect only the interior noise levels).

Traffic management techniques may be able to reduce or eliminate traffic noise impacts along Walnut Boulevard. Trucks are anticipated to be 5% of the total vehicular volume. Therefore, the elimination or reduction of trucks would help mitigate impacts.

An analysis was done to estimate the effect that a truck restriction would have on the predicted noise levels. Assuming that all trucks were eliminated, the decrease in noise

TABLE 3

LOCATION OF THE DESIGN NOISE LEVEL CONTOUR IN 1990 (L_{10} 70 dBA)

	Distance from Road Centerline	
	No-Build Alt.*	Build Alt.**
N.W. 9th St.-Highland Dr.	140 ft.	200 ft.
Highland Dr.-Kings Blvd.	-	200 ft.
Kings Blvd.-N.W. 29th St.	75 ft.	140 ft.
N.W. 29th St.-Witham Hill Dr.	100 ft.	140 ft.
Witham Hill Dr.-Harrison Blvd.	85 ft.	100 ft.

*Traffic Network 1.
**Traffic Network 3.

TABLE 4

TRAFFIC NOISE IMPACTS IN 1990

	No-Build Alt.*	Build Alt.**
Single-family Residences	71	86
Duplexes	18	20
Apartment Buildings (Approx. Number of Units)	19 (61)	25 (100)
Schools	1	1
Churches	1	3
Parks	2	2

*Traffic Network 1.
**Traffic Network 3.

levels would range from 6-7 dBA. Table 5 shows the predicted traffic noise levels with 0% trucks for the worst Build Alternative (Network 3). When these figures are compared with the No-Build Alternatives in 1990, it can be seen that noise levels for the Build Alternative with the truck restriction are 1-5 dBA lower. However, the section from Highland Drive to Kings Boulevard will still experience traffic noise level increases that are 10-18 dBA above the No-Build Alternatives levels.

Table 6 shows the number of impacts resulting from the elimination of all trucks. As shown, the number of impacts is greatly reduced. The remaining impacts are located between N.W. 9th Street and Rolling Green Way.

Changing horizontal or vertical alignments does not appear to be a practical method of mitigation. The alignment presented is the result of the present location of Walnut Boulevard and the hill between Rolling Green Way and Kings Boulevard. In addition, the right-of-way has already been dedicated.

Assuming the truck restriction is implemented, some of the remaining impacts may be mitigated by the placement of sound barriers. To be effective, sound barriers should not have openings allowing significant amounts of traffic noise to pass through. The noise reduction effectiveness of such a barrier is greatly reduced. Therefore, sound barriers are not considered practical where the requirement for direct access to the roadway requires numerous openings in the barrier.

There are four areas where traffic noise impact mitigation may be practical using sound barriers. Figure 4 shows the locations of the four areas. Sound barriers were investigated further as a means of mitigation.

Rolling Green Way-Garryanna

Between Rolling Green Way and Garryanna Street, a sound barrier would reduce traffic noise at five apartment buildings (see Tables 7 and 8). The length of this barrier would need to be 650 feet. Sound barriers with heights of 6 feet and 10 feet were analyzed for their sound reducing properties. Both heights would lower the predicted noise levels at 15 first floor apartment units below the design level (by 7/12 dBA), thus mitigating noise impacts With either height, the traffic noise levels will be louder than the existing condition. However, the 10 ft. sound barrier will bring the predicted levels closer to the existing levels than will the 6 ft. barrier. Because

TABLE 5

1990 TRAFFIC NOISE LEVELS (L_{10}) FOR THE BUILD ALTERNATIVE*

	Without Truck Restriction	With Truck Restriction**
N.W. 9th St.-Highland Dr.	74 dBA	67 dBA
Highland Dr.-Kings Blvd.	74 dBA	67 dBA
Kings Blvd.-N.W. 29th St.	72 dBA	66 dBA
N.W. 29th St.-Witham Hill Dr.	72 dBA	65 dBA
Witham Hill Dr.-Harrison Blvd.	70 dBA	64 dBA

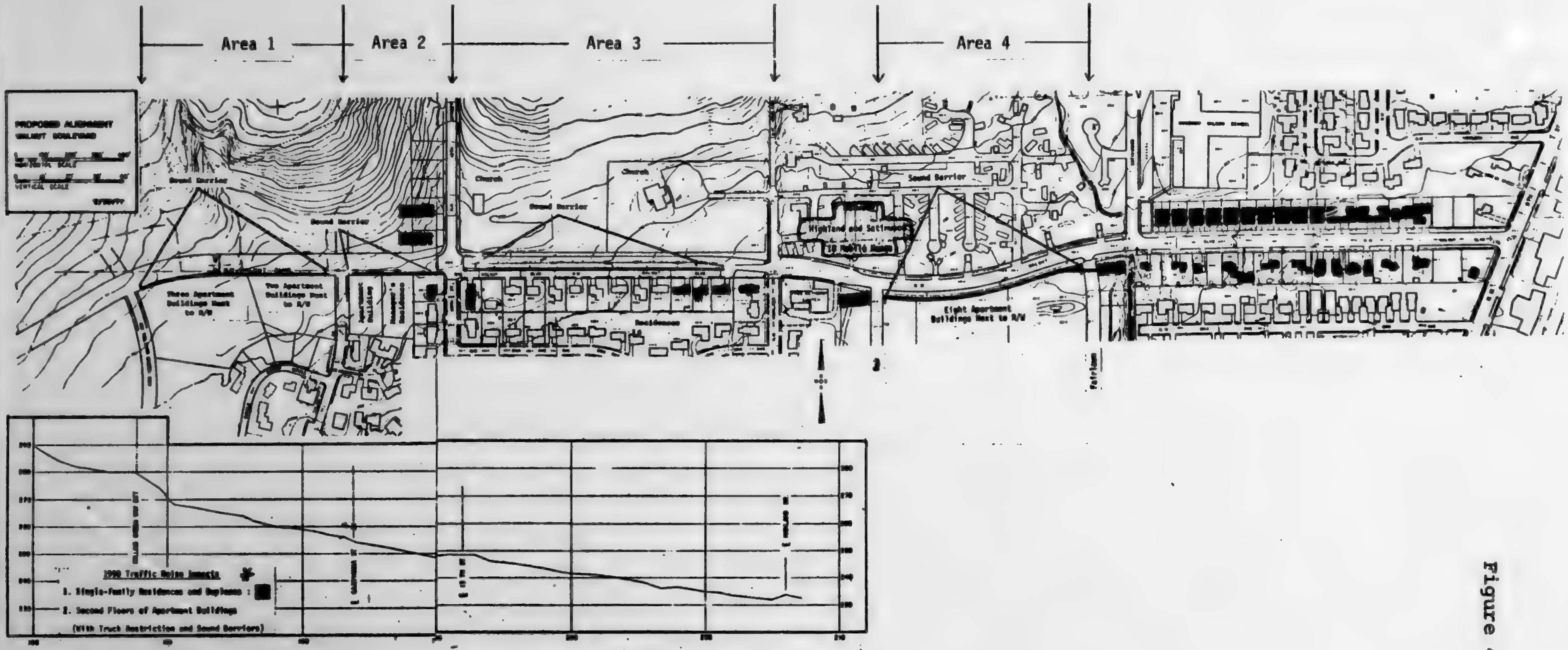
*Calculated at 100 ft. from the road centerline using Traffic Network 3.
**Assuming 0% trucks.

TABLE 6

TRAFFIC NOISE IMPACTS IN 1990 FOR THE BUILD ALTERNATIVE*

	Without Truck Restriction	With Truck** Restriction
Single-family Residences	86	48
Duplexes	20	18
Apartment Buildings (Approx. Number of Units)	25 (100)	14 (71)
Schools	1	0
Churches	3	0
Parks	2	0

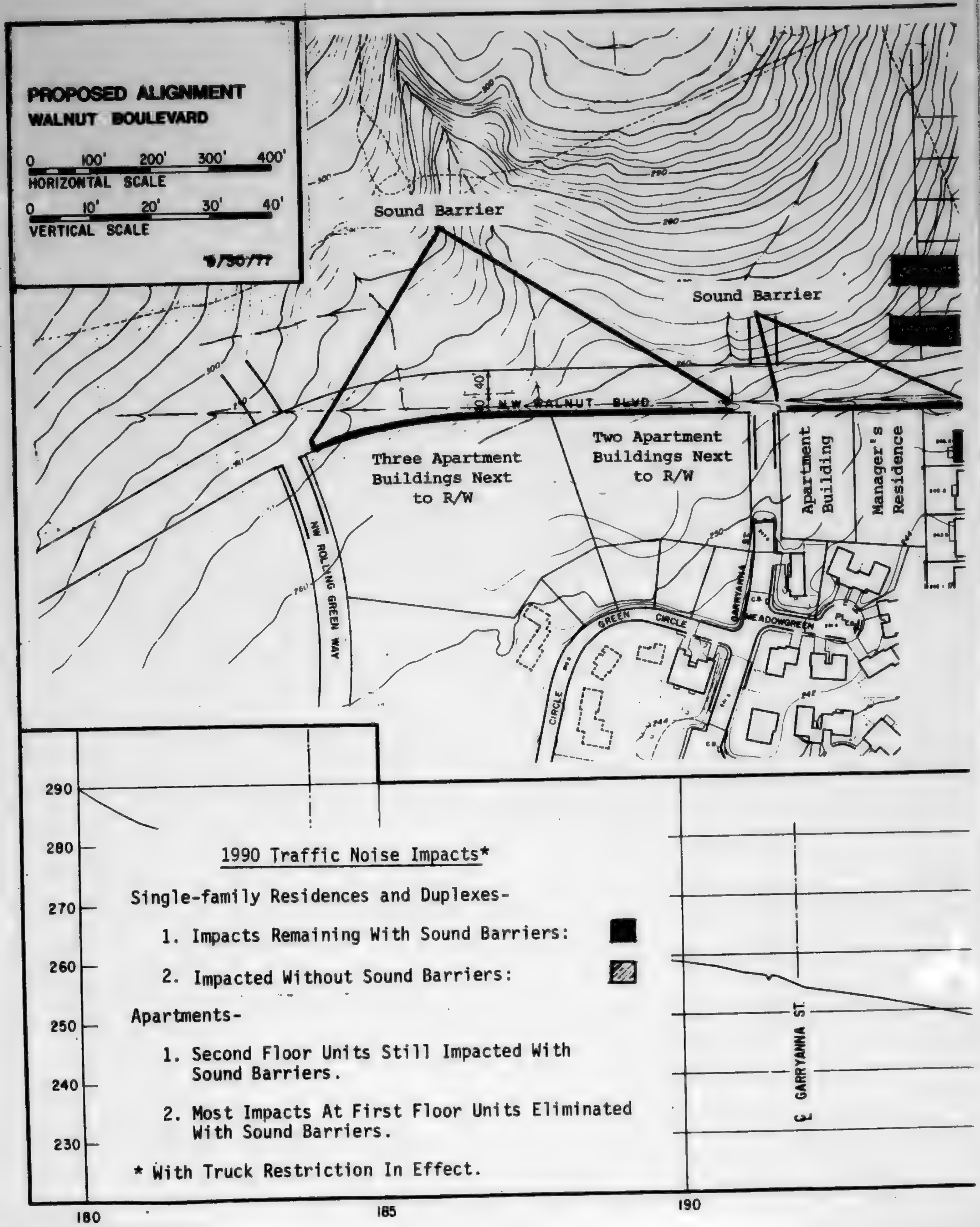
*Traffic Network 3.
**Assuming 0% trucks.


Area 1
Area 2
Area 3
Area 4
PROPOSED ALIGNMENT
WALNUT BOULEVARD
HORIZONTAL SCALE
VERTICAL SCALE
Sound Barrier
Sound Barrier
Three Apartment Buildings Next to R/W
Two Apartment Buildings Next to R/W
Apartment Building
Manager's Residence
Church
Sound Barrier
Church
Residences
Sound Barrier
Eight Apartment Buildings Next to R/W
Fairlawn
1990 Traffic Noise Impacts *
1. Single-Family Residences and Duplexes :
2. Second Floors of Apartment Buildings
(With Truck Restriction and Sound Barriers)

* With Truck Restriction and all Recommended Barriers

Figure 4
]

Figure 4(a)


PROPOSED ALIGNMENT
WALNUT BOULEVARD
0 100' 200' 300' 400'
HORIZONTAL SCALE
0 10' 20' 30' 40'
VERTICAL SCALE
5/30/77
Sound Barrier
Sound Barrier
NW WALNUT BLVD
40'
Three Apartment Buildings Next to R/W
Two Apartment Buildings Next to R/W
Apartment Building
Manager's Residence
NW ROLLING GREEN WAY
GARRYANNA ST
MEADOWGREEN
GREEN CIRCLE
CIRCLE
300
290
280
260
250
242
244
290
280
270
260
250
240
230
180
185
190
℄ GARRYANNA ST.

1990 Traffic Noise Impacts*

Single-family Residences and Duplexes-

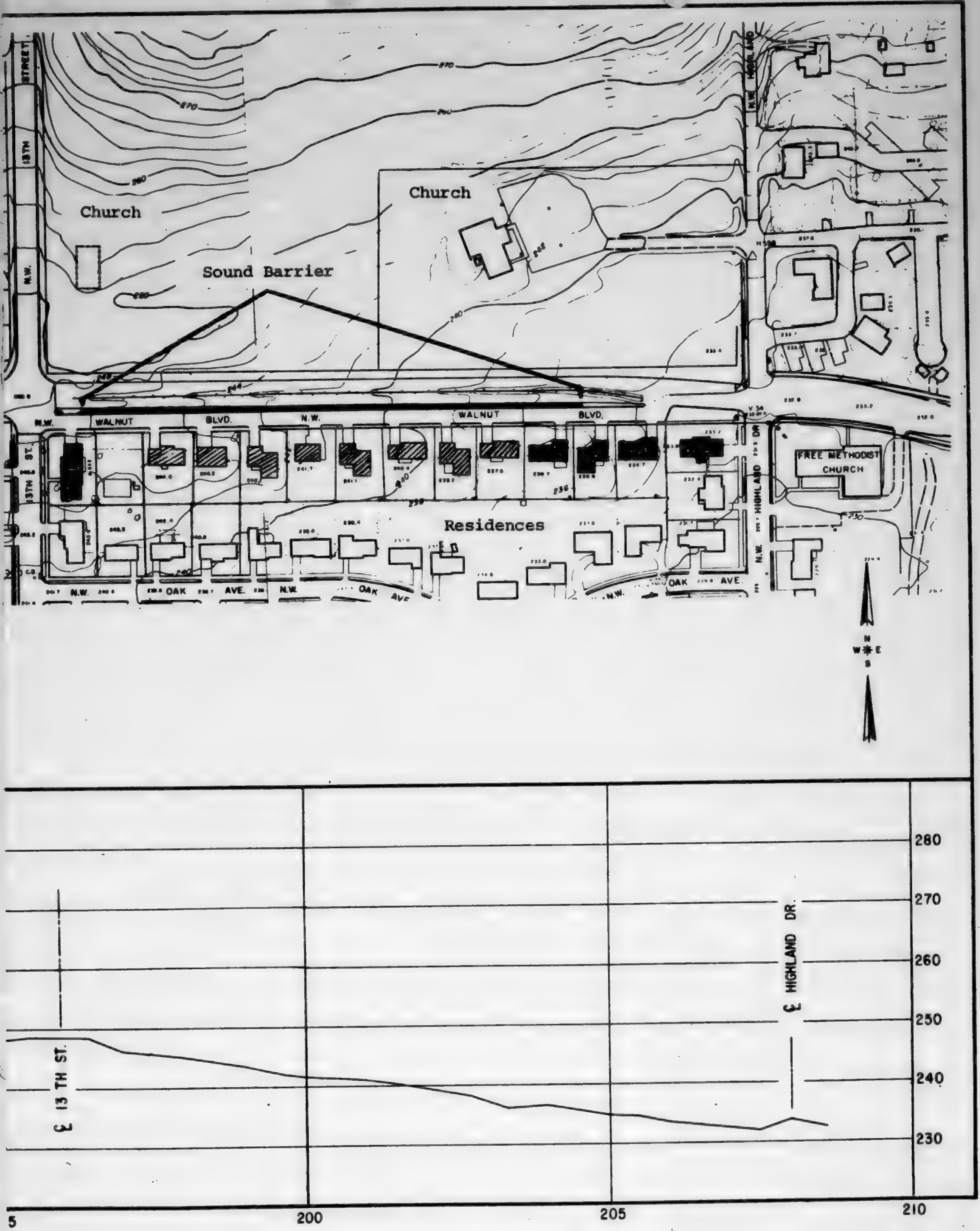
1. Impacts Remaining With Sound Barriers: ■
2. Impacted Without Sound Barriers: ▨

Apartments-

1. Second Floor Units Still Impacted With Sound Barriers.
2. Most Impacts At First Floor Units Eliminated With Sound Barriers.

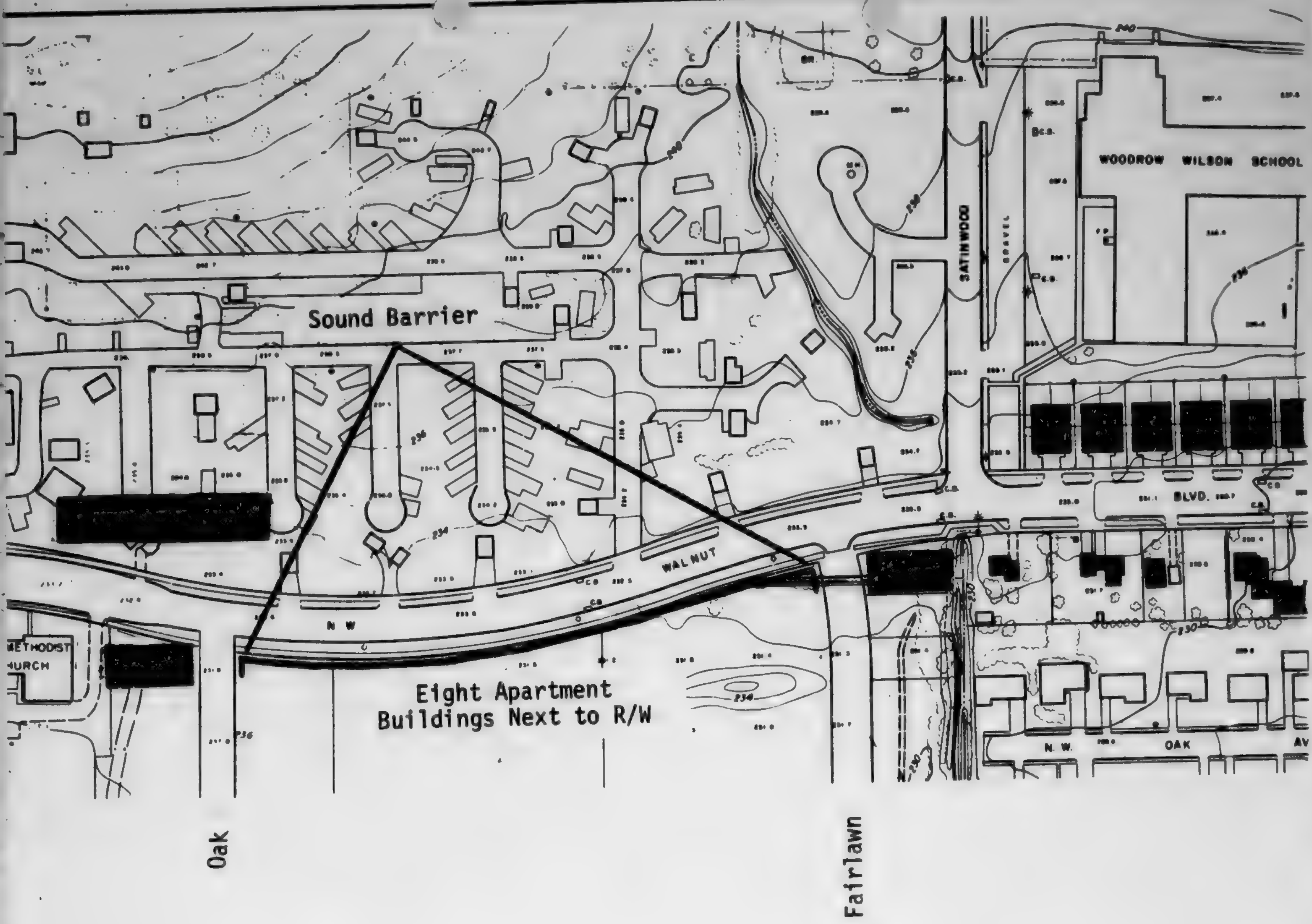
* With Truck Restriction In Effect.

Figure 4(b)



13TH STREET
N.W.
Church
Church
Sound Barrier
N.W. HIGHLAND
N.W. WALNUT BLVD.
N.W. WALNUT BLVD.
13TH ST.
FREE METHODIST CHURCH
Residences
N.W. HIGHLAND DR.
N.W. OAK AVE.
N.W. OAK AVE.
N.W. OAK AVE.
270
260
250
240
N
W
E
S
℄ 13 TH ST.
℄ HIGHLAND DR.
280
270
260
250
240
230
5
200
205
210

Figure 4(c)


Sound Barrier
WOODROW WILSON SCHOOL
SATINWOOD
GRAVEL
BLVD.
N W
WALNUT
METHODIST CHURCH
Eight Apartment Buildings Next to R/W
N. W.
OAK
AV
Oak
Fairlawn

PROPOSED ALIGNMENT
WALNUT BOULEVARD

0 100' 200' 300' 400'
HORIZONTAL SCALE
0 10' 20' 30' 40'
VERTICAL SCALE

9/30/77

Between Highland and Satinwood

Figure 4(d)

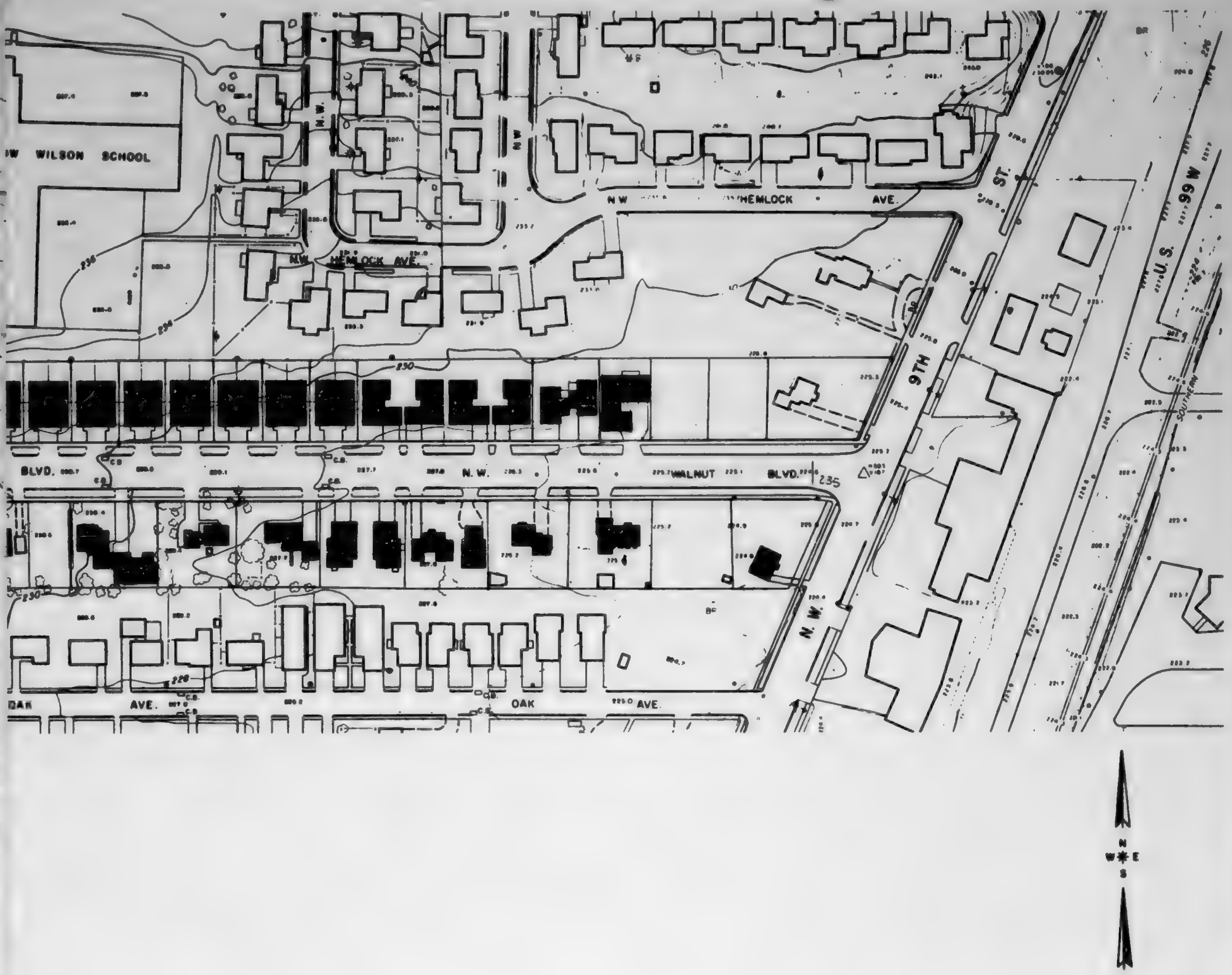

W WILSON SCHOOL
N.W.
N.W.
N.W. HEMLOCK AVE.
N W HEMLOCK AVE.
N.W. 9TH ST.
U.S. 99 W
SOUTHERN
BLVD.
N.W. WALNUT BLVD.
C.B.
235
230
226
BF
OAK AVE.
OAK AVE.
N
W
E
S

TABLE 7

SOUND BARRIER DATA

Barrier	Height	Length	Attenuation*
Rolling Green Way-Garryanna St.	10 ft. 6 ft.	650 ft. 650 ft.	12 dBA 7 dBA
Garryanna St.-N.W. 13th St.	10 ft. 6 ft.	320 ft. 320 ft.	10 dBA 7 dBA
N.W. 13th St.-Highland Dr.	10 ft. 6 ft.	810 ft. 810 ft.	11 dBA 7 dBA
Oak-Fairlawn	10 ft. 5 ft.	800 ft. 800 ft.	12 dBA 7 dBA

*Maximum attenuation, smaller valves are anticipated towards the ends of the sound barrier.

TABLE 8

TRAFFIC NOISE LEVELS (L_{10}) FOR THE AREAS WHERE SOUND BARRIERS ARE FEASIBLE*

	No-Build Alternative	Build Alternative		
		w/o Truck Restriction	With Truck Restriction	
			w/o Barrier	w/Barrier**
Rolling Green Way-Garryanna St.	Approx. 49-57 dBA	78 dBA	71 dBA	64 dBA
Garryanna St.-N.W. 13th St.	Approx. 49-57 dBA	78 dBA	71 dBA	64 dBA
N.W. 13th St.-Highland Dr.	Approx. 49-57 dBA	78 dBA	71 dBA	64 dBA
Oak-Fairlawn	76 dBA	78 dBA	71 dBA	64 dBA

*Calculated at 50 ft. from road centerline.
**Calculated using a sound barrier 6 ft. high.

accesses to Walnut Boulevard from Rolling Green Way and Garryanna Street will limit noise reductions to 3-4 dBA near the ends of the sound barrier, two first floor units should still be impacted.

A barrier would have to be 14-16 ft. high to mitigate noise impacts at the second floor apartment units. A barrier of this height would be aesthetically imposing and very costly to construct. Therefore, second floor mitigation was not considered further.

Garryanna St.-NW 13th St.

Between Garryanna Street and N.W. 13th Street, a sound barrier would reduce traffic noise levels at an apartment building and a residence. This sound barrier would need to be 320 ft. long. As above, significant reductions of traffic noise at the second floor of the apartment building would require a sound barrier of excessive height and was not considered further. A barrier 6 ft. or 10 ft. high could reduce traffic noise by 7/10 dBA at a single first floor apartment unit and the manager's residence--mitigating noise impacts at these two locations. Noise levels at the first floor apartment unit nearest Garryanna Street and the house at the southwest corner of Walnut Boulevard and N.W. 13th Street will be reduced by only 3-5 dBA. This reduction is not enough to eliminate noise impacts at these two locations, but it is partial mitigation.

NW 13th St.-Highland Dr.

Between N.W. 13th Street and Highland Drive, a sound barrier would reduce traffic noise levels at 11 one-story residences. The length of this barrier would need to be 810 feet. A sound barrier 6 ft. or 10 ft. high could reduce traffic noise by 7/11 dBA at eight residences, thus eliminating noise impacts. Three other residences are located near the ends of the barrier and would have noise levels reduced by only 2-4 dBA. This reduction is not enough to completely eliminate noise impacts but it is partial mitigation.

Oak St.-Fairlawn St.

Between Oak St. and Fairlawn St., a sound barrier would reduce traffic noise levels at eight apartment buildings. This barrier would need to be 800 ft. long. Traffic noise could be reduced by 7/12 dBA at the first floor of the buildings if the barrier were 6 ft. or 10 ft. high. (As before, the sound barrier would have to be quite high to significantly reduce noise levels at the second floor.) All noise impacts at the first floor would be mitigated.

The four barriers would eliminate traffic noise impacts at 9 residences and at most of the first floor units of 14 apartment buildings. Traffic noise impacts will not be eliminated for the second floor units of the apartment buildings because the 14-foot height required would not be aesthetically desirable.

The estimated costs of the four sound barriers previously discussed are given in Tables 9 and 10. Table 9 lists the prices for concrete construction, while Table 10 for timber construction. As shown the cost of a timber wall is about one-half the cost of a concrete wall. It obviously has a smaller initial cost than does concrete. But the life expectancy of a timber wall is 20 years, compared to 50 years for a concrete wall. Maintenance cost is anticipated to be higher for the timber wall than the concrete wall, though the actual difference has not been estimated.

To help the decision process, an economic analysis of the two construction types was performed. The assumptions made in this analysis include:

1) A 10-ft. timber wall with a 20-year life expectancy costing \$85 per linear foot

2) A 10-ft. concrete wall with a 50-year life expectancy costing \$170 per linear foot

3) No maintenance costs

4) Interest rate of 7%

5) A 100-year analysis period

The results of the analysis are given in Table 11. The figures show that a timber wall has a present worth* that is \$62 per linear foot lower than is a concrete wall. The annual cost**

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*Present worth is a concept used in economic studies to represent the investment necessary to secure the promise of future payment or payments.

**Annual cost is a concept used in economic studies to compare nonuniform series of money distributions.

TABLE 9

SOUND BARRIER PRICE ESTIMATES: CONCRETE CONSTRUCTION

Sound Barrier	Barrier Height	Total Cost	Cost Per dBA Reduction Per Residence
Rolling Green-Garryanna	6 ft.	$ 75,000	$ 700
	10 ft.	110,000	600
Garryanna-N.W. 13th	6 ft.	37,000	2,600
	10 ft.	55,000	2,800
N.W. 13th-Highland	6 ft.	45,000	800
	10 ft.	185,000	2,100
Oak-Fairlawn	6 ft.	95,000	800
	10 ft.	140,000	700

TABLE 10

SOUND BARRIER PRICE ESTIMATES: TIMBER CONSTRUCTION

Sound Barrier	Barrier Height	Total Cost	Cost Per dBA Reduction Per Residence
Rolling Green-Garryanna	6 ft.	$ 36,000	$ 300
	10 ft.	55,000	300
Garryanna-N.W. 13th	6 ft.	18,000	1,300
	10 ft.	27,000	1,400
N.W. 13th-Highland	Timber construction not recommended due to safety considerations.		
Oak-Fairlawn	6 ft.	45,000	400
	10 ft.	70,000	400

TABLE 11

ECONOMIC ANALYSIS OF CONCRETE VS. TIMBER CONSTRUCTION

	Present Worth	Annual Cost
Timber Wall	$114 plf	$ 8.02 plf
Concrete Wall	176 plf	12.32 plf

Assumptions: Timber Wall - 20-year life expectancy
- $85 per linear foot for 10 ft. wall

Concrete Wall - 50-year life expectancy
$170 per linear foot for 10 ft. wall

No maintenance costs included.

Interest rate of 7%.

Analysis done for a 100-year period.

of a timber wall is $4.30 lower per linear foot than is the concrete wall. Therefore, the lower annual cost for the timber wall should compensate for its potentially higher maintenance costs.

Besides costs, other factors affect the decision to include sound barriers into the project for the mitigation of noise impacts. For instance, the compatibility of sound barriers with their setting. The sound barriers should not contrast with existing structures. Since housing in the area is dominately of timber construction, a concrete wall would tend to clash with its surroundings. A timber wall would fit in better. A long barren wall might appear out of place next to the tree-covered hills and open areas to the north. Landscaping the walls with small earth mounds or planting would greatly improve the situation. In addition to the above, landscaping the opposite side of the roadway with small earth mounds or plantings is recommended to help improve "axis" symmetry around the road and reduce wall dominance or distraction to the motorist. Where possible, wing walls are recommended at the ends of the walls to provide a transition between the top of the barrier and the ground.

Since the sound barrier from N.W. 13th Street to Highland Drive requires a concrete shoulder barrier for traffic safety, it should not be of timber construction. Therefore, a concrete guard rail and concrete blocks tinted in earth colors are recommended. Although these considerations are not included in the estimated sound barrier costs, they should help the sound barriers to fit into their surroundings.

The sound barriers will also affect the view from the residences which they protect. The view is to the north and currently includes open fields and wooded hillsides. This condition, however, is expected to change as development converts the open fields to subdivisions and dots the hillsides with housing. Therefore, no long-term adverse impact to the view is anticipated.

The remaining impacted receptors not mitigatable by a truck restriction or noise barriers require direct access or are near accesses to Walnut Boulevard. Thus, sound barriers could not be used to significantly reduce traffic noise. The remaining impacts involve single-family residences, duplexes, and some apartment units. Since they are not public buildings, structural alterations cannot be used to reduce interior noise levels.

Figure 4 shows the locations of the remaining impacted activities, while Table 12 lists the actual numbers remaining.

TABLE 12

TRAFFIC NOISE IMPACTS REMAINING WITH TRUCK RESTRICTION AND SOUND BARRIERS*

	1990 - Build Alt.**
Single-family Residences	39
Duplexes	18
Apartment Buildings (Approx. Number of Units)***	14 (39)
Schools	0
Churches	0
Parks	0

*Assuming 0% trucks and sound barriers 6 ft. high. See Table 4, page 7 and Table 6, page 9.
**Network 3.
***Impacted units are mostly second floor units.

VI. Traffic Noise Mitigation Conclusions

A truck restriction is recommended to mitigate traffic noise impacts. It should be similar to an existing truck restriction ordinance on four streets in the Corvallis Ordinances listed under Section 30A. Paragraph (1) of this section restricts the operation of a vehicle or combination of vehicles (other than school buses) weighing 12,000 pounds or more. This same restriction is recommended for Walnut Boulevard between N.W. 9th Street and Harrison Boulevard.

None of the sound barriers discussed are recommended for inclusion into the project. The visual appearance of the 10-foot walls would be very incongruous along the arterial. The 6-foot walls would not be very effective. In addition, the cost of the sound barriers would be $197,000 for the sound barriers thought to be most cost-effective. See list below:

1) A 10-ft. timber wall from Rolling Green Way to Garryanna Street - Cost $55,000.

2) A 10-ft. timber wall from Garryanna Street to N.W. 13th Street - Cost $27,000.

3) A 6-ft. concrete wall from N.W. 13th Street to Highland Drive - Cost $45,000.

4) A 10-ft. timber wall from Oak to Fairlawn - Cost $70,000.

This expenditure would be 28% of the total project cost ($683,000). Therefore, it is believed that the costs associated with these sound barriers outweigh their benefits.

VII. Exceptions to the Design Noise Levels

Table 6 lists the numbers of traffic noise impacts remaining after the implementation of all reasonable mitigation measures. Figure 4 shows the locations of these remaining impacts. The mitigation of these remaining impacts is not practical. An exception to achieving the design noise levels is requested for all those receptors listed impacted with and without the sound barriers.

VIII. Construction Noise Analysis

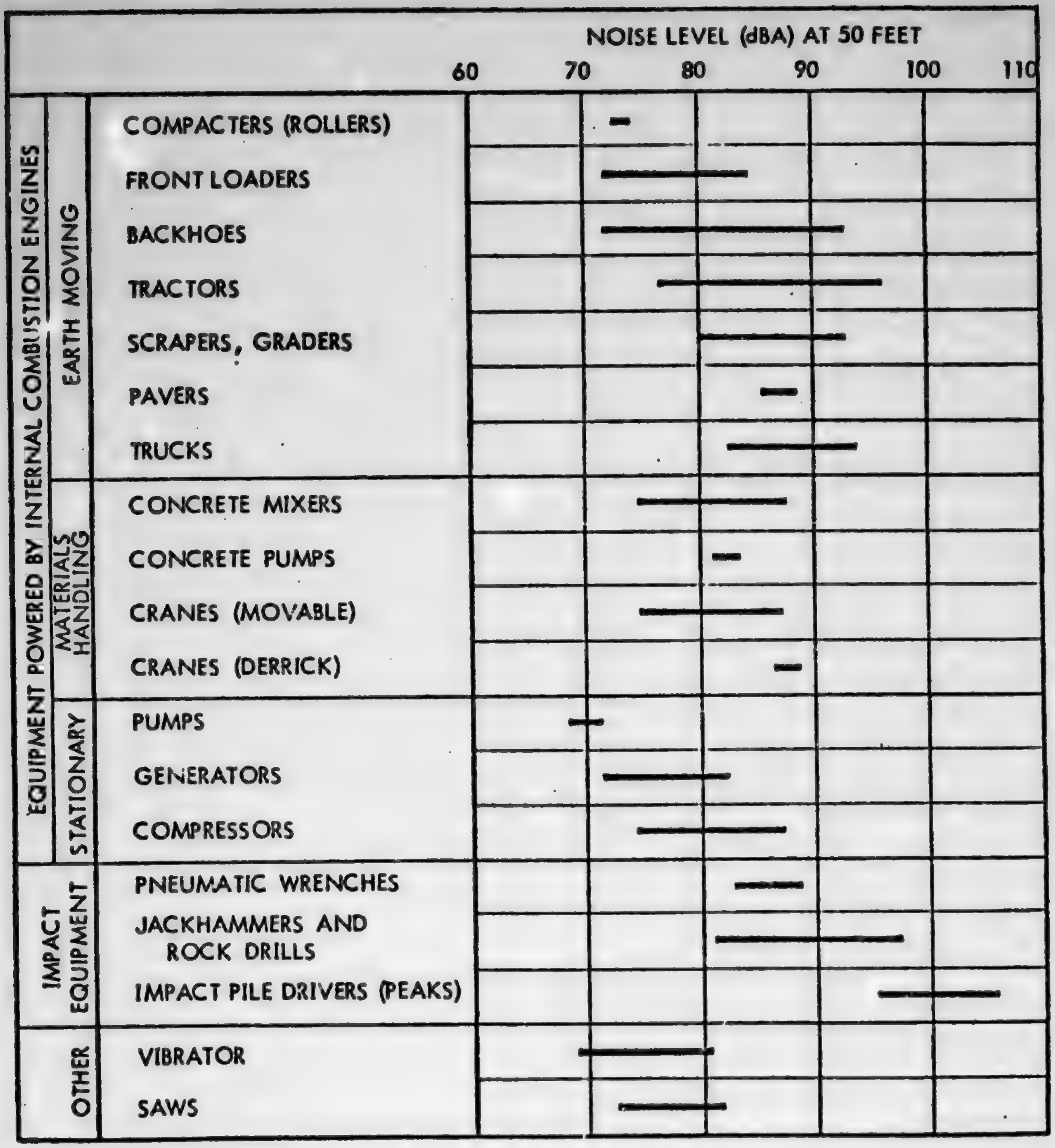
Areas adjacent to the project will also be exposed to additional noise during construction. This noise will be emitted by various pieces of construction equipment. Figure 5 shows the typical ranges of noise levels for construction equipment (at 50 feet) which might be used during project construction.

As shown in Figure 5, areas adjacent to the right-of-way line should be exposed to high noise levels during project construction. Although of a temporary nature, the additional noise can be quite annoying. This is especially true during the quieter nighttime hours. Therefore, construction time constraints will be included in the construction specifications as follows:

> "Construction activities within 1,000 ft. of any occupied residence will not be allowed on Sundays, legal holidays, or on other days between 10:00 p.m. and 6:00 a.m. Exceptions to this provision can be provided by the resident engineer."
>
> "Pile driving or blasting activities within 3,000 ft. of any occupied residence will not be allowed on Sundays, legal holidays, or on other days between 8:00 p.m. and 8:00 a.m. Exceptions to this provision can be provided by the resident engineer."

Figure 5

Construction Equipment Noise Ranges



IX. Local Coordination and Notification

To date the only coordination with local government officials has been a brief discussion concerning the truck restriction on Walnut Boulevard. The city engineer was in agreement with this plan.

Predicted traffic noise levels are in conflict with the FHWA design noise levels for land-use activity category B up to the distances shown in Table 13. It would be the responsibility of the appropriate land-use planning agency to prevent future development conflicts from occurring within this zone.

TABLE 13

LOCATION OF THE DESIGN NOISE LEVEL (L_{10} 70 dBA) CONTOUR IN 1990

	Without Truck Restriction	With Truck** Restriction
N.W. 9th St.-Highland Dr.	200 ft.	60 ft.
Highland Dr.-Kings Blvd.	200 ft.	60 ft.
Kings Blvd.-N.W. 29th St.	140 ft.	55 ft.
N.W. 29th St.-Witham Hill Dr.	140 ft.	45 ft.
Witham Hill Dr.-Harrison Blvd.	100 ft.	40 ft.

*Calculated using traffic Network 3.
**Assuming 0% trucks.

9367

Benton

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION FILE:

INTER-OFFICE CORRESPONDENCE

February 20, 1980

Salem, OR 97310

FROM: A. J. George, Engineering Coordinator
Environmental Section

Tony

SUBJECT: Noise Mitigation
NW Kings Blvd-Highland Dr. Sec.
FAU-2120 (Walnut Blvd.)
Benton County

TO: E. S. Hunter, Asst. State Hwy. Engineer
J. H. Versteeg, Engineering
G. A. Potter, Manager, Environmental Section

Attached is the completed FEIS noise study report for the subject project. This report differs from our normal format as it uses the L_{10} noise descriptor (including FHWA L_{10} criteria) and a 15 dBA increase criteria as opposed to our normal 10 dBA criteria. This was done to be consistent with previous environmental documents.

Because the proposed project constitutes the last of several street improvements along Walnut Blvd., the report addresses noise impacts that will be generated over the entire length of Walnut Blvd. All noise impacts outside of the project limits can be mitigated by a truck restriction--one of the recommended mitigation measures. Impacts within the project limits occur primarily as a result of significant noise increases. We recommend that these impacts be mitigated by a combination of wood and concrete walls--total cost $197,000. Wood is recommended because of lower cost (see economic analysis starting page 12) and esthetic considerations. In addition, landscaping is recommended to soften and balance the visual impact of the barriers; however, the cost estimates do not include landscaping.

The standard construction noise measures are proposed. However, if noise barriers are approved for traffic noise mitigation, we recommend they be constructed before the remainder of the project to mitigate construction noise.

The noise report is largely self explanatory. Note, however, that impacts with and without mitigation can be determined by comparing Tables 6 and 12, pages 9 and 16. The location of noise barriers and impacted receptors shown in Figure 4 are also shown at a larger scale in Figures 4a-d. Cost effectiveness data for concrete walls and timber walls are shown in Tables 9 and 10 respectively.

Your approval of the recommended mitigation measures is requested. If approved, the recommendations will be forwarded to the City of Corvallis for concurrence, prior to the completion of the Final Environmental Impact Statement.

AJG:lb

Attachment

Understand walls not recommended
by Versteeg, Potter, Hunter.

1 Versteeg ✓
Anderson
2 Christensen DD
3 Olson
4 Sullivan JWS
Terpin
Trout copy
5 Wakerlig

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9367

WALNUT BLVD.

1-31-80
2

302-1939

DECEMBER J.C.S.

HIGHLAND DR.-KINGS BLVD.

			Surv. Auth. #3	J.C.S.
Field Survey	901	5,000	2,000	4,927.27
Citizen Partic.	902		300	93.77
Pay. Loc. Govt.	903	14,000	—	13,404.52 51.08
Consultant	904	36,000	40,000	53,172.01
Final Design	905		3,000	—
R/W Descriptions	909		1,000	—
Soils & Geology	910		400	113.06
Traffic	911		500	166.32
Liaison (R/W)	913		1,000	405.14
Utility	914		150	126.92
Location	918		500	107.20
Proj. Mgmt.	920		100	13.40
Specifications	921		800	—
Environmental	923	8,000	4,000	7,643.39
Seminars	950	400	150	311.07
Hearings	980		1,800	1,503.93
			$55,700	$68,634.56
		$72,950		- Credit 1,349.80
				$67,284.76

cc: Stamus

9367

Corvallis
2

ROAD DESIGN 378-6558

Tony George, Engineering Coordinator
Environmental Section

January 16, 1980

A Olson
Adrian Olson
Preliminary Design Engineer

1 Vorsteeg ✓
Anderson
2 Christensen Doc
Olson
Sullivan
Terpin
Trout
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RECEIVED
JAN 18 1980
ROAD DESIGN SECTION

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Noise Mitigation
N.W. Kings Blvd.-Highland Dr.
Walnut Boulevard
Benton County

Two types of sound barriers were considered for this project. One type of barrier is a concrete wall constructed with precast concrete panels, concrete blocks or sound absorbing panels. These walls all cost approximately the same to construct. The other type of barrier is a wood or timber wall.

The timber wall has a lower initial construction cost, however the concrete wall requires a minimum of maintenance and would have a useful life of fifty years plus. A timber wall is a high maintenance wall and would have a maximum expected life of twenty years. This should be considered in any comparison of timber and concrete walls.

A six-foot high concrete wall costs approximately $115 per lineal foot to construct, compared to $55 per lineal foot for a six-foot high timber wall. A ten-foot high concrete walls costs $170 per lineal foot compared to $85 per lineal foot for the timber wall.

The proposed sound barrier between N.W. Rolling Green Way and Garryanna Street wo[illegible] need to be shortened approximately 50 feet at the west end and 70 feet at the east end in order to achieve the proper sight distance for safe access to Walnut Boulevard from the side streets. This would reduce the effectiveness of the barrier. The amount of mitigation that can be obtained due to the reduced length will need to be re-evaluated.

This revised 650-foot long barrier would cost approximately $75,000 for a six-foot high concrete wall or $36,000 for a six-foot high timber wall. Constructing a ten-foot high concrete wall would cost $110,000 compared to $55,000 for a ten-foot high timber wall.

The proposed barrer between Garryanna Street and N.W. 13th Street would need to be shortened approximately 40 feet at the west end in order to provide the proper sight distance for safe access to Walnut Boulevard from Garryanna Street. The amount of mitigation that can be obtained due to the reduced length will need to be re-evaluated.

This revised 320-foot long barrier would cost approximately $37,000 for a six-foot high concrete wall or $18,000 for a six-foot high timber wall. Constructing a ten-foot high concrete wall would cost $55,000 compared

Enclosed are copies of two alternate designs which have been sketched up in response to the comments [illegible] to $27,000 for a ten-foot high timber wall.

The proposed barrier between N.W. 13th Street and Highland Drive would need to be shortened approximately 40 feet at the west end and 100 feet at the east end in order to achieve the proper sight distances for safe access to Walnut Boulevard from the side streets. The amount of mitigation this wall would provide will need to be re-evaluated.

Constructing this wall approximately 29 feet from the center line of the roadway could create a safety problem. A safety barrier should be included as part of this wall. There would be no practical alternative location for placement of this wall. A timber wall was not considered appropriate in this area.

Constructing a six-foot high concrete block/shoulder barrier combination wall would cost approximately $45,000, at an average cost of $55 per lineal foot. The most feasible design for a ten-foot high wall appears to be a precast concrete shoulder wall/barrier combination that would cost approximately $185,000 to construct at an average cost of $230 per lineal foot over the revised 810 foot length.

The proposed 800 foot long barrier between Oak Avenue and Fairlawn Street would cost approximately $95,000 for a six-foot high concrete wall or $45,000 for a six-foot high timber wall. Constructing a ten-foot high concrete wall would cost $140,000, compared to $70,000 for a ten-foot high timber wall.

There would be no apparent adverse impact to the road design by construction of these barriers.

The proposed sidewalks would need to be adjusted to allow room for installation of the sound barriers located at the existing right-of-way line.

This would be a type 1-A project.

RM:cj

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

FILE:

INTER-OFFICE CORRESPONDENCE
December 4, 1979
Salem, OR 97310

FROM: Anthony J. Tony George, Eng. Coordinator
Environmental Section

TO: J.H. Versteeg

SUBJECT: Noise Mitigation--Walnut Blvd.FEIS
NW Kings Blvd-Highland Drive
Walnut Blvd
Benton County

The noise report for the FEIS on the Walnut Boulevard Project has identified four areas where sound barriers may be placed to eliminate or reduce impacts. Figure 4 shows the locations of the barriers, while Tables 7 and 8 give the barrier data and the predicted traffic noise levels.

Please check these sound barriers for engineering feasibility and develope estimated cost figures. Note that each of the four barriers are designed for 6 feet and 10 feet heights.

Due to the predominance of wood architecture and fences in the area, wooden barriers should be considered. Concrete block walls may clash with the existing surroundings.

If you have any questions, please contact Steve Lindland or myself. Thank you for your assistance.

AJG:SL:ct

Attachments

cc: A. Olson
Steve Lindland

Versteeg
Anderson
Christensen
[✓ Olson]
Sullivan
Terpin
Trout
Wakarig

RECEIVED
DEC 06 1979
ROAD DESIGN
SECTION

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Figure 4(a)

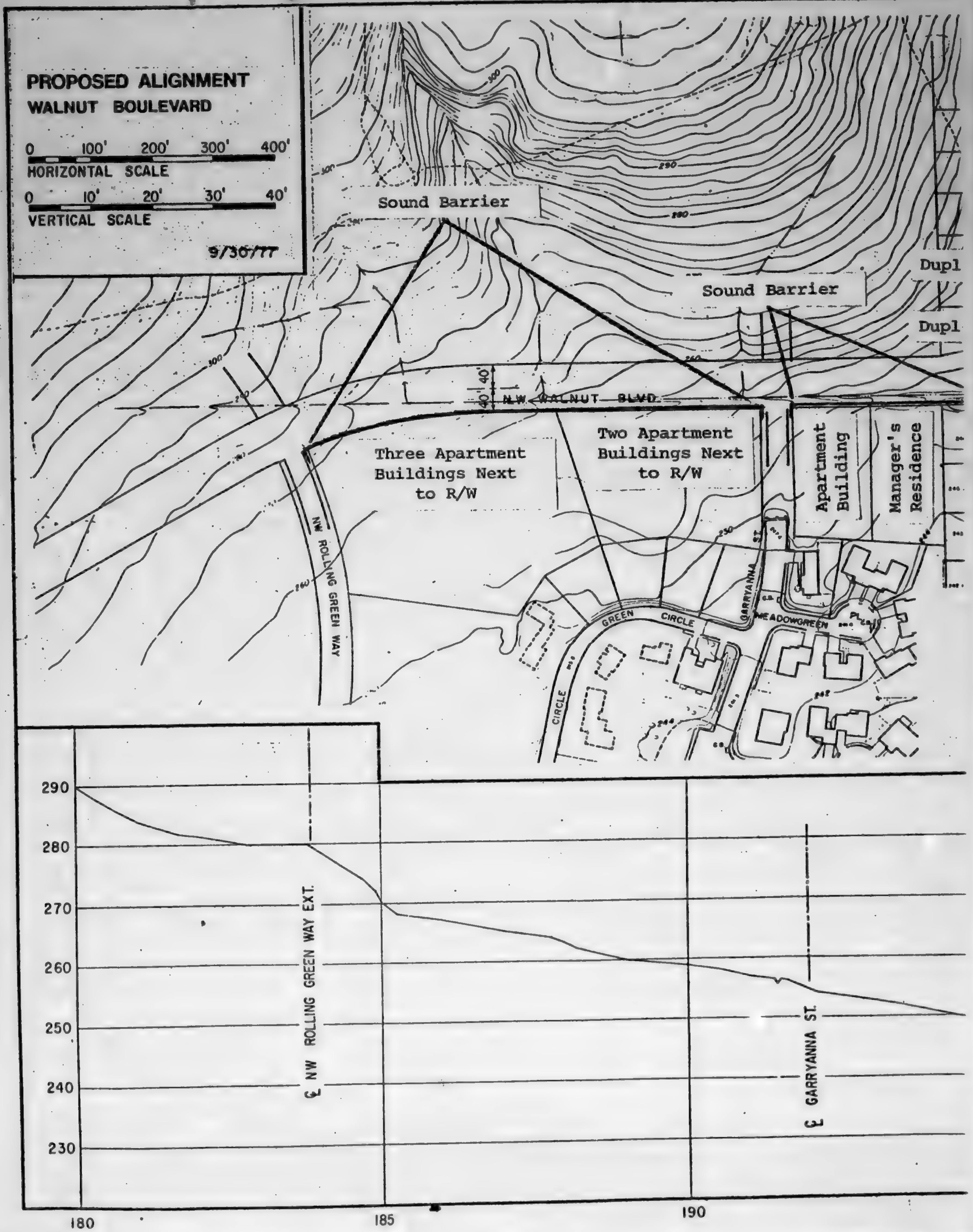
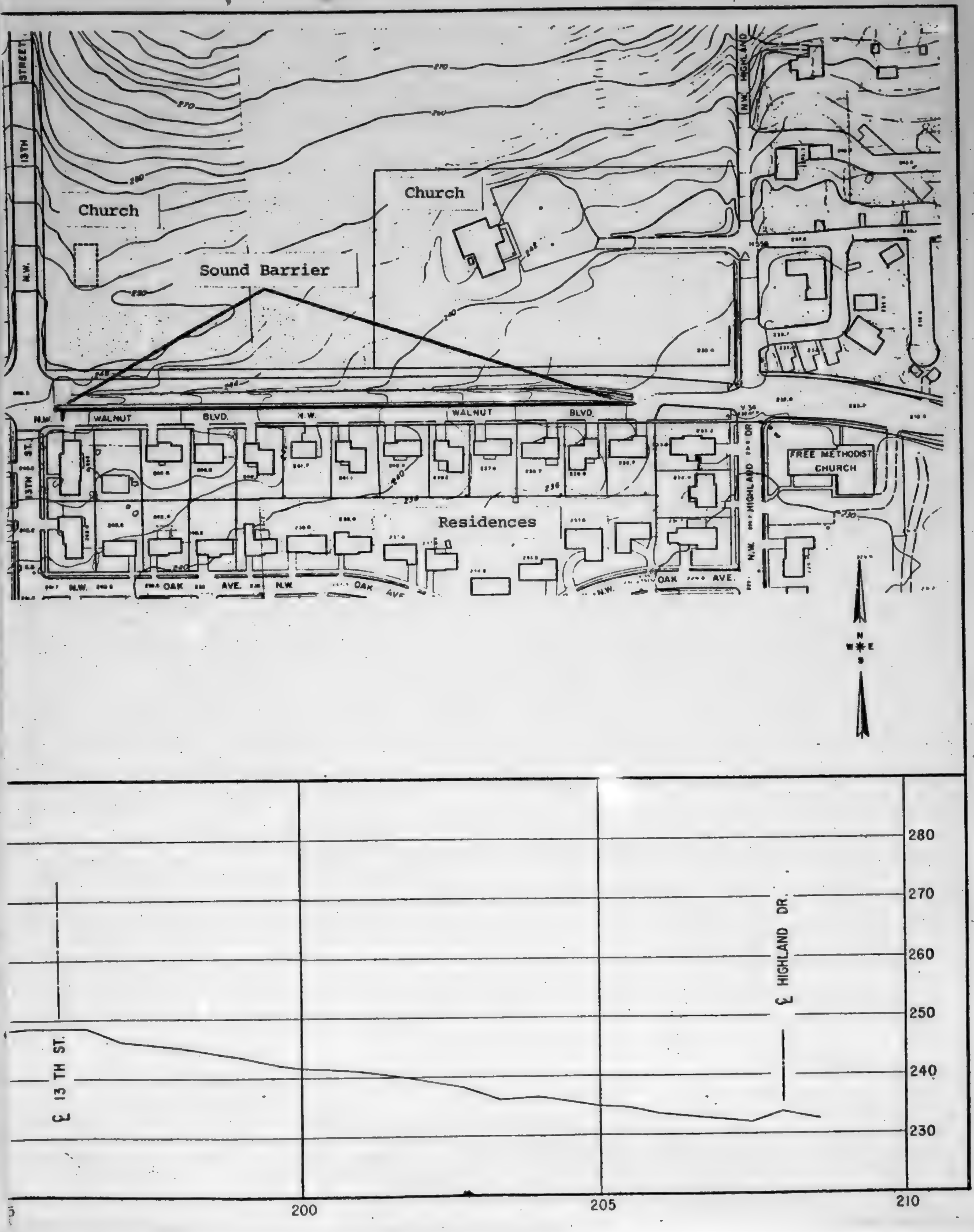
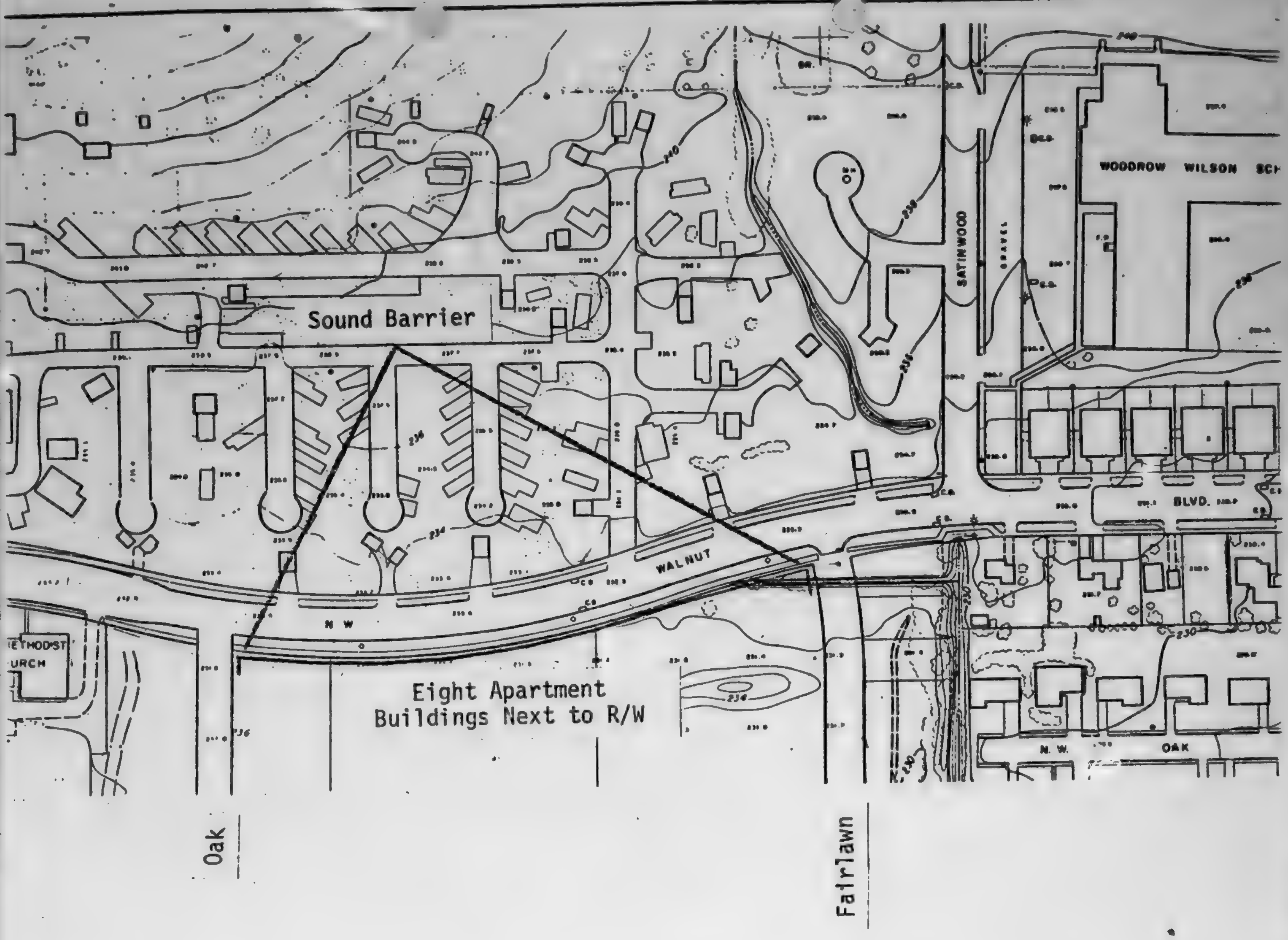

PROPOSED ALIGNMENT
WALNUT BOULEVARD
0 100' 200' 300' 400'
HORIZONTAL SCALE
0 10' 20' 30' 40'
VERTICAL SCALE
9/30/77
Sound Barrier
Sound Barrier
Dupl
Dupl
300
290
280
260
250
40'
40'
N.W. WALNUT BLVD.
Three Apartment Buildings Next to R/W
Two Apartment Buildings Next to R/W
Apartment Building
Manager's Residence
NW ROLLING GREEN WAY
GARRYANNA ST.
GREEN CIRCLE
CIRCLE
MEADOWGREEN PL.
290
280
270
260
250
240
230
℄ NW ROLLING GREEN WAY EXT.
℄ GARRYANNA ST.
180
185
190

Figure 4(b)


13TH STREET
N.W.
Church
Sound Barrier
Church
N.W. HIGHLAND
270
260
250
240
236
230
N.W. WALNUT BLVD.
N.W. WALNUT BLVD.
13TH ST.
FREE METHODIST CHURCH
Residences
N.W. HIGHLAND DR.
N.W. OAK AVE.
N.W. OAK AVE.
N.W. OAK AVE.
N
W
E
S
℄ 13 TH ST.
℄ HIGHLAND DR.
280
270
260
250
240
230
200
205
210


WOODROW WILSON SCH
SATINWOOD
GRAVEL
Sound Barrier
BLVD.
WALNUT
N W
N. W. OAK
ETHODIST
URCH
240
236
234
230
Eight Apartment
Buildings Next to R/W
Oak
Fairlawn

PROPOSED ALIGNMENT
WALNUT BOULEVARD

0 100' 200' 300' 400'
HORIZONTAL SCALE

0 10' 20' 30' 40'
VERTICAL SCALE

9/30/77

Table 7

Sound Barrier Data

Barrier	Height	Length	Attenuation*
olling Green Way - Carryanna St.	10 ft.	770 ~~800~~ ft.	12 dBA
	6 ft.	770 ~~800~~ ft.	7 dBA
Carryanna St. - N.W. 13th St.	10 ft.	360 ~~350~~ ft.	10 dBA
	6 ft.	360 ~~350~~ ft.	7 dBA
N.W. 13th St. - Highland Dr.	10 ft.	950 ft.	11 dBA
	6 ft.	950 ft.	7 dBA
ak - Fairlawn	10 ft.	800 ft.	12 dBA
	6 ft.	800 ft.	7 dBA

* Maximum attenuation, smaller values are anticipated towards the ends of the sound barrier.

Table 8

Traffic Noise Levels (L_{10}) for the Areas Where Sound Barriers Are Feasible*

	No-Build Alternative	Build Alternative		
		W/O Truck Restriction	With Truck Restriction	
			W/O Barrier	With Barrier**
lling Green Way - Garryanna St.	Approx. 49-57 dBA	78 dBA	71 dBA	59 dBA
arryanna St. - N.W. 13th St.	Approx. 49-57 dBA	78 dBA	71 dBA	61 dBA
.W. 13th St. - Highland Dr.	Approx. 49-57 dBA	78 dBA	71 dBA	60 dBA
Oak - Fairlawn	76 dBA	78 dBA	71 dBA	59 dBA

---

* Calculated at 50 ft. from road centerline

** Calculated using a sound barrier 11 ft. high

9367

Form 81-734-3000

OREGON STATE HIGHWAY DIVISION

AUTHORITY FOR SURVEY

Section Highland Drive-Kings Blvd.
Highway Walnut Blvd. (Corvallis)
County Benton

Date January 15, 1980
Authorization No. 4
Survey Prefix 302-1939 (Assigned by Salem office)

Description of termini, route, length, etc.: The project is the extension of Walnut Blvd from Highland Drive to NW Kings Blvd. Project length is 3,800 feet.

M-2120(1)
5-15-80
Phase I
(Through Design Approval only)

Purpose of survey: To prepare plans, specifications and cost estimates to construct 50' to 60' wide street with curbs, drains and type 11 bikepath.

Estimate of Costs:

Resident Engineer	(901)	$7,500	R/W Liaison	(913)	1,000
Citizens Involvement	(902)	100	Utility Liaison	(914)	500
Paym't to Loc. Governmt.	(903)	15,000	Recon & Hydrology	(918)	500
Consultant Fees	(904)	53,200	Project Management	(920)	100
Final Design	(905)	0	Specifications	(921)	0
R/W Descriptions	(909)	0	Adm. Serv. (Eng.)	(922)	0
Soils & Geology	(910)	1,500	Enviromental	(923)	12,000
Traffic	(911)	500	Training & Seminars)	(950)	500
			Public Hearings	(980)	1,500

INSTRUCTIONS

Submit four copies to Salem. After approval by the Assistant State Highway Engineer, one copy will be sent to the Regional Engineer and one copy to the Resident Engineer.

This form does not constitute authority for making survey until approved and returned.

Submit separate order for each survey.

RECEIVED
JUN 10 1980
LOCATION SECTION

Total estimated cost of survey	$93,900
Previous authorization	55,700
Additional authorization requested	38,200
Additional authorization approved (Salem)	
Total all authorizations approved (Salem)	

Requests made by: Field Engineer

Recommended for Approval: Regional Engineer

Recommended for Approval: Frank E. Perpin Location Engineer

Approved: Assistant State Highway Engineer

SP*19760-734

9367

CORVALLIS CITY HALL
501 S.W MADISON AVENUE
CORVALLIS, OREGON 97330

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION (503) 757-6941

October 29, 1979

Phillip O. Stearns, Region Z
Federal Aid Engineer
P.O. Box 14030
Salem, Oregon 97310

SUBJECT: FAU 2110 NE Circle Blvd.
#74-589
FAU 2120 NW Walnut Blvd.
#74-592

Dear Mr. Stearns:

Forwarded herewith are two certified copies of Resolutions relating to the advancement of the N.W. Walnut and N.E. Circle Blvd. projects. The City Council also passed a Resolution concerning N.W. Circle Blvd. with an amended alignment; however, this Resolution will not be considered as final until the City Council has determined and approved Findings of Fact that substantiates their actions.

Please have the work proceed with all due haste on the above projects.

Very truly yours,

A. Gordon Wyatt

A. Gordon Wyatt
Principal Engineer

AGW:gs
enclosure

11-5-79
cc Potter

Minutes of the meeting of October 15, 1979, continued.

A resolution submitted by Council person R. Frank Tucker.

WHEREAS, the City must notify the Department of Transportation, State of Oregon of its decision on the environmental impact statement prepared for FAU Project 2120 M/2120/(1),

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Corvallis that the City Council affirms that Walnut Boulevard is an arterial street and authorizes the preparation of the final Environmental Impact Statement and final design and construction of the proposed project as described above.

R. Frank Tucker

Upon motion, duly made and seconded, the foregoing resolution was adopted; and the Mayor thereupon declared said resolution to be adopted.

I hereby certify that the foregoing is a true and correct copy and the whole thereof of the resolution adopted by the City Council of the City of Corvallis, Oregon at their meeting on October 15, 1979

Acting City Recorder
City of Corvallis, Oregon

Minutes of the meeting of October 15, 1979, continued.

A resolution submitted by Council person Coberly.

WHEREAS, the City must notify the Department of Transportation, State of Oregon of its decision on the environmental impact statement prepared for FAU Project 2110 M/2110/(2),

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Corvallis that the City Council authorizes the preparation of the final Environmental Impact Statement and final design and construction of the proposed project as described above.

Jean Coberly

Upon motion, duly made and seconded, the foregoing resolution was adopted; and the Mayor thereupon declared said resolution to be adopted.

I hereby certify that the foregoing is a true and correct copy and the whole thereof of the resolution adopted by the City Council of the City of Corvallis, Oregon at their meeting on October 15, 1979.

Acting City Recorder
City of Corvallis, Oregon

9367

2

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:

August 28, 1979

TO: G. L. Green, Division Administrator
Federal Highway Administration

Original Signed By
D. E. Swan

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Public Hearing Transcript
Project No. M-2120(1)
N.W. Kings Blvd.-N.W. Highland Dr. Section
City Street (FAU 2120)
Benton County

In compliance with federal statutes and regulations and the Oregon Action Plan, I am submitting a copy of a transcript of the Corridor/Design Public Hearing held in Corvallis, Oregon on May 30, 1979 relative to the subject project.

Project No.	Section
M-2120(1)	N.W. Kings Blvd.-N.W. Highland Dr. Section

JLG:fkc

cc: C. W. Head
G. A. Potter
Gary Zehner

NOTED
C. W. HEAD

Form 734-3122

9347 2

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

May 22, 1979

NOTED
E. S. HUNTER

In Reply Refer to
File No.:

Ms. Sharon Langeberg
365 N.W. Harrison
Corvallis, OR 97330

RE: Circle Boulevard
N.W. Lantana Dr. to N.W. Witham
Hill Drive Section, and
N.W. Ninth St. to Southern Pacific
Railroad (Seavy Ave.) Section
City of Corvallis, Oregon
Benton County

Walnut Boulevard
Kings Blvd. to Highland Dr. Section
City of Corvallis, Oregon
Benton County

Dear Ms. Langeberg:

Thank you for your recent letter concerning the Circle and Walnut projects in Corvallis, Oregon.

Your letter will be made part of the record on these projects. By copy of this letter I will also inform the City of Corvallis of your views on this matter. As you may know, a public hearing has been scheduled by the City of Corvallis on May 30 and 31.

Thanks for writing.

Very truly yours,

ORIGINAL SIGNED BY
GARY A. POTTER

Gary A. Potter, Manager
Environmental Section
412 Transportation Bldg.
Salem, OR 97310

RECEIVED
TECHNICAL SERVICES
MAY 23 '79
REFER TO
FOR

GAP:brl

cc: Mr. Gordon Wyatt, Project Coordinator, Public Works Department

AN EQUAL OPPORTUNITY EMPLOYER

May 18, 1979

Mr. Gary Potter
Manager
Environmental Section
Oregon State Highway Division
Salem, Oregon 97310

Dear Mr. Potter:

I urge that the Circle Boulevard/Walnut Boulevard extensions be implemented in the near future.

If the implementation does not take place, many residential streets will become throughways, and most residents of Northwest Corvallis will pay the price of:

15-25% incresed mileage to go to work or shopping

20% increased time to drive from home to work or other destinations

More start and stop traffic

Unneccessary waste of expensive energy (gasoline)

Traffic Congestion due to a volume of traffic greatly exceeding the handling capacity of the existing road network.

Serious delays for the fire or police department in answering emergencies. Walt Pflughaupt, Fire Chief, has testified at public hearings that a Western extension of Circle Boulevard would greatly enhance fire truck access to the Witham Hill Drive area. In fact, direct routing of this high-risk area was a consideration in determining the Circle Boulevard location for the recently constructed fire station.

Increased traffic on most Northwest residential streets.

Increased hazards for children crossing some streets on way to schools.

Continued lack of public access to the recreational value of Woodland Meadow.

Unsafe street conditions.

Eventually, we will have to face the reality of improving our roads to handle the traffic in our City. Costs will be considerable higher if we further delay these improvements. Federal funds may not be available at a later date.

Yours sincerely,

Sharon Langeberg
365 N. W. Harrison
Corvallis, OR 97330

SL:jm

9367

1859

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

May 22, 1979

In Reply Refer to
File No.:

NOTED
E. S. HUNTER

Mr. Gordon Wyatt
Project Coordinator
Public Works Department
Corvallis City Hall
501 SW Madison Avenue
Corvallis, OR 97330

RE: Circle Boulevard
N.W. Lantana Dr. to N.W. Witham
Hill Drive Section, and
N.W. Ninth St. to Southern Pacific
Railroad (Seavy Ave.) Section
City of Corvallis, Oregon
Benton County

Walnut Boulevard
Kings Blvd. to Highland Dr. Section
City of Corvallis, Oregon
Benton County

Dear Mr. Wyatt:

Per our discussion today, I am forwarding a copy of Mr. Zotter's May 14 memorandum to Glen Green that further discusses the Section 4(f) inplications on the Circle Boulevard project.

Very truly yours,

ORIGINAL SIGNED BY
G. A. POTTER

Gary A. Potter, Manager
Environmental Section
412 Transportation Bldg.
Salem, OR 97310

GAP:brl

Attachment

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TECHNICAL SERVICES
MAY 23 '79
REFER TO
FOR
Info | Inves | R/D | D/R | Sign | Act | File

Form 734-3122

Form FHWA 121 (Rev. 5-73)

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
222 S. W. Morrison St.
Portland, Oregon 97204

DATE: May 14, 1979

In reply refer to: HRC-010

SUBJECT: DEIS's - Circle Blvd. and Walnut Blvd.

FROM: Assistant Regional Counsel
Region 10

TO: Mr. Glen L. Green
Division Administrator
Salem, Oregon

RECEIVED
ENVIRONMENTAL
SECTION
MAY 18 1979
Referred to ✓ Manager ✓
Proj. Coord. ✓ Res. Coord.
Eng. Coord. Adm. Asst.
Sec. File

Per your request, we have reviewed the draft environmental impact statements (DEIS) for Circle Boulevard and Walnut Boulevard (Kings Blvd. - Highland Drive Section) in Corvallis, Oregon.

We have no comments on the Walnut Boulevard DEIS. However, based on our review of the Circle Boulevard DEIS, it is our legal opinion that if the City of Corvallis selects the presently proposed build alternative for Circle Drive between N.W. Witham Hill Drive and N.W. Lantana Drive, a §4(f) determination will be required with respect to Woodland Meadow - Natural Park. This legal opinion is based on the fact that the proposed project would have the following effects on the park:

1. Requires land from the park for the construction of a class I bikeway (DEIS, pp. 19, 130).

2. Physically separates the existing park into two sections (DEIS, pp. 5, 43, 46).

3. Significantly increases the noise levels within the park. The present ambient noise level within the park is 50 dba. The projected noise level within the park after construction of the project would be in excess of 70 dba within 15 feet of the right-of-way at the eastern end and 45 feet at the western end (DEIS, p. 131).

4. Significantly impacts the aesthetic qualities of the park (DEIS, p. 132).

5. Creates the potential for park user/traffic conflicts and hazards, especially for children (DEIS, p. 131).

RECEIVED
MAY 18 1979
OREGON DIVISION

6. Increases carbon monoxide concentrations within the park (DEIS, p. 131).

Both the taking of parkland for the bicycle path and the material adverse effect on the park from the physical separation, noise, air quality, visual and traffic hazard impacts constitute a "use" of the park as that term has been defined by the courts in Brooks v. Volpe, 460 F.2d 1193, 3 ERC 1858 (9th Cir., 1972); Stop H-3 v. Coleman, 533 F.2d 434, 9 ERC 1383 (9th Cir., 1976); Monroe County Conservation Council v. Adams, 566 F.2d 419, 11 ERC 1037 (2nd Cir., 1977); Citizens for Mass Transit v. Brinegar, 357 F.Supp. 1269, 5 ERC 1231 (D. Ariz., 1973); Conservation Society of Southern Vermont v. Secretary of Transportation, 362 F.Supp. 627, 5 ERC 1683 (D. Vt., 1973), 443 F.Supp. 1320 (D. Vt., 1978); Lange v. Brinegar, ____F.Supp. ____ (E.D. Wash., Civ. No. 3941, 8/31/76). See also our prior memorandums on the Foothills Blvd. DEIS, Grants Pass, and the Front Street Bypass DEIS, Salem.

For example in Brooks v. Volpe, the Court stated:

> "The word 'use' is to be construed broadly in favor of environmental statements in cases in which environmental impact appears to be a substantial question . . . . Application of this principle in the present case requires that the encirclement of the Denny Creek Campground by the challenged freeway be recognized as a 'use' of that campground within the meaning of 23 U.S.C. §138." 460 F.2d 1193, at 1194.

The Court in Monroe County v. Adams stated:

> "Although only a small portion of the park would have to be taken to accomplish this reconstruction, the actual 'use' of the park within the meaning of §4(f) would be much greater. The park . . . would be subject to the unpleasantness which accompanies the heavy flow of surface traffic. In addition, access to the park from the adjoining residential areas would become difficult and hazardous because of the necessity of crossing a heavily-travelled, six-lane arterial highway. These factors add up to a 'use' of the park under the statute." 566 F.2d 419, at 424.

And the Court in Lange v. Brinegar stated:

> "Courts have generally recognized that a project need not actually encroach upon public land to require compliance with §4(f) . . . . The construction of this highway segment inevitably affects the [recreational] easements in question. Noise, air and water pollution, increased accessibility and general unsightliness are possible consequences of constructing the highway. While the segment may not actually encroach upon state interests in the areas, the roadway will constructively use the recreation areas. A §4(f) analysis must be made." Slip opinion, at 32.

The §4(f) statement must document that there are no feasible and prudent alternatives to "using" land from the park and that all possible planning to minimize harm has occurred. The DEIS only discusses two alternatives - the proposed project and no-build. Should the City select the proposed project, the Division should assure that the §4(f) statement adequately describes from an engineering standpoint why there are no other feasible and prudent alternatives to meet the stated needs for this project.

Please feel free to call should you wish to discuss this matter further.

James F. Zotter

James F. Zotter

cc: R.C. Cowdery (HED-010)

9367

LOCATION NARRATIVE

NW Kings Blvd.-Highland Drive
(Walnut Ave.; Corvallis)
Benton County

Richard E. Nelson
Region 2 Location Engineer
April 1979

SCOPE: The proposed project is to construct Walnut Blvd. from Kings Blvd. to Highland Ave.. Walnut Blvd. is identified as an Urban collector in the Corvallis Area Transportation Plan and has previously been constructed as a collector from Highland Ave. easterly to NW Ninth Street.

HISTORY: Project request submitted in April 1975; City forces to perform preliminary engineering. In November 1978, a supplemental agreement was executed at the request of the City, to allow completion of the preliminary engineering by State forces. Proposal was prepared utilizing field data obtained by City forces.

RIGHT OF WAY: Existing 80 foot right of way has been previously obtained. Design criteria is existing right of way corridor, the City has obtained additional right of way from 13th to Highland on the North side of Walnut. The City will also obtain all necessary slope easements. The State will obtain the necessary additional R/W.

HORIZONTAL AND VERTICAL CONTROL:

Coordinates are assumed, bearings are from city surveys. Vertical control; USC&GS horizontal; Vertical alignments are controlled by existing right of way.

TYPICAL SECTION:

Travel lanes, one 12', one 13' left and right.
Median Refuge 14 feet.
at the intersections of Kings
Sidewalk - 5' none Right side
Bikeway - 8' none Left side.

BASE DESIGN:

Wearing Surface - 2" Class "B" A/C
Base Course - 4-1/2" Class "B" A/C
Treated Subgrade - 12" Lime Treatment
Sidewalk - 4" P.C.C.
Bikeway - 6" P.C.C.

DRAINAGE: There is an existing storm sewer system, which will also serve the adjacent developments.

UTILITIES: There is an existing sanitary sewer system and water main which will not conflict with construction. The Storm and Sanitary sewer manholes will need adjustment.

STAGE CONSTRUCTION:
Stage construction not required. Minor flagging of traffic will be necessary at construction of new intersection connections.

LOCATION COST ESTIMATE AND QUANTITY SUMMARY

SECTION Kings Blvd.-Highland Ave UNIT OR PART ____________ Sheet 1 of 2

HIGHWAY Walnut Ave. PREFIX 302-1939-901 COUNTY Benton

ITEM NO.	SPEC. NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT PRICE	AMOUNT
1	110	Mobilization	Lump Sum	All -	8%	42,166.01
2	111	Temp. Protection & Direction of Traffic	Lump Sum	All	1½%	7,789.29
3	111	Temporary Signs	Sq. Ft.	209	6.00	1,254.00
4	111	Temporary Barricades, Type III - 8'	Each	49	100.00	4,900.00
5	111	Flagmen	Hour	80	19.00	1,520.0
6	202	Removal of Structures & Obstruction	Lump Sum	All	2,300.00	2,300.00
7	203	General Excavation	Cu. Yd.	16,059.7	5.00	80,298.50
8	206	Trench Excavation	Cu. Yd.	269.3	8.00	2,154.40
9	225	Furnish & Placing Topsoil	Cu. Yd.	460.0	11.50	5,290.00
10	233	Watering	M-Gal.	401.5	10.00	4,015.00
11	307	Lime Treated Subgrade	Sq. Yds.	21,112.6	1.50	31,668.90
12	307	Lime For Treated Subgrade	Ton	475.1	80.00	38,008.00
13	403	CL 'B' Asphalt Conc. Mix	Ton	7,198.2	17.50	125,968.50
14	403	Asphalt Cement in Mix	Ton	431.9	103.00	44,485.70
15	407	Asphalt Tack Coat	Ton	1.9	150.00	285.00
16	603	12" Storm Sewer Pipe	Lin. Ft.	612.0	12.00	7,344.00
17	604	Manhole, Pre-Cast	Each	5.0	1,500.00	7,500.00
18	604	Curb Inlet	Each	12.0	775.00	9,300.00
19	604	Type 'D' Inlet, Modified	Each	1.0	550.00	550.00
20	608	5' P.C.C. Walk - 4"	Sq. Yd.	1,813.3	13.50	24,479.55
21	608	8' P.C.C. Bikeway - 6"	Sq. Yd.	3,477.8	20.00	69,556.00
22	609	P.C.C. Curb Type 'A'	Lin. Ft.	7,619.0	6.75	51,428.25
23	610	Extra for Asphalt Road Appr	Each	6	400.00	2,400.00
24	628	Adjust Manhole	Each	18	200.00	3,600.00
25	681	Seeding & Mulching	Acre	1.4	700.00	980.00
				Sub-Total		569,241.09

LOCATION COST ESTIMATE AND QUANTITY SUMMARY

SECTION Kings Blvd- Highland Ave. UNIT OR PART ______ Sheet 2 of 2

HIGHWAY Walnut Ave PREFIX 302-1934-901 COUNTY Benton

ITEM NO.	SPEC. NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT PRICE	AMOUNT
				Sub-Total		569,241.09
		Engineering & Contingencies		20%		113,848.22
				Total		683,089.31

9367

Form 81-734-3030

OREGON STATE HIGHWAY DIVISION

AUTHORITY FOR SURVEY

Section Highland Drive - Kings Blvd.

Highway Walnut Blvd. (Corvallis)

County Benton

Date April 10 1979

Authorization No. 3

Survey Prefix 302-1939 (Assigned by Salem office)

Description of termini, route, length, etc.:

The project is the extension of Walnut Blvd. from Highland Drive to NW Kings Blvd. Project length is 3,800 feet.

Purpose of survey: To prepare plans, specifications and cost estimates to construct 50' to 60' wide street with curbs, drains and type 11 bikepath.

Estimate of cost:

Field Survey	901	2,000	Utility	914	150
Citizen Part.	902	300	Location	918	500
Consultant	904	40,000	Proj. Mgmt.	920	100
Final Design	905	3,000	Specifications	921	800
R/W Descriptions	909	1,000	Environmental	923	4,000
Soils & Geol.	910	400	Seminars	950	150
Traffic	911	500	Hearings	980	1,800
Liason	913	1,000			

M-2120(1)
2-26-76

INSTRUCTIONS

Submit four copies to Salem. After approval by the Assistant State Highway Engineer, one copy will be sent to the Regional Engineer and one copy to the Resident Engineer.

This form does not constitute authority for making survey until approved and returned.

Submit separate order for each survey.

Total estimated cost of survey	$ 55,700
Previous authorization	50,000
Additional authorization requested	5,700
Additional authorization approved (Salem)	
Total all authorizations approved (Salem)	

Requests made by:

Costs & Records Spec.
Field Engineer

Recommended for Approval:

Regional Engineer

Recommended for Approval:

Frank E. Perpin
Location Engineer

Approved:

E S Hunter
Assistant State Highway Engineer

SP*19760-734

9367

2.

April 4, 1979

City of Corvallis
City Hall
Corvallis, OR 97330

Attention: Jerry Hortsch
City Recorder

MISC. CONTRACTS and
AGREEMENTS No. 5312

Gentlemen:

Attached for your files are fully executed copies of three agreements described as follows:

1) Supplemental agreement concerning construction of the N.W. Lantana Drive-N.W. Witham Hill Drive Section of N.W. Circle Boulevard, FAU 2110.

2) Supplemental agreement concerning construction of the N.W. Kings Boulevard-N.W. Highland Drive Section of N.W. Walnut Boulevard, FAU 2120.

3) Supplemental agreement concerning construction of the N.W. 9th Street-SPRR Section of N.W. Circle Boulevard, FAU 2110.

We are retaining fully executed copies of these supplemental agreements for the Transportation Commission's files.

Sincerely,

C. W. Head
COMMISSION SERVICES

kkr

Enclosures

bc: Gerald Wimer (agreements attached)

9367

81-734-3030

OREGON STATE HIGHWAY DIVISION
INTER-OFFICE CORRESPONDENCE
December 18, 1978
Salem, Oregon

FILE: 302-1938
302-1939
302-1941

Phil Stearns

FROM: Phillip O. Stearns
REGION FEDERAL AID SPECIALIST

TO: G. W. Wimer
LOCAL GOVERNMENT MANAGER

SUBJECT: Engineering for
FAU Projects
Corvallis Urban Area

City of Corvallis has requested State to perform preliminary engineering on the following projects:

✓ NW Lantana Drive-NW Witham Hill Drive Section 5311
NW Circle Boulevard (FAU 2110)

✓ NW 9th Street-SPRR Section 5557
NW Circle Boulevard (FAU 2110)

✓ NW Kings Boulevard-NW Highland Drive Section 5312
NW Walnut Boulevard (FAU 2120)

I have attached previous correspondence for your information.

Please have the project agreements revised or appropriate supplements written for City approval.

POS/gl
attachments

Drafts to typing 2-8-79.
MCH

PROJECT MANAGEMENT
CCE ☐

N Rp M

Zehner
Make sure Mainor has started agreement supplements

5-13-75
2-23-76

CORVALLIS CITY HALL
501 S.W. MADISON AVENUE
CORVALLIS, OREGON 97330

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION (503) 757-6941

December 7, 1978

Mr. Phillip O. Stearns
Region II, Federal Aid Engineer
Oregon Highway Division
P.O. Box 14030
Salem, OR 97310

SUBJECT: N.W. Circle #74-588
N.E. Circle #74-589 FAU Project
N.W. Walnut #74-592

Dear Phil:

The proposal as presented in your December 4, 1978 letter is acceptable to the City. Please prepare the necessary supplemental agreements for the City's approval.

Because of the public's interest in these projects, we would liked to have had the State conduct these hearings.

We will undoubtedly call upon the Region office staff for support, in order to insure that the hearings are conducted within the State and Federal guidelines.

Very truly yours,

A. Gordon Wyatt
Principal Engineer

AGW:ml

ROBERT W. STRAUB
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
Region 2
2960 E. STATE STREET, SALEM, OREGON 97310 PHONE 378-2626

December 4, 1978

Rolland Baxter
City Engineer
City Hall
Corvallis, OR 97330

Dear Mr. Baxter:

Your letter requesting State to perform preliminary engineering and the hearing for the Circle Boulevard and Walnut Boulevard projects has been reviewed.

Region Office will complete the preliminary engineering for your projects but we feel City should hold the hearing(s). State can provide hearing maps, estimates, and other hearing paraphernalia, with City providing the hearing officer and construction engineer. Our right of way section may be persuaded to provide a person for the right of way discussion.

If this is satisfactory to you, please advise and I will have the necessary supplement to the project agreement written for City's approval.

Very truly yours,

Phillip O. Stearns
REGION II ENGINEER

POS/gl
cc: LGPU

City of Corvallis

CORVALLIS CITY HALL
501 S.W. MADISON AVENUE
CORVALLIS, OREGON 97330

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION (503) 757-6941

November 9, 1978

Phillip O. Stearns
Regional Federal Aid Engineer
Oregon Highway Division
P. O. Box 14030
Salem, Oregon 97310

SUBJECT: Circle and Walnut, FAU Projects (#74-588, 589 and 592)

Dear Mr. Stearns:

Some four years ago, when we entered into the FAU projects program, our engineering work load was such that we felt that the preliminary engineering could be accomplished with city staff. During the ensuing time we have found that the workload has increased very rapidly and it has held at a level that our engineering staff has had more than we could handle. We have, on several occasions, utilized local consulting engineering firms for preparing plans and specifications for local construction projects. Budgetory limitations have prohibited our increasing the staff and our first priorities have been to accomplish and accomodate the growth and development within the city of Corvallis.

With the present workload that we have, we do not believe that we can meet the time schedule that is required to have the preliminary engineering completed within the time frame necessary for the design hearing. Therefore, by this letter we are requesting that the Oregon Highway Division complete the preliminary design work portion of the preliminary engineering phase. We can and will provide the necessary field survey support for you to accomplish this design work.

Additionally, because of the amount of local interest and controversy that has developed regarding these projects and because it now appears that the Corridor-Design Hearings will be held about April, 1979 and that we will have a relatively new elected governing body and administrative staff, we would hereby request that the Oregon Highway Division provide the hearings office and conduct the public Corridor-Design Hearings for the three projects. We will provide the local support that you would need and provide for arranging for locations, advertising, etc.

Your favorable consideration of these requests will be greatly appreciated. If necessary, please provide the necessary information for amending the present city/state agreements regarding the preliminary engineering.

Very truly yours,

Rolland Baxter
City Engineer

AGW:cej

9367 7-21-78 2

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

FEDERAL AID PROJECT NO. M-2[illegible]0(1) & M-2120(1)

STATE PROJECT NO. See below

COUNTY NAME Benton

PROGRAM STAGE (Check) ☐ 1. ☐ 2.

FROM:
G. L. Green, Division Administrator
Salem, Oregon

PROGRAM NO.

ITEM NO. M-66 & M-78

TO:

Mr. F. B. Klaboe, Chief of Operations
Oregon Department of Transportation
State of Oregon
Salem, Oregon

DATE PS & E APPROVED

DATE AUTHORIZATION EFFECTIVE See below

FEDERAL ROUTE NUMBER FAU Routes 2110 & 2120

STATE ROUTE NUMBER City Streets

GENERAL LOCATION:
N.W. Witham Hill Blvd. - N.W. Arbol Place and
N.W. Kings Bldvd. - N.W. Highland Ave.

GENERAL DESCRIPTION OF WORK:

Supplemental Consultant Agreement

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRLIMINARY ENGINEERING FOR SURVEY AND PLAN PREPARATION
☒ OTHER (Specify) Supplement #2
Wilbur Smith and Associates, Inc.
TEC NTE $26,895 FF $21,028
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONTRUCTION - ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of 7-10-78 I approve Supplemental Agreement #2 and confirm the verbal authorization date of 5-22-78 for Task Order #19 at a TEC NTE of $4,931. Task orders 20 through 24 are approved as of 7-10-78 at a TEC of $21,964. A signed copy of the approved supplemental agreement is returned herewith.

DATE 7-21-78	SIGNATURE OF APPROVING OFFICIAL G K Hessner	TITLE for Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U.S. GOVERNMENT PRINTING OFFICE: 1976—626-787

9367 11-29-77 2

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

FEDERAL AID PROJECT NO.: M [illegible] 10(1) & M-2120(1)

STATE PROJECT NO.: See Below

COUNTY NAME: Benton

PROGRAM STAGE (Check) ☐ 1. ☐ 2.

FROM:
G. L. GREEN, Division Administrator
Salem, Oregon

PROGRAM NO.:

ITEM NO.: M-66 & M-78

TO:

Mr. F. B. Klaboe
Chief of Operations, ODOT
State of Oregon
Salem, Oregon

DATE PS & E APPROVED	DATE AUTHORIZATION EFFECTIVE	FEDERAL ROUTE NUMBER
	10-11-77	FAU Routes 2110 & 2120
		STATE ROUTE NUMBER City Streets

GENERAL LOCATION:

"NW Witham Hill Blvd - NW Arbol Place" and "NW Kings Blvd - NW Highland" (Corvallis)

GENERAL DESCRIPTION OF WORK:

Supplemental Consultant Agreement

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY

☐ PRLIMINARY ENGINEERING FOR SURVEY AND PLAN PREPARATION

☒ OTHER (Specify): Supplemental Consultant Agreement #1
TEC NTE $3,000- F.F. $2,344

☐ ACQUISITION OF RIGHT-OF-WAY

☐ CONTRICTION - ADVERTISE FOR RECEIPT OF BIDS

☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's 11-9-77 letter this will confirm the authorization of Mr. Paul Riedl to proceed with that work covered by Supplemental Agreement No 1 with Wilbur Smith and Associates effective 10-11-77.

(M-2110(1) TC $1,500, F.F. - $1,172)
(M-2120(1) TC $1,500, F.F. - $ 1, 172)

NOTED
F. B. KLABOE

DATE	SIGNATURE OF APPROVING OFFICIAL	TITLE
11-29-77		for Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U.S. GOVERNMENT PRINTING OFFICE: 1976—626-787

9367

Form FHWA 121 (Rev. 5-73)

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
Box 300
Salem, Oregon 97308

DATE: April 19, 1977

In reply refer to: 1041EC.3

SUBJECT: Oregon Project M-2110(1) & M-2120(1)
Circle and Walnut Blvds.
Benton County

FROM : G. L. Green, Division Administrator

To : Mr. H. S. Coulter, State Highway Engineer
Salem, Oregon

As requested in Mr. Rulien's April 18 letter, I concur that the work outlined in the City of Corvallis and Wilbur Smith and Associates, Inc., consultant letter of March 18, 1977, is within the scope of the approved agreement.

It is understood that there will be no increase in net fee or total cost of the approved agreement.

G. K. Hossner
for G. L. Green

PROJECT MANAGEMENT
APR 21 '77
REFER TO Proj Eng
FOR

Info	Investigate	R/D	Action	File	Letter	See me
X						

RECEIVED
STATE HWY ENGR
APR 20 '77
REFER TO Rulien
FOR

Info	Inves	R/D	D/R	Sign	Act	File

(R)

NOTED
MAINOR C. HOLMES

Copy To: Swan
Stearns

9367

PRO 6-2

ROBERT W. STRAUB
GOVERNOR

Department of Transportation

STATE HIGHWAY BUILDING, SALEM, OREGON 97310

April 6, 1977

TO G. L. Green, Division Administrator
Federal Highway Administration

FROM L. W. Rulien
Program Management Engineer

SUBJECT Consultant Engineering Agreement
Project No. M-2110(1)
N.W. Witham Hill Dr.-N.W. Arbol Place Sec.
Project No. M-2120(1)
N.W. Kings Blvd.-N.W. Highland Drive Sec.

Attached for your approval is two copies of a letter form consultant agreement with Wilbur Smith and Associates, Inc. on the subject projects for the work necessary to conduct an attitude survey to obtain a representative cross section of prevailing views and concerns in each of the neighborhood areas which would be impacted by the proposed projects.

We further request the following:

(1) Authorization to proceed with the work under this agreement at an estimated total cost of $1,500 with an obligation of federal funds for each project as follows:

	Total Cost	Federal Funds
M-2110(1)	$ 750.00	$ 586.00
M-2120(1)	750.00	586.00
TOTAL	$1,500.00	$1,172.00

(2) The return of one approved copy of the letter-form agreement for our files.

CL:ljt
Att.

9367

CORVALLIS CITY HALL
501 S.W. MADISON AVENUE
CORVALLIS, OREGON 97330

PUBLIC WORKS DEPARTMENT

(503) XXXXXXXX
757-6941

March 23, 1977

Mr. Phillip O. Stearns
Oregon State Highway Division
P.O. Box 14030
Salem, OR 97310

Dear Mr. Stearns:

Forwarded herewith is a request from Wilbur Smith and Associates for approval of additional expenditures of $3,970 for the necessary work to provide an adequate traffic analysis for the various alternatives to be included in the draft Environmental Impact Statement for Circle and Walnut Boulevards. The usable data and materials that have been available from CATS and other studies has been considerably less than was anticipated when the contract negotiation was conducted.

The requested $3,970 would fall within the contingency amounts included in the contract. This amount plus the previously requested $1,500 for the more extensive attitude survey will utilize $5,470 of the budgeted $6,000 contingency amount.

We agree to this expenditure and hereby request that you expedite approval so that we can authorize the consultants to proceed with the work.

Very truly yours,

A. Gordon Wyatt
Project Coordinator

AGW/scr
enclosure

R

Wilbur Smith and Associates, Inc.

CABLE WILSMITH
TELEX 87-3439

111 PINE STREET
ROOM 1500
San Francisco, California 94111
PHONE (415) 433-3840

March 18, 1977

RECEIVED
MAR 21 1977
Engineering Division

Mr. A. Gordon Wyatt
Project Coordinator
Corvallis City Hall
501 S.W. Madison Avenue
Corvallis, Oregon 97330

RE: Circle and Walnut Boulevards - d EIS
Task 8 - Transportation Analysis

Dear Gordon:

Subsequent to our review of the available 1985 travel demand and traffic volume forecasts, and in response to specific concerns expressed by residents of the project area, we propose to apply a more detailed, computer-based methodology in developing traffic assignments for the six 1990 highway network alternatives selected for further study.

The available 1985 forecasts had been developed about 10 years ago as part of the CATS study. A review of the population and employment forecasts, on which the future trip generation was based, has revealed significant discrepancies from actual (1970 census data), and presently anticipated (proposed Corvallis Comprehensive Plan) population and employment distribution patterns. These required changes substantially exceed the originally planned work efforts which essentially assumed only the consideration of major new developments, such as the new Hewlett-Packard plant.

In view of these necessary, major adjustments to the future trip generation and distribution, it does not appear to be advisable to update the 1985 CATS traffic volume forecasts. Instead, we propose to make new assignments of the revised trips to the six 1990 highway network alternatives, which will permit --at reasonable, additional costs--the application of recently developed, computer based assignment techniques (capacity-restraint method). The selected highway network alternatives would, of course, include the latest highway improvement plans for the new developments in northern Corvallis and other areas of the city (e.g. CBD by-pass), thus permitting more realistic traffic volume forecasts for roadways within the study area.

The originally planned work is described in Task 8 of our agreement as follows:

> "...The available projections will be modified and updated as may be required utilizing techniques

ALLIANCE, OH · NEW HAVEN · ATLANTA · BRISBANE · COLUMBIA, SC · DALLAS · FALLS CHURCH, VA · HONG KONG · HOUSTON · KNOXVILLE · LONDON · LOS ANGELES
MAYSVILLE, KY · NEW YORK · MELBOURNE · MIAMI · PHILADELPHIA · RICHMOND · SAN FRANCISCO · SINGAPORE · TORONTO · WASHINGTON, DC · WINSTON-SALEM

> acceptable to the City. (A complex computerized modelling exercise is not contemplated, although a relatively simple computer-based process of modifying the existing forecast using trip generation adjustment factors will be applied if required.)..."

It had been our intention to use a computer-based process to condense the 89-zone 1985 CATS trip matrix to an approximate 15-district matrix which would then have been factored to 1990. Manual adjustments would then have been made to reflect major new developments. A manual assignment procedure was planned to allocate applicable district-to-district trip pairs to the project area's roadway network alternatives.

In comparison with the orginally planned work, our proposed approach would require the following additional work efforts:

- development of separate traffic growth factors by trip purpose (based on revised population and employment forecasts) for each of the 89 traffic zones;
- development and coding of one basic 1990 highway network, plus modifications of selected links to reflect the six network alternatives;
- six computer-based assignments of all zone-to-zone trips to the selected highway network alternatives.

Since we are able to use our in-house computer and transportation analysis programs, we would be able to accomplish the additional work within a three-week time period, at a total cost which would not exceed $3,970.00. This estimate is based on the following distribution of total costs and expenses:

Project Engineer	$ 1,000
Technician (Coding)	720
Data Analyst	1,200
Clerical (Key-Punching)	200
Secretarial	50
Data Processing	800
TOTAL:	$ 3,970

For your comparison we have listed the original and the new proposed budget for Task 8 by work element:

Task 8 - Work Elements	BUDGET Original	Proposed
Growth and Development Patterns	$820	$820
Compatibility of Proposed Projects With Other Projects in Corvallis	450	450
Identification of Secondary Effects	500	500
Assessment of Public Transport's Role	300	300
Travel Demand Projections (Matrix)		
a) Data processing	350	750
b) Other labor and expenses	400	1,870
Traffic Assignments		
a) Data processing	---	400
b) Other labor and expenses	800	2,500
Traffic Impact Assessment (short- and long-term needs, traffic engineering implications, etc.)	2,250	2,250
TOTAL:	$5,870	$9,840

We are confident that the proposed additional efforts will increase the validity of the transportation analysis, and will enable the study team to be more responsive to specific transportation-related concerns expressed by residents of the project area.

We are prepared to commence the work immediately upon authorization to proceed. If the foregoing is acceptable, this letter may serve as our agreement by signing below and returning a copy to us.

Very truly yours,

WILBUR SMITH AND ASSOCIATES

Gerd Morhenn

Gerd H. Morhenn
Principal Transportation Planner

GHM:dfm

APPROVED: A Gordon Wyatt City Engineer
Title: Project Coordinator
Date: 3/22/77

APPROVED: __________
DATE: __________

9367

City of Corvallis

CORVALLIS CITY HALL
501 S.W. MADISON AVENUE
CORVALLIS, OREGON 97330
(503) 752-4292

PUBLIC WORKS DEPARTMENT

February 28, 1977

Oregon State Highway Division
Regional Federal Aid Engineer
P.O. Box 14030
Salem, OR 97310

ATTN: Phillip O. Stearns   SUBJECT: FAU Projects--NW Circle, NW Walnut, NE Circle

Enclosed is the original and one copy of a request for additional funds for conducting an altitude survey. I discussed this, in your absence, with Mike Schultz on 2/15/77. After talking with Pete Carstensen he indicated that he felt there was no poblem. Please indicate approval by endorsement with proper signatures as soon as possible, please.

Very truly yours,

A. Gordon Wyatt

A. Gordon Wyatt
Project Coordinator

AGW/lm

Returned to City for signature

PROJECT MANAGEMENT
MAR 8 '77
REFER TO:
FOR

Info	Investigate	R/D	Action	File	Letter	See me

NOTED
MAINOR C. HOLMES

Wilbur Smith and Associates, Inc.

CABLE WILSMITH
TELEX 87-3439

111 PINE STREET
ROOM 1500
San Francisco, California 94111
PHONE (415) 433-3840

February 21, 1977

RECEIVED
FEB 24 1977
Engineering Division

Mr. A. Gordon Wyatt
Project Coordinator
Corvallis City Hall
501 S.W. Madison Avenue
Corvallis, Oregon 97330

Dear Gordon:

As part of the Citizens Participation Program for the Circle and Walnut Boulevard EIS studies, we had suggested to you and the PCAC that an attitude survey should be conducted to obtain a representative cross section of prevailing views and concerns in each of the neighborhood areas which would be impacted by the proposed projects. During the last Project Citizen's Advisory Committee (PCAC) meeting of February 14, 1977, a general concensus was reached that Wilbur Smith & Associates, rather than the PCAC, should conduct this survey.

We are prepared to perform this survey. We propose to hand-deliver approximately 2,000 mail-back questionnaires to a representative number of households in each of the nine study area neighborhoods. The returned questionnaires will be tabulated by hand. A summary of the survey and an evaluation of the results will be presented in a working paper (40 copies) within two weeks after receipt of the returned questionnaires.

We propose to perform this survey for a total cost not to exceed $1,500.00. This estimate is based on the following distribution of costs and expenses:

Printing	$ 200
Postage	260
Project Engineer	240
Field Personnel	200
Clerical and Secretarial	500
Travel and Subsistence	100
Total:	$1,500

We are prepared to commence the survey within three (3) days upon written authorization to proceed.

If the foregoing is acceptable, this letter may serve as our agreement by signing below and returning a copy to us.

Very truly yours,

WILBUR SMITH AND ASSOCIATES

Gerard Drake

Gerard L. Drake
Vice President

GHM:dfm

APPROVED: ____________________
TITLE: ____________________
DATE: ____________________

APPROVED : ____________________
TITLE : ____________________
DATE: ____________________

APPROVED: ____________________
TITLE: ____________________
DATE: ____________________

9367

U. S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

11-12-76

LETTER OF APPROVAL AND/OR AUTHORIZATION

FEDERAL AID PROJECT NO. M2110(1)& M 2120(1)

STATE PROJECT NO. See below

FROM:
G. L. Green, Division Administrator
Salem, Oregon

PROGRAM NO.

ITEM NO. M-66 & M-78

COUNTY NAME Benton

PROGRAM STAGE (Check) ☐ 1. ☐ 2.

TO:

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

RECEIVED
STATE HWY ENGR
NOV 17 '76
REFER TO Rulien
FOR

DATE PS&E APPROVED

DATE AUTHORIZATION EFFECTIVE 11-12-76

FEDERAL ROUTE NUMBER FAU Routes M 2110 & 2120

STATE ROUTE NUMBER

GENERAL LOCATION:
"N.W. Withom Hill Blvd. - N.W. Arbol Place (Corvallis)"
and "N.W. Kings Blvd. - N.W. Highland Ave. (Corvallis."

GENERAL DESCRIPTION OF WORK:
Preliminary Engineering.

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

PRELIMINARY ENGINEERING TO DETERMINE
☐ LOCATION ONLY
PRELIMINARY ENGINEERING FOR SURVEY AND PLAN
☐ PREPARATION
☒ OTHER (*Specify*) Preliminary engineering necessary to obtain an adopted Final Environmental Impact Statement.

☐ ACQUISITION OF RIGHT-OF-WAY
CONSTRUCTION - ADVERTISE FOR RECEIPT
☐ OF BIDS
☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Rulien's 10-22-76 memorandum, I approve the agreement between City of Corvallis and Wilbur Smith & Associates. As further requested in Mr. Rulien's letter of 11-3-76 you are authorized to proceed with that work covered by the approved agreement.

DATE 11-12-76

SIGNATURE OF APPROVING OFFICIAL

TITLE Division Administrator

FORM PR-1240 (REV. 8-70)
EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U.S. GOVERNMENT PRINTING OFFICE: 1975 [illegible]

9367

Mr. Dettmar W. Jones
Staff Auditor

November 10, 1976

Mainor

Mainor C. Holmes
Agreements Engineer

Preaward Evaluation
City of Corvallis/Wilbur Smith & Associates
Circle Blvd./Walnut Blvd.

As requested in your letter of October 26, 1976, attached is correspondence from the City of Corvallis which explains the $2,200 item for "Outside Consultant Services".

MCH:sch

Attachment

cc w/att: Glen Gray, FHWA

Bp

FAUS

City of Corvallis

CORVALLIS CITY HALL
501 S.W. MADISON AVENUE
CORVALLIS, OREGON 97330

PUBLIC WORKS DEPARTMENT

(503) 752-4292

November 2, 1976

Oregon Department of Transportation
206 Transportation Building
Salem, Oregon 97310

Attention: Mainor C. Holmes
Office Engineer
County-City Unit

Gentlemen:

Forwarded are three copies of a letter and support information relating to the "Outside Consultant Services" to be utilized by Wilbur Smith and Associates in the conduct of the Environmental Impact Studies for Circle and Walnut Boulevards.

Very truly yours,

A. Gordon Wyatt
Project Coordinator

AGW/hrk
Enclosures

Mainor

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NOV 5 - 1976
☐ ENGR. ☐ COOR. ☑ OE ☒ AE ☐ UE
☐ UPE ☒ CE ☐ BE ☐ BPE ☐

Wilbur Smith and Associates, Inc.

CABLE WILSMITH
TELEX 57-3439

111 PINE STREET
ROOM 1500
San Francisco, California 94111
PHONE (415) 433-3840

October 29, 1976

RECEIVED
NOV 1 1976
Engineering Division

Mr. Gordon Wyatt
Principal Engineer
Public Works Department
501 S.W. Madison Avenue
Corvallis, Oregon 97330

Dear Mr. Wyatt:

The $2,200.00 budget for subcontractor services shown in contract documents we prepared for the Environmental Impact Studies of Circle and Walnut Boulevards pertains to services by a specialist in analyses of air quality and noise impacts relating to highway projects. These services would be performed in connection with Task 10-Analysis of the Human Environment (Noise and Air Quality) as described on pages 12 and 13 of Exhibit "A".

Our cost estimate was based on a July 22, 1976 letter proposal offered by Ecumene Associates, specialists in environmental research, with whom we have had satisfactory prior working relationships on similar projects. If a subcontract is consummated with Ecumene Associates, the work would be performed by Dr. Donald G. Holtgrieve who received his doctorate from the University of Oregon in 1973 and is currently associated with California State University at Hayward, California.

I trust that this information will clarify the purpose for the $2,200 subcontractor budget.

Very truly yours,
WILBUR SMITH AND ASSOCIATES

Gerard Drake
Gerard L. Drake
Senior Vice President

GLD/tgc

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COUNTY & CITY SECTION
[illegible] - 1976
☐ ENGR. ☐ COOR. ☐ OE ☐ AE ☐ UE
☐ UPE ☐ CE ☐ RE ☐ RPE ☐

ALLIANCE, OH - NEW HAVEN - ATLANTA - BRISBANE - COLUMBIA, SC - DALLAS - FALLS CHURCH, VA - HONG KONG - HOUSTON - KNOXVILLE - LONDON - LOS ANGELES
MAYSVILLE, KY - NEW YORK - MELBOURNE - MIAMI - PHILADELPHIA - RICHMOND - SAN FRANCISCO - SINGAPORE - TORONTO - WASHINGTON, DC - WINSTON-SALEM

9367

PRO 6-2

November 3, 1976

TO: G. L. Green, Division Administrator
Federal Highway Administration

INAL SIGNED BY
D. E. SWAN

FROM: L. W. Rulien
Program Management Engineer

SUBJECT: Consultant Engineer Agreement, Wilbur Smith & Associates
Project No. M-2110(1)
N.W. Witham Hill Blvd.-N.W. Arbol Place (Corvallis)
Project No. M-2120(1)
N.W. Kings Blvd.-N.W. Highland Ave. (Corvallis)

We hereby request your authorization to proceed with work by the consultant engineer concurrent with approval of the consultant agreement on the subject projects.

Our letter of October 22, 1976 forwarded copies of the consultant agreement for your approval, however we indavertently overlooked requesting your authorization to proceed with work by the consultant.

The estimated cost for work by the consultant is $70,000 of which $35,000 is chargeable to project M-2110(1) and $35,000 is chargeable to project M-2120(1). Authorization to proceed with work by the consultant will not involve an additional obligation in total cost or federal funds at this time since the estimated costs were included in the amounts previously authorized and obligated by your letter of March 9, 1976.

CL:dpy

F.AUS

9367

City of Corvallis
INCORPORATED JANUARY 1857

CORVALLIS CITY HALL
501 S.W. MADISON AVENUE
CORVALLIS, OREGON 97330

ADMINISTRATIVE OFFICES

(503) 752-4292

October 27, 1976

Larry W. Rulien
Project Management Engineer
Oregon Department of Transportation
207 State Highway Building
Salem, Oregon 97310

Dear Mr. Rulien:

This letter is to request that the present 78% - 22% Federal - State / City matching ratio for our Circle and Walnut Boulevard FAU projects be amended to the new 86% - 14% ratio such that the new ratio will apply for our Environmental Impact Studies and other preliminary engineering activities. This request is in response to Fred Klaboe's memorandum of October 14, 1976.

Very truly yours,

G. Eug McAd

G. Eugene McAdams
Public Works Director/
Assistant City Manager

GEM/AGW/hrk

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COUNTY & CITY SECTION
OCT 29 1976
☐ ENGR. ☐ COOR. ☑ OE ☒ AE ☐ UE
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PROJECT MANAGEMENT
OCT 29 '76
REFER TO Pratt #
FOR

Info	Investigate	R/D	Action	File	Letter	See me
			✓			

9367

STATE OF OREGON
HIGHWAY DIVISION

INTEROFFICE MEMO

TO: Maynor Holmes
County-City Office Engineer

DATE: October 26, 1976

FROM: Vernon E. Skoog VES
Controller

SUBJECT: Pre-award Evaluation
City of Corvallis/Wilbur Smith & Assoc.
Circle Boulevard/Walnut Boulevard

We have evaluated the accounting provisions of the referenced proposals as required by FHWA.

Subject to the inclusion of itemization of outside consultant costs for $2,200, we approve the proposal otherwise as submitted.

DWJ:njc
Attachment

2 copies of agreement and letter of authorization to proceed sent to Stearns 11/17/76.
Mainor

1 copy to Finance (Dett Jones)

Mainer

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COUNTY & CITY SECTION
OCT 27 1976
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☐ UPE ☒ CE ☒ RE ☐ RPE ☐

INTEROFFICE MEMO

STATE OF OREGON
HIGHWAY DIVISION

DATE: October 26, 1976

TO: Vernon E. Skoog
Controller

FROM: Dettmar W. Jones D. W. Jones
Staff Auditor

SUBJECT: Pre-award Evaluation
City of Corvallis/Wilbur Smith & Assoc.
Circle Boulevard & Walnut Boulevard

Definition Statement

The referenced proposal between the City of Corvallis and its consultant, Wilbur Smith & Associates, provides for the preparation of a draft environmental impact statement on the street improvements described therein.

Consultant has attached a schedule B showing the type of costs, the supportive detail and the maximum total of $70,000. Federal funds will be participating for about 86% of the total, therefore evaluation is required.

Analysis

The cost categories proposed are allocable and allowable, and adequate supporting detail is supplied for most of those categories. The rates for direct salary, provisional overhead rate and fixed fee are reasonable. Line item "e" under Direct non-Salary Costs, "Outside Consultants $2,200", should be itemized to assure eligibility for federal participation.

It is understood that the item for "Contingencies $6,000" will be reimbursed only as actual costs are incurred for items eligible for federal participation.

There are no arithmetical errors or other ommissions. The budget reference for anticipated state costs will be found in a separate agreement between City and State.

Conclusion

I recommend approval of the proposed agreement, subject to the inclusion of detail to show the anticipated outside consultants comprising $2,200.

APPROVED
V.E. Skoog
[illegible]

DWJ:njc

cc: Maynor Holmes
R. J. Hacek

9367

ECUMENE ASSOCIATES
environmental research

Post Office Box 4313
Hayward, California 94540
(415) 582-6824

Donald Holtgrieve, PhD.
President

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NOV 5 - 1976
☐ ENGR. ☐ COOR. ☐ OE ☐ AE ☐ UE
☐ UPE ☐ CE ☐ RE ☐ RPE ☐

July 22, 1976

Mr. Ross Maxwell
Wilbur Smith Associates
111 Pine Street
San Francisco, California 94111

Dear Mr. Maxwell:

As per our telephone conversation, I am pleased to present an estimate for my services for the air quality and noise components of your Corvallis, Oregon street extension EIS proposal. Also, you will find here a statement of my qualifications and experience in environmental impact analysis.

Estimate for Professional Services

Providing bid acceptance within thirty days, the total cost of the air quality and noise components of the Corvallis street extension EIS is $2,200.00. Completion of the report will require thirty working days from date of bid acceptance after which three copies of the report will be delivered to Wilbur Smith Associates. This estimate includes representation at local meetings and necessary expostulatory or other commentary or answers to questions that may occur in the EIS review process. This estimate is also submitted with the understanding that Wilbur Smith Associates will furnish present and predicted traffic statistics from which noise and air quality data will be derived.

The scope of my portion of the project will include noise level measurements at the site, conversion of these measurements to CNEL and L_{10}, L_{50}, and L_{90} levels, comparison of these levels with federal, state, and local standards, and a summary of present noise conditions. Future noise levels will be computed using predicted traffic volumes as a base and will be analysed for comparison to present levels. Again, comparison to standards will be made, and areas of potential serious noise impact will be identified. Suggested mitigation measures will also be included in the report so that predicted impacts may be minimized.

The air quality analysis will include a survey of all existing meteorological and climatological literature including literature available on all existing air pollution sources in the area.

Then, present emissions from highway traffic in the area will be calculated. Again, these estimated emissions will be compared with federal, state, and local standards, and future predictions will be made and compared to the same standards. Areas of greatest potential air pollution will be identified and mitigation measures recommended.

Both the air quality and noise studies will include maps of before and after completion of project conditions.

Statement of Qualifications

I received a PhD degree in transportation geography from the University of Oregon in 1973. Since then I have successfully combined the teaching of environmental sciences with environmental impact consulting. I am currently an Associate Professor of Geography at California State University, Hayward.

The consulting firm whose name appears on the letterhead of this document was founded by me in 1973. I have completed over two dozen environmental impact reports since that time and have written portions of other reports, particularly those portions concerned with traffic analysis, air quality impact, and noise impact analysis. In addition, I teach courses in environmental impact analysis and have successfully placed several of my students in governmental and consulting environmental analysis positions. Also, while at California State University, Hayward, I have been the director of an interdisciplinary environmental studies concentration, the most rapidly growing professional major in the institution.

My research and publication record includes three grants and over sixteen articles in national and state professional journals. In addition, I am editor of The California Geographer, a statewide professional journal. I am a member of the Association of Environmental Professionals, the Association of American Geographers, and several other professional groups.

I sincerely hope that this estimate is acceptable to you and to the contracting agency and that I may provide you with a reliable, impartial, and complete environmental report.

Very truly yours,

Donald G. Holtgrieve

Donald G. Holtgrieve
President

DGH:sn

9367

fans
Corvallis

Form E-39 (Rev. 9-71)

OREGON STATE HIGHWAY DIVISION

AUTHORITY FOR SURVEY

Section: Highland Drive - Kings Blvd.
Highway: Walnut Blvd. (Corvallis)
County: Benton

Date: July 14, 1976
Authorization No.: 2
Survey Prefix: 302-1939 (Assigned by Salem office)

Description of termini, route, length, etc.: The project is the extension of Walnut Blvd from Highland Drive to NW Kings Blvd. Project length is 3,800 feet.

4

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Purpose of survey: To prepare plans, specifications and cost estimates to construct 50' to 60' wide street with curbs, drains and Type II bikepath.

Estimate of cost:

Field	901	1,500		
Citizen Participation	902	300		
City	903	42,000		
Plans	905	2,500		
R/W	909	1,000		
Liaison	913	1,000		
Location	918	500		
Proj. Mgt	920	100		
Specifications	921	500		
Environmental	923	400		
Hearings	980	200	M-2120(1)	2/26/76

Total estimated cost of survey $50,000
Previous authorization 8,000
Additional authorization requested 42,000
Additional authorization approved (Salem) .
Total all authorizations approved (Salem) . .

INSTRUCTIONS

Submit four copies to Salem. After approval by the Assistant State Highway Engineer, one copy will be sent to the Regional Engineer and one copy to the Resident Engineer.

This form does not constitute authority for making survey until approved and returned.

Submit separate order for each survey.

Requests made by:
for Richard Nelson Field Engineer

Recommended for Approval:
Regional Engineer

Recommended for Approval:
Location Engineer

Approved:
Assistant State Highway Engineer

SP*23604-734

9367

FAUS

City of Corvallis
INCORPORATED JANUARY 1857

CORVALLIS CITY HALL
501 S.W. MADISON AVENUE
CORVALLIS, OREGON 97330

PUBLIC WORKS DEPARTMENT

(503) ~~XXXXXXXX~~
757-6941

July 7, 1976

L.W. Rulien
Project Management Engr.
207 State Hwy. Bldg.
Salem, OR 97310

Gentlemen:

Enclosed for your information is a copy of the project prospectus for the Circle and Walnut Boulevard projects. A copy of the mailing list is also enclosed.

Very truly yours,

Rolland Baxter
City Engineer

A Gordon Wyatt

By: A. Gordon Wyatt
Principal Engineer
Project Coordinator

AGW/nko
enclosure

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PROJECT MANAGEMENT
JUL - 8 '76
REFER TO:
FOR

Info	Investigate	R/D	Action	File	Letter

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City of Corvallis

CORVALLIS CITY HALL
501 S.W. MADISON AVENUE
CORVALLIS, OREGON 97330

PUBLIC WORKS DEPARTMENT

(503)[illegible]
757-6941

JUL 6 1976

Gentlemen:

The City of Corvallis invites your proposals for developing the draft Environmental Impact Statement (dEIS) including analysis of proposed route improvement alternatives for the three following listed projects. Separate proposals shall be Submitted for the Circle Boulevard and Walnut Boulevard projects. Under the City's Agreements with the Oregon State Highway Division (OSHD) the City is responsible for developing nearly all phases of the Preliminary Engineering for these projects of which the dEIS information is a part. The final Environmental Impact Statement document is not to be included in this Proposal, but there is a high probability that the consultant who prepares the dEIS may also prepare the final EIS document.

The three specific Federal Aid Urban (FAU) Street projects are:

1. N.W. Witham Hill Drive - N.W. Arbol Place Section, N.W. Circle Boulevard, FAU 2110;

2. N.W. Ninth Street - N.E. Seavy Avenue Section, N.E. Circle Boulevard, FAU 2110; and,

3. N.W. Kings Blvd. - N.W. Highland Drive Section, N.W. Walnut Boulevard, FAU 2120.

The dEIS for Circle Boulevard shall cover the entire length of Circle Boulevard from its proposed future intersection with N.W. Harrison Boulevard easterly to its present intersection with the Albany-Corvallis Highway, U.S. 20. While this dEIS shall cover the total length it will be prepared in two separate and distinct sections, i.e., the section westerly of N.W. Ninth Street and the section easterly of N.W. Ninth Street.

The dEIS for Walnut Boulevard shall cover the existing and proposed future extensions of this route from the intersection of N.W. Harrison Boulevard with N.W. 53rd Street to the intersection of N.W. Ninth Street.

An alignment or right-of-way for Walnut Boulevard has not been established for the N.W. Harrison Boulevard to N.W. Witham Hill section.

The purpose of these studies is to provide all the background environmental, social, and economic data from which the dEIS for the projects can be prepared, and to prepare the draft statements. A prime requirement will be to study all feasible alternatives as well as "no build" alternatives. Air and noise quality studies shall also be a part of the study. Qualified consultant services are sought to conduct these studies and to prepare the dEIS. The contract will be managed by the City of Corvallis under the direction of the City's Principal Engineer, A. Gordon Wyatt, who has been designated as Project Coordinator for these FAU projects and any questions in this regard should be directed to him. Your response to these Request for Proposals should reach the City as stated in the Request for Proposal no later than July 26, 1976. At least three consultants shall be selected for interviews and following the interviews the successful consultant shall be notified within seven days. All consultant selection activity is hoped to be completed on or before August 31, 1976. The tentative schedule is that the consultant selected shall commence work no later than September 15, 1976.

We look forward to receiving a thoughtful and thorough proposal by return mail.

Very truly yours,

Rolland Baxter

Rolland Baxter
City Engineer

CORVALLIS CITY HALL
501 S.W. MADISON AVENUE
CORVALLIS, OREGON 97330
(503) XXXXXXXX
757-6941

PUBLIC WORKS DEPARTMENT

REQUEST FOR PROPOSAL

Circle Boulevard Study

Content | Page

- Background of Project 1
  - General Explanation 1
  - Objectives of Study 3
  - Methodology and Philosophy 3
  - Available Documents 5

- The Project Study 5
  - Scope of Work 5
  - Work Items 9
  - Progress Reports 10
  - Final Product 10

- The Proposal 12
  - Basic Criteria 12
  - Organization of Proposal 13
  - Submission Requirements and Scheduling 14

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BACKGROUND OF PROJECT

General Explanation

Community wide transportation planning and comprehensive planning studies for the Corvallis Urban Area for the past twenty-five years or more have included the Circle Boulevard route as a part of each plan. The Corvallis Area Transportation Study (CATS), 1969, was the first of these plans that terminated this route at its intersection with N.W. Harrison Boulevard and did not propose an extension of Circle Boulevard southerly of N.W. Harrison Boulevard to connect to the Corvallis-Philomath Highway, U.S. 20 and ORE 34. A Traffic Safety Study for the Corvallis Urban Area conducted by Cornell, Howland, Hayes and Merryfield (CH2M) in 1971 also recommended that the Circle Boulevard route be de-emphasized from a major arterial to a minor arterial or collector.

Two separate improvement projects are proposed for Circle Boulevard. One project would be to improve the westerly extension of Circle Boulevard from N.W. Witham Hill Drive to its present end near Arbol Place. This proposed improvement would utilize an existing right-of-way for which no present roadway improvements exist. There are no existing traffic movements on this section.

The other proposed improvement project would widen and improve an existing roadway between N.W. Ninth Street in the City of Corvallis and N.E. Seavy Avenue in Benton County. This portion of Circle Boulevard was formerly a part of the N.E. Seavy Avenue, but with the opening of a new section of Circle Boulevard in 1975 the City and County officially and jointly renamed the entire section as N.E. Circle Boulevard.

It should herewith be noted that the draft Environmental Impact Statement shall include the entire route of Circle Boulevard from N.W. Harrison Boulevard to the Albany-Corvallis Highway, U.S. 20. However, an improvement schedule has not been established nor is one contemplated for the N.W. Harrison Boulevard to N.W. Witham Hill Drive Section.

Federal Aid Highway funds will be utilized in the engineering, design, acquisition of right-of-way, and construction phases of these proposed projects. It has been determined that these projects will have significant impact and they have been classified as Category 2, Major Action projects under the Oregon Action Plan. Hence, Environmental Impact Statements shall be prepared to fulfill the Federal requirements under the National Environmental Policy Act of 1969.

In-house capability for preparing the draft Environmental Impact Statement (dEIS) exists within the staffs of the Oregon State Highway Division and the City of Corvallis. However, staff is presently not available for this work because of a heavy backlog of other work nor is such staff availability contemplated for some future time. Because of the community need for improving its transportation network, the local governmental concern, the public interest, and the time-frame required to complete the studies and to complete the projects it is imperative that the environmental studies commence immediately. Consequently the City of Corvallis will contract with an outside consulting firm that is capable of beginning immediate work on this project and completing the work within a reasonable period of time.

Objectives of Study

There are two main objectives for the Circle Boulevard Study. The first objective is to analyze from an engineering perspective the feasible route improvement alternatives and then develop the in-depth analysis of the environmental, social and economic impacts for each alternative. The alternatives considered shall include "no build" alternatives and a comparative analysis of all alternatives shall be presented. The Study may not rely on the level of existing, available data to determine the final product but it must gather information and generate the necessary data to give a balanced presentation of all alternatives.

The second objective of the Circle Boulevard Study is to prepare the required draft Environmental Impact Statement for the entire route from N.W. Harrison Boulevard to the Albany-Corvallis Highway, U.S. 20. The dEIS shall be prepared as a whole but shall be divided into two separate and distinct sections, i.e., (1) for the N.W. Harrison Boulevard - N.W. Ninth Street Section and (2) for the N.W. Ninth Street - Albany-Corvallis Highway, U.S. 20 Section. During the course of the Study and analysis it will be necessary to be cognizant of the report format for environmental impact statements as required by U.S. Department of Transportation, Federal Highway Administration regulations.

Methodology and Philosophy

The consulting firm selected shall have a demonstrated expertise in environmental study and analysis and shall have the available professional expertise as required to conduct such a study. Federal regulations for the environmental impact statement process require that it be the product of an interdisciplinary investigation. Therefore, it is desirable that the consultant have available the individual experts either in-house or by subcontract, such as an economist, urban planner, transportation planning and traffic engineer, geologist with particular expertise in soil mechanics and hydrology, biologist, sociologist, air quality analyst, acoustical analyst, landscape architect, project manager with demonstrated ability to manage an interdisciplinary team, and such other appropriate personnel deemed necessary by an analysis of the project.

An important element of the study will be citizen involvement and impact. A Project Citizens Advisory Committee (PCAC) has been established by the City Council and individual members have been appointed by the Mayor. Because of the interrelationship of the Circle Boulevard and Walnut Boulevard projects one PCAC has been established and the individuals are appointed to serve for both projects. The PCAC shall be under the direction of the Project Coordinator. The consultant is expected to remain receptive to citizen concern and involvement and the necessity for public education during the course of the study and shall have one or more representatives available to attend the PCAC or other citizen involvement meetings.

The contract will be managed by the City of Corvallis, Public Works Department, Engineering Division under the supervision of the Principal Engineer who has been designated as Project Coordinator for the projects. The consultant will be expected to maintain liaison with the Project Coordinator and with the appropriate state and federal agencies throughout the course of the study.

The consultants are expected to provide their own data requirements and analysis. However, this requirement does not preclude access to public reports and public files of state and local governmental units or the utilization of other existing data available in a form usable by the consultant. The compilation, tabulation and analysis of data by state and local governmental agencies is not to be expected by the consultant unless specifically volunteered by a responsible official in these agencies. The City will make available to the consultant copies of such maps, pictures, and drawings as have been developed in the course of other preliminary engineering activities but the consultant shall have the responsibility for developing such maps and drawings as will be required for publication in the dEIS document.

Available Source Information Materials

The following studies, reports and documents, among others, relating to the Circle Boulevard Study will be made available to the consultant selected:

Corvallis Area Transportation Study, Interim Report, 1969 (The compilation of data normally published in separate volumes for similar transportation studies was not published; however, this data is available for review in the offices of the Oregon Department of Transportation).

Corvallis Urban Area Traffic Safety Study and Recommended Street System Improvements, Cornell, Howland, Hayes and Merryfield, 1971.

THE PROJECT STUDY

Scope of Work

The following outline constitutes the major items that the consultant is expected to research and analyze during the course of the Circle Boulevard Study. The outline is not necessarily all-inclusive. These outlined items along with any and all others that the consultant deems necessary shall be presented as work items in the proposal submitted to the City of Corvallis.

- A. Existing Setting - description of area and region
    - 1. Natural features
    - 2. Land-use patterns
    - 3. Community description and project relationships
- B. Development - Past, Present, and Future
    - 1. History of development
        - a. Past
        - b. Present
    - 2. Adherence to existing plans and studies
    - 3. Accomplishments of previous recommendations
    - 4. Interrelationship with other Corvallis area projects
        - a. Highways and Streets
        - b. Community-wide projects
    - 5. Relationship of Circle Boulevard to local community
        - a. Intracity people and goods movement, congestion, and linkage
        - b. Orientation to CBD, Oregon State University, other shopping and work centers, or other major traffic generators.
        - c. Public transportation and transit
    - 6. Relationships of the function of Circle Boulevard to area, region and state
        - a. Local and circumferential travel
        - b. Urban bypass
        - c. Intercity movements

C. Transportation Analysis

1. Urban area network assessment
2. Assessment of existing and possible modal alternatives
3. Traffic study, to include analysis of
    a. Existing and projected ADT
    b. Level of service analysis
    c. Terminal analysis
    d. Accident analysis
    e. O and D study analysis
    f. Deficiency analysis
    g. Accessibility analysis
4. Demonstration of need
    a. Short term (i.e., 0-10 years)
    b. Long term (i.e., 10-25 years)

D. Analysis of Physical Environment

1. Topography and structural geology
2. Soils (particularly engineering and land-use characteristics)
3. Hydrology, flood plain, and drainage
4. Water quality
5. Meteorologic/climatologic data
6. Vegetation
7. Wildlife, aquatic and terrestrial

E. Analysis of Human Environment

1. Physical environment-related aspects
    a. Air quality
    b. Noise analysis

2. Detailed land use, present and projected
    a. Institutional (i.e., government, utilities, parks, historic and archeologic sites, wildlife refuges, schools, etc.)
    b. Private (residential, agricultural)
    c. Business (commercial, industrial)
    d. Land-use regulatory devices
3. Economic characteristics
    a. Tax base and general economic function
    b. Business - commercial, industrial
    c. Land values and development potentials
    d. Employment
    e. Trends
    f. Competitive effects
4. Social characteristics
    a. Population and housing
    b. Community and government sub-units
    c. Income
    d. Minorities and ethnic identification
5. Landscape aesthetics

F. Engineering Evaluation
    1. Alternative design consideration, i.e., alignment, right-of-way, number of lanes, etc.
    2. Cost analysis
    3. Construction, techniques to minimize impact
    4. Operation and maintenance; acoustics

5. Generalized right-of-way needs; relocation, business and residential
6. Special provisions for alternate transportation modes
7. Visual aesthetics: landscaping and basic structure design

G. Synoptic comparison of alternatives based on:
    1. Environmental and engineering factors
    2. Cost/benefit priorities
    3. Funding availabilities and ratios
    4. Highway Division and other agencies' jurisdictional and procedural constraints, i.e., A-95 Process, environmental statements, 4(f) determination, hearings, agency reviews, location approval.
    5. Interrelation with other area projects, including transit.
    6. Relation to adopted plans and programs

Work Items

1. The Scope of Work section of this Request for Proposal constitutes the bulk of the work items for the Study. The consultant shall include those items and all others that he deems necessary in his proposal as specific work tasks in his Study plan. If it is the consultant's opinion that any of the items are not pertinent to the Study and are omitted from his proposal he shall give an explanation for such omissions.
2. The consultant shall be expected to participate in the PCAC activities and shall work with the committee through the Project Coordinator. The PCAC program provides for public

education through such methods as news releases and public meetings and the consultant will participate as deemed necessary.

3. Analyze the need for and feasibility of making Circle Boulevard a multi-modal transportation facility, paying particular attention to public transit, bicycle and pedestrian usage.
4. Analyze and discuss the scope of work items for all feasible alternatives and for a "no-build" alternative.

Progress Reports

The consultant shall be expected to provide the City of Corvallis and the Oregon State Highway Division with regular progress reports in addition to the normal direct personal contact during the Study. Progress reports shall be submitted monthly, in writing, prior to the first Monday of each calendar month, until the final reports are accepted.

The progress reports are to include an itemized account of work items completed in the month previous, a statement of findings or conclusions and a schedule for the following month. The report is also to be utilized as an instrument for reporting any delays experienced, anticipated schedule revisions, or work modifications required.

When requested the consultant shall be present to present the report to the local and state governmental bodies and to the PCAC.

Final Product

The specific product of the Circle Boulevard Study shall culminate the research and analysis effort in a document entitled a draft Environmental Impact Statement. The dEIS shall be prepared in two specific and distinct parts covering the sections westerly and easterly of NW Ninth

Street, respectively, as previously stated in section 7 this Request for Proposal. This dEIS shall be made available in complete form for review and approval by the Federal Highway Administration, the Oregon State Highway Division and the City of Corvallis. This document shall have incorporated all applicable information and data developed in the course of the study. The format of the dEIS shall adhere to the rules, prescribed in the U.S. Department of Transportation Federal-Aid Highway Program Manual, Volume 7, Chapter 7, Section 2, Environmental Impact and Related Statements. As a minimum the dEIS will include the following sections:

1. Location and description of projects
2. Purpose of project and demonstration of need
3. Existing environmental setting
4. Alternatives
   a. Description, including "no-build" alternatives
   b. Discussion of unresolved conflicts and alternative use of resources
   c. Relationship between short-term uses and long-term benefits or productivity
   d. Irreversible changes in landscape
   e. Irretrievable commitment of resources
   f. Growth-inducing potential of alternatives
5. Impact of projects on environment
   a. Primary impacts
   b. Secondary impacts
   c. Impacts on Section 4 (f) lands

   d. Adverse impacts of the project

   e. Steps to be taken to minimize unavoidable adverse impacts

   f. Summary of impacts

6. Synoptic comparison of alternatives

The consultant shall be prepared to make a presentation of the dEIS at the Public Corridor-Design Hearing to be held following the completion of the study and respond to questions in its regard.

This Request for Proposal does not include the preparation of the Final Environmental Impact Statement. However, it is anticipated that the consultant selected may be retained by a contract to be later negotiated for the preparation of the final document. No work items, costs, or time-frame for developing a final EIS shall be included in this proposal.

The dEIS prepared by the consultant shall be printed only after approval by the City, State, and FHWA and in sufficient copies to provide for the distribution recommended by FHWA and State regulations. Thirty (30) copies of the preliminary draft shall be submitted to the City for review and joint City, State and FHWA approval.

THE PROPOSAL

Basic Criteria

The proposal responses will be judged on the basis of a) demonstrated understanding of the task; b) thoroughness of the proposal; c) general presentation of the proposal, form of the final report, and graphics; d) originality of the proposal. The firm's proposed working relationship with the City of Corvallis staff and other agencies will also be considered.

The selection committee will utilize standard selection criteria in evaluating the consultants submitting a proposal. A rating sheet may be used to judge the previous experience of the consultant, his existing capabilities and the proposal itself. The contract will be awarded only to a qualified consultant. Minimum standards for qualification are:

1. Having the financial resources for the performance of the contract, or the ability to obtain such resources;
2. The ability to comply with the proposed time schedule for this study;
3. Having a receptive and sound methodological approach;
4. Having the necessary experience, organization and staff, technical competence and skills, management capabilities, and the facilities to carry out the study;
5. Having an adequate past record of performance;
6. Being an Equal Opportunity Employer and being otherwise qualified by law to receive the Circle Boulevard Study Contract.

Organization of the Proposal

The proposal submitted must include, as a minimum, the following items:

1. A description of the overall program submitted by the consultant;
2. A detailed explanation, on an item-by-item basis, of the study plan which the contractor expects to use. This should include an explanation of any modifications of the work items and scope of work of part II of this Request for Proposal. Particular attention should be directed to the means for coordinating with the City of Corvallis staff;

3. A detailed schedule, such as a Pert Diagram or C.P.M. outlining the work and time frame schedule of the study, analysis, presentation and publication.
4. An itemized description of the draft environmental impact statements to be produced as end products;
5. A description of the techniques to be utilized in the study;
6. A listing of all key personnel and management to be utilized on the study, including a description of qualifications and skills (i.e., resumes);
7. A work schedule and cost estimate, to include detail as well as total costs for the study and its end products;
8. A list and description of tasks, qualifications, and responsibilities of any subcontractors who may be hired;
9. References of former clients and samples of previous reports of a similar nature to this study;
10. A statement of offer signed by an individual authorized to bind the contractor.

Consultants submitting a proposal are encouraged to revise and improve the request for proposal, including the work items, as necessary, and to make subsequent modifications of the proposal before submission, as a demonstration of their expertise and competence with quality consulting work and procedures.

Submission Requirements

The response to this request in the form of a formal, complete proposal must be received in the office of the City Manager, City of Corvallis, no later than 3:00 p.m. (DST) on July 26, 1976. Proposals sent must arrive by this deadline. Ten copies of the proposal must be sent. All copies of the proposal are to be mailed or delivered to: City Manager, City of Corvallis, City Hall, 501 S.W. Madison Avenue, Corvallis, Oregon 97330. Proposals, or modifications thereof, received after the above hour and date will not be considered.

All consultants submitting a proposal will be notified of the decision of the selection committee by August 13, 1976 by U.S. mail. All consultant selection activities including interviews are expected to be completed by August 31, 1976. The consultant selected for the study is expected to commence work as soon as possible after contract negotiation but not later than 10 days after the receipt of the contract and notification to proceed. September 15, 1976, is the latest desirable starting date for commencement of work on this project.

Total time allotted to fulfill the basic study, including completion and delivery of the preliminary dEIS, is six months form the commencement of the Study. An additional three months will be allowed for the completion of the Draft Environmental Impact Statement. This additional three-month period will allow for detailed review and comment by appropriate personnel from the Oregon State Highway Division and the Federal Highway Administration. This period must also include the time necessary to gain final approval of the Draft EIS by the Federal Highway Administration. In the event that the consultant submitting a Proposal deems that the six months time-frame schedule is inappropriate or extremely difficult to achieve he shall have the option of outlining a different schedule as a part of his proposal. In the event that he is selected and a contract is reached his schedule shall be binding as a part of the contract.

9367

3-9-76

U. S. DEPARTMENT OF TRANSPORTAT FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

F RAL AID PROJECT NO.: M-2120(1)

STATE PROJECT NO.: See below

FROM:
G.L. Green, Division Administrator
Salem, Oregon

PROGRAM NO.:

ITEM NO.: M-65

COUNTY NAME: Benton

PROGRAM STAGE (Check) ☐ 1. ☐ 2.

TO:

Mr. F. B. Klaboe
Administrator & State Highway Engineer
State of Oregon
Salem, Oregon

RECEIVED
STATE HWY ENGR
MAR 1 9 '76
REFER TO
Rulien
FOR

Info	Inves	R/D	D/R	Sign	Act	File
					✓	

DATE PS&E APPROVED:

DATE AUTHORIZATION EFFECTIVE: 2/26/76

FEDERAL ROUTE NUMBER: FAU 2120

STATE ROUTE NUMBER: City Street

GENERAL LOCATION:
"NW Kings Blvd.-NW Highland Avenue"
City Street (Corvallis) Walnut Blvd.

GENERAL DESCRIPTION OF WORK:
Preliminary Engineering

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY

☐ PRELIMINARY ENGINEERING FOR SURVEY AND PLAN PREPARATION

☐ ACQUISITION OF RIGHT-OF-WAY

☐ CONSTRUCTION - ADVERTISE FOR RECEIPT OF BIDS

☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

☒ OTHER (Specify) All phases of Preliminary Engineering necessary to obtain approval of the final Environmental Impact Statement at a total estimated cost of $40,000, Federal funds $31,200.

REMARKS

My program approval memorandum of 2/26/76 approved this project for inclusion in the Federal-aid program.

As requested in Mr. Rulien's 3/2/76 letter my approval memorandum of 2/26/76 is amended to show authorized work as shown above and I concur that the Environmental Statement for the subject project is not limited to the termini as approved but includes, in compliance with FHPM 7-7-2, the entire route between NW Harrison Blvd. and Ninth Street.

DATE	SIGNATURE OF APPROVING OFFICIAL	TITLE
3/9/76	G. K. Hossner for	Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

9367

Jaus
PRO 6-2
Corvallis

**OREGON STATE
HIGHWAY DIVISION**

HIGHWAY BUILDING • SALEM, OREGON • 97310

ROBERT W. STRAUB
GOVERNOR

March 2, 1976

TO G. L. Green, Division Administrator
Federal Highway Administration

FROM L. W. Rulien
Project Management Engineer

SUBJECT Project No. M-2120(1)
N.W. Kings Blvd. - N.W. Highland Dr. (Corvallis) Section

We hereby request your concurrence that the environmental statement for the subject project is not limited to the termini as programed but includes, in compliance with FHPM 7-7-2, the entire route between N.W. Harrison Blvd. and 9th Street.

We further request that your previous authorization to preceed with preliminary engineering be amended to read all phases of preliminary engineering necessary to obtain approval of the final environmental impact statement at a total estimated cost of $40,000, Federal funds $31,200.

The overall cost of the project as programed does not require changing at this time.

CL:re

cc: C. O. Fredrickson
D. E. Swan
R. Unrein

RECEIVED
COUNTY & CITY SECTION
MAR [illegible] - 1976
☐ ENGR. ☐ COOR. ☑ [illegible] ☐ AE ■ UE
☒ UPE ☒ CE ☐ RE ☐ RPE ☐

A DIVISION OF THE DEPARTMENT OF TRANSPORTATION

Jans

U. S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

9367

LETTER OF APPROVAL AND/OR AUTHORIZATION

2-26-76

FEDERAL AID PROJECT NO.
M-2120(1)

STATE PROJECT NO.
NW Kings Blvd-NW Highland Dr.

COUNTY NAME
Benton

PROGRAM STAGE (Check)
☐ 1. ☐ 2.

FROM:
G. L. Green, Division Administrator
Salem, Oregon

PROGRAM NO.

ITEM NO.
M-65

TO:

Mr. F. B. Klaboe, Administrator & State Highway Engineer
State of Oregon
Salem, Oregon

DATE PS&E APPROVED

DATE AUTHORIZATION EFFECTIVE
2/26/76

FEDERAL ROUTE NUMBER
FAU 2120

STATE ROUTE NUMBER
City Street

GENERAL LOCATION:
City Street (Corvallis) Walnut Blvd.

GENERAL DESCRIPTION OF WORK:
Preliminary Engineering

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY

☐ PRELIMINARY ENGINEERING FOR SURVEY AND PLAN PREPARATION

☒ OTHER *(Specify)* All phases of Preliminary Engineering necessary to obtain location/design approval at a total estimated cost of $40,000, Federal funds $31,200.

☐ ACQUISITION OF RIGHT-OF-WAY

☐ CONSTRUCTION - ADVERTISE FOR RECEIPT OF BIDS

☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

My program approval memorandum of 2/26/76 approved this project for inclusion in the Federal-aid program.

As requested in Mr. Rulien's 2/13/76 letter you are authorized to proceed with the work as shown above.

#14

DATE
2/26/76

SIGNATURE OF APPROVING OFFICIAL
G. K. Hassner

TITLE
for Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

TRANSMITTAL AND REQUEST FOR INITIAL PROGRAM APPROVAL OF PROJECTS

(PPM 21-1)

STATE HIGHWAY DEPARTMENT Oregon	DATE 2/26, 76
BY (Signature) L.W. Rulien's 2/13/76 letter	
TITLE Project Management Engineer	

CLASS OF FEDERAL FUNDS

☐ FAI ☐ FAP ☒ FAU ☐ FAS ☐ OTHERS ______

STAGE 1*
ITEM NOS. ______ THRU ______

STAGE 2
ITEM NOS. ______ THRU ______

ITEM NO.	PROJECT NOS.	LENGTH (Miles)	TOTAL ESTIMATED COST	FEDERAL FUNDS	OTHER IDENTIFICATION AND/OR REMARKS (State)	
					Location	Work
65	M-2120(1)	0.68	50,000	39,000	NW Kings Blvd- NW Highland Drive (Corvallis) Section Benton County State of Oregon	Preliminary Engineering including utility preparatory work.

REMARKS (Division)

RECOMMENDED		APPROVED	
DATE	SIGNATURE AND TITLE	DATE	SIGNATURE AND TITLE
		2/26/76	G. L Green, Division Administrator

* Program approval and any authorization to proceed with a Stage 1 project shall not constitute any commitment of Federal funds nor shall it be construed as creating in any manner, any obligation on the part of the Federal Government to provide Federal funds for the undertaking.

FORM PR-48
(Rev. 8-71)

GPO 915-890

MONTHLY TRANSACTION NO.

DATE SUBMITTED TO W. O.

FORM PR-1
(REV. 4-61)

February 13, 1976

FEDERAL - AID PROGRAM DATA

CARD 2	REPORT NUMBER 1 (19) (20)	PROJECT LOCATION (45 typewriter spaces) City St., Walnut Blvd. (Corvallis) 21 65			ADT	PRESENT --	FUTURE 12,000* (66) (70)	YEAR 96 (71) (72)	REGION 10	STATE NAME Oregon	
CARD 3	CHARACTER OF PROPOSED WORK (35 typewriter spaces) Preliminary Engineering 28 62	NATL. FOREST (63) (65)	FH ROUTE NO. (66) (68)	SUPV AGCY (69)	DA CLASSIF. (70)	DA AREA (71)	EMERG. YR. (72) (73)	PL. AUTH YR (74) (75)	PROJECT NUMBER PREFIX LETTER(S) M- 14 23	NUMBER 2120 (1) 7	
CARD 4	CLASS OF FEDERAL FUNDS Urban System								COUNTY NAME Benton		CO
	NAME OF URBAN AREA Corvallis 17-31								ROUTE NO. U	FEDERAL-AID 2120 (32)	STATE City St. (36) (37)	U.S. ---

CARD 5	LINE NO.	CHANGE CODE	PROJECT CODE	WORK CLASS	WORK TYPE	STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS	STATE FUNDS	OTHER FUNDS
1	(14-15)	(16	41	42	43 46	53		(54) (58)	(59) (66)	(67) (78)		
5					PE		City St. Walnut Blvd. (Corvallis)	0.68	50,000	39,000	5,500	5,500 (City)
5					ROW							
5					CONST (CODE)		"N.W. Kings Blvd.-N.W. Highland Dr. (Corvallis) Section"					

CARD 1	CODE 1	PREPARED BY Cliff Laux	PROJECT TOTALS	0.68	50,000	39,000	5,500	5,500 (City)
1	14	PROGRAM APPROVAL DATES FEB 26 1976			(19) (23)	(24) (33)	REMARKS	

FHWA OREGON DIVISION

* 1996 ADT based on completion of Walnut Blvd from Witham Hill Drive to 53rd St.

FORM PR-1
(REV. 4-61)

FEDERAL-AID PROGRAM DATA

February 13, 1976

LOCATION (45 typewriter spaces) y St., Walnut Blvd. (Corvallis)	ADT	PRESENT --	FUTURE 12,000*	YEAR 96	REGION 10	STATE NAME Oregon	STATE CODE 41	APPN CODE W32

ITEM NO.: 65

K (35 typewriter eering	NATL. FOREST	FH ROUTE NO.	SUPV AGCY	DA CLASSIF.	DA AREA	EMERG. YR.	PL. AUTH YR	PROJECT NUMBER PREFIX LETTER(S) M-	NUMBER 2120 (1)	SEQ. NO.	I. Projects Only POST MI.	DESIG.

Urban System

Corvallis

COUNTY NAME: Benton
CODE: 003

ROUTE NO.: U
FEDERAL-AID: 2120
STATE: City St.
U.S.: ---

PROGRAM STAGE ☐ 1 OR XX 2

ESTIMATED PROJECT COST BY PHASES

RK YPE	STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS	STATE FUNDS	OTHER FUNDS	CHARACTER OF PROPOSED WORK (Full description)
		City St. Walnut Blvd. (Corvallis)	0.68	50,000	39,000	5,500	5,500 (City)	Preliminary engineering all phases incl. P.E. by utility forces.
W								(Future 4 lane curbed roadway with bikeway <.. southerly side.)
ST		"N.W. Kings Blvd.-N.W. Highland Dr. (Corvallis) Section"						ROW - 80 normal; access control-partial; Parking Restrictions - complete
ux		PROJECT TOTALS	0.68	50,000	39,000	5,500	5,500 (City)	

AL DATES
376

ON DIVISION

REMARKS

* 1996 ADT based on completion of Walnut Blvd from Witham Hill Drive to 53rd St.

(over)

N.W. KINGS BLVD. - N.W. HIGHLAND DR. (CORVALLIS) SECTION

Project No. M-2120(1)

Existing Facility: Dedicated street no existing roadway.

Adjacent Sections:

W. End - - - 44-foot curbed roadway
E. End - - - 44-foot curbed roadway

Project Data: Work under this project consists of preliminary engineering all phases including preliminary engineering by utility forces for the future construction necessary to provide a variable 50 to 60-foot curbed street section for 4 travel lanes with a left turn lane at the intersection of King Blvd. and Highland Ave. and a bikeway on the southerly side.

NOTE: Preliminary engineering field work will be accomplished by City of Corvallis forces with final plan preparation by State forces. The City of Corvallis may employ a consultant for environmental work.

System Action, Airports, Railroads, Water Developments, Historical and Recreational Areas: None involved.

FHPM 7-7-2 Requirements: Major Action project concurred in by FHWA on October 14, 1975.

IM 50-1-70 Requirements:

a. State Clearinghouse -- A-95 review approval letter dated December 10, 1975.

b. District 4 clearinghouse -- Notice of Intent was submitted to District 4 clearinghouse on November 5, 1975 and the District submitted comments under letter of February 6, 1976.

FHPM 7-7-5 Requirements:

a. Public Hearings -- Opportunity for a hearing

b. Location/Design -- Approval will be requested action

Data for PR-37:

Preliminary Engineering -- Field Work - - - $ 40
PS & E Preparation - - - 10
Total $ 50

NOTE: This project is in Congressional District No.

N.W. HIGHLAND DR. (CORVALLIS) SECTION

Project No. M-2120(1)

ted street no existing roadway.

curbed roadway
curbed roadway

this project consists of preliminary engineering
minary engineering by utility forces for the
ary to provide a variable 50 to 60-foot curbed
l lanes with a left turn lane at the inter-
Highland Ave. and a bikeway on the southerly

ring field work will be accomplished by City
with final plan preparation by State forces.
is may employ a consultant for environmental

ailroads, Water Developments, Historical and
involved.

Major Action project concurred in by FHWA

se -- A-95 review approval letter dated
.

nghouse -- Notice of Intent was submitted to
nghouse on November 5, 1975 and the District
s under letter of February 6, 1976.

FHPM 7-7-5 Requirements:

a. Public Hearings -- Opportunity for a hearing will be offered

b. Location/Design -- Approval will be requested under separate action

Data for PR-37:

Preliminary Engineering -- Field Work - - -	$ 40,000
PS & E Preparation - - -	10,000
Total	$ 50,000

NOTE: This project is in Congressional District No. 1.

9347

L.

February 25, 1976

City of Corvallis
City Hall
Corvallis, OR 97330

Attention: Jerry Hortsch
City Recorder

MISC. CONTRACTS and
AGREEMENTS No. 5312

Gentlemen:

Attached for your records is a fully executed copy of a supplemental agreement (Urban System Project) concerning construction of the N.W. Kings Boulevard-N. W. Highland Drive (Corvallis) Section of N.W. Walnut Boulevard.

We have retained a fully executed copy of this agreement for the Transportation Commission's files.

Very truly yours,

C. J. Head
COMMISSION SERVICES

fkm

Att.

cc Don Harwell (agree. att.)

9367

~~PRO 6-2~~

February 13, 1976

TO G. L. Green, Division Administrator
Federal Highway Administration

FROM L. W. Rulien
Project Management Engineer

SUBJECT Program Data Submission
Project No. M-2120(1)

We are submitting program data for one project, Item No. 65, Project No. M-2120(1), "N.W. Kings Blvd.-N.W. Highland Dr. (Corvallis) Section", which we desire to have included in the Federal-aid Urban System Highway Program.

This project has been originated by local officials and concurred in by the Oregon Transportation Commission and the State Highway Division.

We request, concurrent with program approval, authorization to proceed with all phases of preliminary engineering necessary to obtain location/design approval at an estimated total cost of $40,000 with an obligation of $31,200 in federal funds.

Copies of the State Clearinghouse and District 4 Clearinghous A-95 Review approval letters and comments were previously submitted.

CL:vld

cc: C. O. Fredrickson (Region 2)

MONTHLY TRANSACTION NO.

DATE SUBMITTED TO W.O.

FORM PR-1
(REV. 4-61)

FEDERAL-AID PROGRAM DATA

February 13, 1976

CARD 2	REPORT NUMBER 1	PROJECT LOCATION *(45 typewriter spaces)* City St., Walnut Blvd. (Corvallis)	**ADT**	PRESENT --	FUTURE 12,000*	YEAR 96	REGION 10
							STATE NAME Oregon

CARD 3	CHARACTER OF PROPOSED WORK *(35 typewriter spaces)* Preliminary Engineering	NATL. FOREST	FH ROUTE NO.	SUPV AGCY	DA CLASSIF.	DA AREA	EMERG. YR.	PL. AUTH YR	PROJECT NUMBER PREFIX LETTER(S) M-	NUMBER 2120 (1)

CARD 4	CLASS OF FEDERAL FUNDS Urban System	COUNTY NAME Benton				
	NAME OF URBAN AREA Corvallis	ROUTE NO. U	FEDERAL-AID 2120	STATE City St.	U.S. ---	

ESTIMATED PROJECT COST BY PHASES

CARD 5	LINE NO.	CHANGE CODE	PROJECT CODE	CLASS	WORK TYPE	WORK STEP	TERMINI *(Full description)*	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS	STATE FUNDS	OTHER FUNDS
5					**PE**		City St. Walnut Blvd. (Corvallis)	0.68	50,000	39,000	5,500	5,500 (City
5					**ROW**							
5					**CONST** (CODE)		"N.W. Kings Blvd.-N.W. Highland Dr. (Corvallis) Section"					

CARD 1	CODE 1	PREPARED BY Cliff Laux	PROJECT TOTALS	0.68	50,000	39,000	5,500	5,500 (City
1	14	PROGRAM APPROVAL DATES					REMARKS	

* 1996 ADT based on completion
of Walnut Blvd from Witham Hill
Drive to 53rd St.

FORM PR-1
(REV. 4-61)

FEDERAL-AID PROGRAM DATA

February 13, 1976

CT LOCATION (45 typewriter spaces)	ADT	PRESENT	FUTURE	YEAR	REGION	STATE NAME	STATE CODE	APPN CODE	ITEM NO.
ty St., Walnut Blvd. (Corvallis)		--	12,000*	96	10	Oregon	41	W32	65

ORK (35 typewriter	NATL. FOREST	FH ROUTE NO.	SUPV AGCY	DA CLASSIF.	DA AREA	EMERG. YR.	PL. AUTH YR	PROJECT NUMBER PREFIX LETTER(S)	NUMBER	SEQ. NO.	T. Projects Only POST MI.	DESIG.
neering								M-	2120 (1)			

Urban System

COUNTY NAME Benton CODE 003

Corvallis

ROUTE NO. U FEDERAL-AID 2120 STATE City St. U.S. ---

PROGRAM STAGE ☐ 1 OR XX 2

ORK TYPE	STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS	STATE FUNDS	OTHER FUNDS	CHARACTER OF PROPOSED WORK (Full description)
		City St. Walnut Blvd. (Corvallis)	0.68	50,000	39,000	5,500	5,500 (City)	Preliminary engineering all phases incl. P.E. by utility forces.
W								(Future 4 lane curbed roadway with bikeway on southerly side.)
NST DE)		"N.W. Kings Blvd.-N.W. Highland Dr. (Corvallis) Section"						ROW - 80 normal; access control-partial; Parking Restrictions - complete
Laux		PROJECT TOTALS	0.68	50,000	39,000	5,500	5,500 (City)	

OVAL DATES

REMARKS

* 1996 ADT based on completion of Walnut Blvd from Witham Hill Drive to 53rd St.

(over)

N.W. KINGS BLVD. - N.W. HIGHLAND DR. (CORVALLIS) SECTION

Project No. M-2120(1)

Existing Facility: Dedicated street no existing roadway.

Adjacent Sections:

W. End - - - 44-foot curbed roadway
E. End - - - 44-foot curbed roadway

Project Data: Work under this project consists of preliminary engineering all phases including preliminary engineering by utility forces for the future construction necessary to provide a variable 50 to 60-foot curbed street section for 4 travel lanes with a left turn lane at the intersection of King Blvd. and Highland Ave. and a bikeway on the southerly side.

NOTE: Preliminary engineering field work will be accomplished by City of Corvallis forces with final plan preparation by State forces. The City of Corvallis may employ a consultant for environmental work.

System Action, Airports, Railroads, Water Developments, Historical and Recreational Areas: None involved.

FHPM 7-7-2 Requirements: Major Action project concurred in by FHWA on October 14, 1975.

IM 50-1-70 Requirements:

a. State Clearinghouse -- A-95 review approval letter dated December 10, 1975.

b. District 4 clearinghouse -- Notice of Intent was submitted to District 4 clearinghouse on November 5, 1975 and the District submitted comments under letter of February 6, 1976.

FHPM 7-7-5 Requirements:

a. Public Hearings -- Opportunity for a hearin

b. Location/Design -- Approval will be request action

Data for PR-37:

Preliminary Engineering -- Field Work - - - $ 4
PS & E Preparation - - - 1

Total $ 5

NOTE: This project is in Congressional District No

N.W. HIGHLAND DR. (CORVALLIS) SECTION

Project No. M-2120(1)

ted street no existing roadway.

curbed roadway
curbed roadway

this project consists of preliminary engineering
minary engineering by utility forces for the
ary to provide a variable 50 to 60-foot curbed
l lanes with a left turn lane at the inter-
Highland Ave. and a bikeway on the southerly

ering field work will be accomplished by City
with final plan preparation by State forces.
is may employ a consultant for environmental

Railroads, Water Developments, Historical and
involved.

Major Action project concurred in by FHWA

use -- A-95 review approval letter dated
5.

inghouse -- Notice of Intent was submitted to
inghouse on November 5, 1975 and the District
ts under letter of February 6, 1976.

FHPM 7-7-5 Requirements:

a. Public Hearings -- Opportunity for a hearing will be offered

b. Location/Design -- Approval will be requested under separate action

Data for PR-37:

Preliminary Engineering -- Field Work - - -	$ 40,000
PS & E Preparation - - -	10,000
Total	$ 50,000

NOTE: This project is in Congressional District No. 1.

9367

Salem
January 20, 1976

Richard Unrein
Urban Engineer

Urban System Project
Programming Request

Mr. D. E. Swan
Federal Aid Engineer
Project Management Section

City: Corvallis

Section: NW Kings Blvd.-NW Highland Dr. Section
NW Walnut Blvd., FAU 2120
0.68 Mile

Proposed Work: All remaining phases of preliminary engineering to prepare project for contracting. City will perform field work and State will prepare final plans and award contract. City may employ consultant for environmental work.

FAUS Cost:	Total	Federal	State	City
Preliminary Engineering	$ 50,000	$ 39,000	$ 5,500	$ 5,500
Right-of-Way	(22,000)	(17,160)	(2,420)	(2,420)
Construction	(223,000)	(173,940)	(24,530)	(24,530)
	$295,000	$230,100	$32,450	$32,450

State Clearinghouse Approval: 12/10/75

District 4 Clearinghouse Approval: Filed 11/5/75 no response

Approved by Transportation Commission: 1/22/75

See attached project assessment for additional project information.

RU:dp

Attachment

~~☐ ENGR. ☐ ASST. ☐ OE ☐ AE ☐ UE~~
~~☐ UPE ☐ CE ☐ [illegible] ☐ [illegible] ☐~~

☐ ENGR. ☐ ASST. ☑ OE ☐ AE ■ UE
☑ UPE ☒ [illegible] ☐ [illegible] ☐

9367

Corvallis

PROJECT MANAGEMENT

JAN 16 76

REFER TO:

FOR

Info | Investigate | R/D | Action | File | ...

OREGON STATE HIGHWAY DIVISION

REGION 2

2960 E. STATE STREET • SALEM, OREGON • 97310 • Phone 378-2626

Robert Straub
~~TOM McCALL~~
GOVERNOR

F. B. KLABOE
Administrator of Highways

January 15, 1976

A. Gordon Wyatt
Project Coordinator
City Hall
Corvallis, Oregon 97330

Attachments in Circle file.

Dear Mr. Wyatt:

Your letter regarding an unofficial group offering assistance in developing the D.E.I.S.'s for the Circle and [redacted] projects has been discussed with State Highway and FHWA personnel.

The criteria for selecting a consultant would remain the same, whether the City makes the selection or a private group. If City wishes an unofficial group to assist in obtaining information to include in the D.E.I.S., it would be the City's responsibility to monitor and document the groups activities to ensure the correct procedures and policies are followed.

Air and noise studies are technical in nature. If the studies are performed by a properly selected consultant, the reports on data obtained should be valid. The information could be incorporated in the D.E.I.S. Regardless of who selects the consultant, the City must review and approve the information utilized in the D.E.I.S. Further review will be performed by State and FHWA.

An alternate to allowing an unofficial group providing information and including it in the D.E.I.S., is to accept the information at the appropriate time and include it as part of the Corridor/Design hearing testimony.

In summary, I have said it is okay for unofficial groups to provide input for inclusion in the D.E.I.S providing they follow the rules and with City supervision.

The matter of truck limitations on Federal Aid routes will be answered by separate letter.

RECEIVED
COUNTY & CITY SECTION
JAN 19 1976
☐ ENGR. ☐ COOR. ☑ CE ☐ AE ■ UE
☑ UPE ☑ CE ☐ RE ☐ RPE ☐

Very truly yours,

Phillip O. Stearns

Phillip O. Stearns
REGION 2 FEDERAL AID ENGINEER

POS/elf
cc: L. W. Rulien
Paul Riedl

Form E-30 (Rev. 9-71)

9367

Jans

OREGON STATE HIGHWAY DIVISION

AUTHORITY FOR SURVEY

Section Highland Drive - Kings Boulevard

Highway Walnut Boulevard (Corvallis)

County Benton

Date January 14, 1976

Authorization No. 1

Survey Prefix 302-1939 (Assigned by Salem office)

Description of termini, route, length, etc.:

The project is the extension of Walnut Boulevard from N.W. Highland Drive to N.W. Kings Boulevard. Project length is 3,800 feet.

RECEIVED
COUNTY & CITY SECTION
MAR 8 - 1976
☐ ENGR. ☐ COOR. ☑ UE ☐ AE ■ UE
☑ UPE ☑ CE ☐ RE ☐ RPE ☐

Purpose of survey:

To prepare plans, specifications, and cost estimate to construct 50' to 60' wide street with curbs, drains, and Type II bikepath.

This is an FAU Project.

Estimate of cost:

		Total
Field	901	1,500
Citizen Participate	902	300
Plans	905	2,500
R/W	909	1,000
Liaison	913	1,000
Location Studies	918	500
Proj. Mgt.	920	100
Specifications	921	500
Environmental	923	400
Hearings	980	200

M-2120(1)

INSTRUCTIONS

Submit four copies to Salem. After approval by the Assistant State Highway Engineer, one copy will be sent to the Regional Engineer and one copy to the Resident Engineer.

This form does not constitute authority for making survey until approved and returned.

Submit separate order for each survey.

Total estimated cost of survey . . . . . . $ 8,000

Previous authorization . . . .

Additional authorization requested . . . .

Additional authorization approved (Salem) .

Total all authorizations approved (Salem) . .

Requests made by:
for Richard Nelson
Field Engineer

Recommended for Approval: C. O. Fredrickson
Regional Engineer

Recommended for Approval: Victor D Wolfe
Location Engineer

Approved: E S Hunter
Assistant State Highway Engineer

SP*23604-734

OFFICE ENGINEERING SECTION
P. E. APPR. 2-26-76
FED. AID FAUS STATE

9367

[illegible] Corvallis

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION
INTER-OFFICE CORRESPONDENCE
December 10, 1975
Salem, Oregon 97310

FILE: ENV 2-1

FROM: Gary A. Potter, Manager
Environmental Section

SUBJECT: Circle Blvd. and
[redacted] Projects
Corvallis FAUS

TO: Richard Unrein
Urban Engineer

In response to your memo of November 26, 1975 concerning air and noise studies on the two Corvallis FAUS projects, I offer the following:

1. Recently completed schedules for the Environmental Section have us essentially committed to major studies through September 1976.

2. Air and noise studies are among the most critical of the above schedule.

3. Very optimistically, work could begin on these two projects in September, 1976 and completion of the studies would take four to six months, including the traffic analysis.

As a general item, we have taken steps to add additional personnel in the section to assist in air quality and noise studies, but it will be some time before those steps will result in increased production.

Until then we will be hard pressed to undertake complete air and noise studies on category 1 and 2 secondary and urban system projects.

We will continue to provide available data, technical assistance, review of programs and studies, to those agencies undertaking their own studies.

One final note is that detailed traffic analysis must be available before air and noise can begin.

GAP:sz

cc: E. S. Hunter
R. L. Schroeder
L. W. Rulien
George Hopkins
Don Harwell
C. O. Fredrickson
Eddie Welsh
Phil Stearns

Unrein

RECEIVED
COUNTY & CITY SECTION
DEC 10 1975
☐ ENGR. ☐ COOR. ☑ CE ☐ AE ■ UC
☑ UPE ☒ CE ☐ RE ☐ RPE ☐

12-11-75
Phil Steans has contacted City.

9367

L.

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

RECEIVED
STATE HWY ENGR
DEC 12 '75
REFER TO
FOR
Info Inves R/D D/R Sign Act File

STATE CLEARINGHOUSE

Intergovernmental Relations Division
240 Cottage Street S.E., Salem, Oregon 97310
Leslie Lehmann, Coordinator Ph: 378-3732

STATE A-95 REVIEW CONCLUSIONS

APPLICANT: State Highway Division

PROJECT TITLE: NW King Blvd-NW Highland Drive

DATE: 12/10/75

The state has reviewed your project and reached the following conclusions:

☒ XXX No significant conflict with the plans, policies or programs of state government have been identified and your proposal is endorsed as presented.

☐ Relevant comments of state agencies are attached and should be considered in the final design of your proposal.

☐ Potential conflicts with the plans and programs of the state agency(s) have been satisfactorily resolved. No significant issues remain.

☐ Significant conflicts with the plans, policies or programs of state government have been identified and remain unresolved. The final proposal has been reviewed and the final comments and recommendations of the state are attached.

12-12-75

cc: G. L. Green, FHWA
F. B. Klaboe
Victor Wolfe
J. B. Boyd
R. E. Royer
J. H. Versteeg
Gary Potter
G. N. Hopkins
B. L. Gifford
D. E. Swan
C. O. Fredrickson
H. C. Johnson
Aeronautics Div.

NOTICE TO FEDERAL AGENCY

The following is the officially assigned State Identifier Number:

7511 2 220

This number should be used on all correspondence and particularly on SF 240 as required by OMB A-98.

A copy of this notification and attachments, if any, must accompany your application to the federal agency as required by OMB A-95. Comments of the appropriate local reviewing agencies must also be included.

Ben

BEN GIFFORD
[illegible]

NOTED
MARIE STEPHENS

PNRS #2

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

Intergovernmental Relations Division
240 Cottage Street S.E., Salem, Oregon 97310
Leslie Lehmann, Coordinator Phone: 378-3732

Administrative Services Division
Dept. of Environmental Quality
RECEIVED
NOV 12 1975

LOCAL GOVERNMENT
RELATIONS DIV
DEC 1 1975

PNRS STATE REVIEW

Project #: 7511 2 220 Due Date: DEC 05 1975

To Agency Addressed: If you intend to comment but cannot respond by the return date, please notify us immediately. If no response is received by the due date, it will be assumed that you have no comment and the file will be closed.

PROGRAM REVIEW AND COMMENT

To State Clearinghouse: We have reviewed the subject Notice and have reached the following conclusions on its relationship to our plans and programs:

- ( ) It has no adverse effect.
- (✓) We have no comment.
- ( ) Effects, although measurable, would be acceptable.
- ( ) It has adverse effects.
- ( ) We are interested but require more information to evaluate the proposal.
- ( ) Please coordinate the implementation of the proposal with us.
- ( ) Additional comments for project improvement. (Attach if necessary)

Info	FOR	REFER TO	DEC 12 '75	RECEIVED STATE HWY ENG'R
Inves				
R/D				
D/R				
Sign				
Act				
File				

- - - - - - - - - - -

REMARKS (Please type or print legibly)

Please submit draft EIS AS AVAILABLE

Agency DEQ By L. Willis

9367

2

OREGON STATE
HIGHWAY DIVISION

HIGHWAY BUILDING • SALEM, OREGON • 97310

ROBERT W. STRAUB
GOVERNOR

F. B. KLABOE
Administrator of Highways

November 5, 1975

TO: Executive Department
Federal Aid Coordination Unit

Oregon District 4 Council of Govt.
#7 Wellsher Bldg.
Corvallis, OR 97330

FROM: George N. Hopkins
George N. Hopkins
Project Development Engineer

RECEIVED
STATE HWY ENGR
NOV 7 '75
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

SUBJECT: Notice of Intent for Federal-Aid Funds
State Admin. Dist. No. 4
N.W. King Blvd.-N.W. Highland Dr. Section
Walnut Blvd.-City of Corvallis
Benton County

In accordance with Executive Memorandum 02-270-20, attached are copies of the Notices of Intent for the subject project.

Early programing of this project for advance planning in anticipation of future construction is necessary; therefore, your prompt attention to this proposal will be appreciated.

Allowing time for your review, we estimate the date of filing for federal-aid funds on this project to be December 8, 1975.

Attachment

BLG:ek

cc; G. L. Green, FHWA
✓ F. B. Klaboe
V. D. Wolfe
J. B. Boyd
R. E. Royer
J. H. Versteeg
Gary Potter
G. N. Hopkins, County-City
B. L. Gifford
D. E. Swan
C. O. Fredrickson
H. C. Johnson
Aeronautics Div.

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

NOTIFICATION OF INTENT TO APPLY FOR FEDERAL AID

For Internal Use Only	1-8] PNRS #	Page One

02	12] APPLICANT [45 State Highway Division	46] DIVISION [79 Dept. of Transportation		
03	12] APPLICANT ADDRESS STREET [45 State Highway Building	46] CITY [60 Salem		76] ZIP [80 97310
04	12] CONTACT PERSON [45 L. W. Rulien	46] AREA CODE [48 503	49] PHONE [55 378	56] EXTENSION [59 6563

01	12] PROJECT TITLE [71 N.W. King Blvd.-N.W. Highland Dr. Dist. 4	

11	12] PROJECT LOCATION—CITY Walnut Blvd. City of Corvallis	PROJECT LOCATION—COUNTY Benton	PROJECT LOCATION [79 SEC: - T: 12S R: 6W

SUMMARY PROJECT DESCRIPTION (ATTACH SUPPORTING DOCUMENTS AS NECESSARY—SEE INSTRUCTIONS ON BACK)

05 This project, approx. 0.75 miles in length, involves preliminary engineering,

06 12] acquisition of right-of-way, grading, paving and incidental work required to open [71

07 12] an unimproved section of Walnut Blvd. and provide arterial system continuity [71

08 12] throughout its length from Corvallis West urban limits to N.W. 9th St. [71

09 12] [71

10 12] (See Attachment.) [71

	AMOUNT REQUESTED—FEDERAL FUNDS		NON-FEDERAL MATCHING FUNDS		OTHER	TOTAL
12	12] (A) Grant [19	20] (B) Other [27	28] (C) State [35	36] (D) Local [43	44] (E) FUNDS [51	52] (F) FUNDS [60
	191,100	-	26,950	26,950	-	245,000

13	12] TYPE OF OTHER FEDERAL FUNDS (See 12B) [45	46] TYPE OF OTHER NON-FEDERAL FUNDS (See 12E) [79
14	12] FEDERAL PROGRAM TITLE [71 Title 23 USC Highways	
15	12] FEDERAL AGENCY NAME [45 U.S. Dept. of Transportation	46] FEDERAL SUB-AGENCY NAME [79 FHWA

17 **(A) TYPE OF APPLICANT:** (Check (X) the single most applicable box)

STATE ☒ 12 INTER-STATE ☐ 13 COUNTY ☐ 14 CITY ☐ 15 SCHOOL DISTRICT ☐ 16 SPECIAL DISTRICT ☐ 17 COMMUNITY ACTION ☐ 18 SPONSORED ORGANIZATION ☐ 19 OTHER ☐ 20

(B) TYPE OF ACTION: (Check (X) as many boxes as apply to this action)

NEW GRANT ☒ 21 CONT. GRANT ☐ 22 SUPPL'T GRANT ☐ 23 INCREASE DURATION ☐ 24 DECREASE DURATION ☐ 25 CANCELLATION ☐ 26 INCREASE DOLLARS ☐ 27 DECREASE DOLLARS ☐ 28

(C) HAS DISTRICT CLEARINGHOUSE BEEN NOTIFIED?
Yes ☒ 29 No ☐ 30 Date: November 5, 1975

(D) REVIEW REQUIRED by A-95 Yes ☒ 31 No ☐ 32

(E) ENVIRONMENTAL IMPACT Yes ☒ 33 No ☐ 34

(F) HOUSING RELOCATION REQUIRED Yes ☐ 35 No ☒ 36

(G) ESTIMATED APPLICATION FILING DATE:	41] MONTH [42 December	43] DAY [44 8	45] YEAR [46 1975

ADDITIONAL INFORMATION—ALL APPLICANTS

I. A. Is the project consistent with the city or county comprehensive plan, zoning and subdivision ordinance? No ☐ Yes ☒

I. B. Is the proposal consistent with statewide land use goals? No ☐ Yes ☒

I. C. Is the proposal consistent with state and regional plans? No ☐ Yes ☒

II. Will the project have an impact on a neighboring jurisdiction? No ☒ Yes ☐

If so, is the project consistent with the comprehensive plan for that jurisdiction? No ☐ Yes ☐

III. Explain deviations if any, from pertinent plans.

IV. Federal Catalog number (or Public Law no. and title) 20.205 Highway Planning & Construction

V. Has funding agency been notified? No ☐ Yes ☒ Date: 11-5-75

VI. If project includes state funds (12C), identify agency State Highway Division

STATE AGENCIES ONLY

VIII. (a) IS PROGRAM BUDGETED ☐ NON-BUDGETED ☐

(b) STATE SHARE

GENERAL FUND CASH	OTHER FUND CASH	IN KIND
$	$	$

(c) FUNDING METHOD

	FEDERAL SHARE		STATE SHARE		TOTAL	
First Year	%	$	%	$	%	$
Second Year	%	$	%	$	%	$
Third Year	%	$	%	$	%	$

(d) WILL PROGRAM REQUIRE HIRING OF NEW STATE EMPLOYEES? No ☐ Yes ☐ Number

(e) Will accounting for this grant be administered by the Executive Dept. Accounting Division? Yes ☐ No ☐

PLEASE ATTACH ANY ADDITIONAL NARRATIVE OR REMARKS

17 (E) This is a Category 2 project of major significant environmental impact under Oregon's Action Plan.

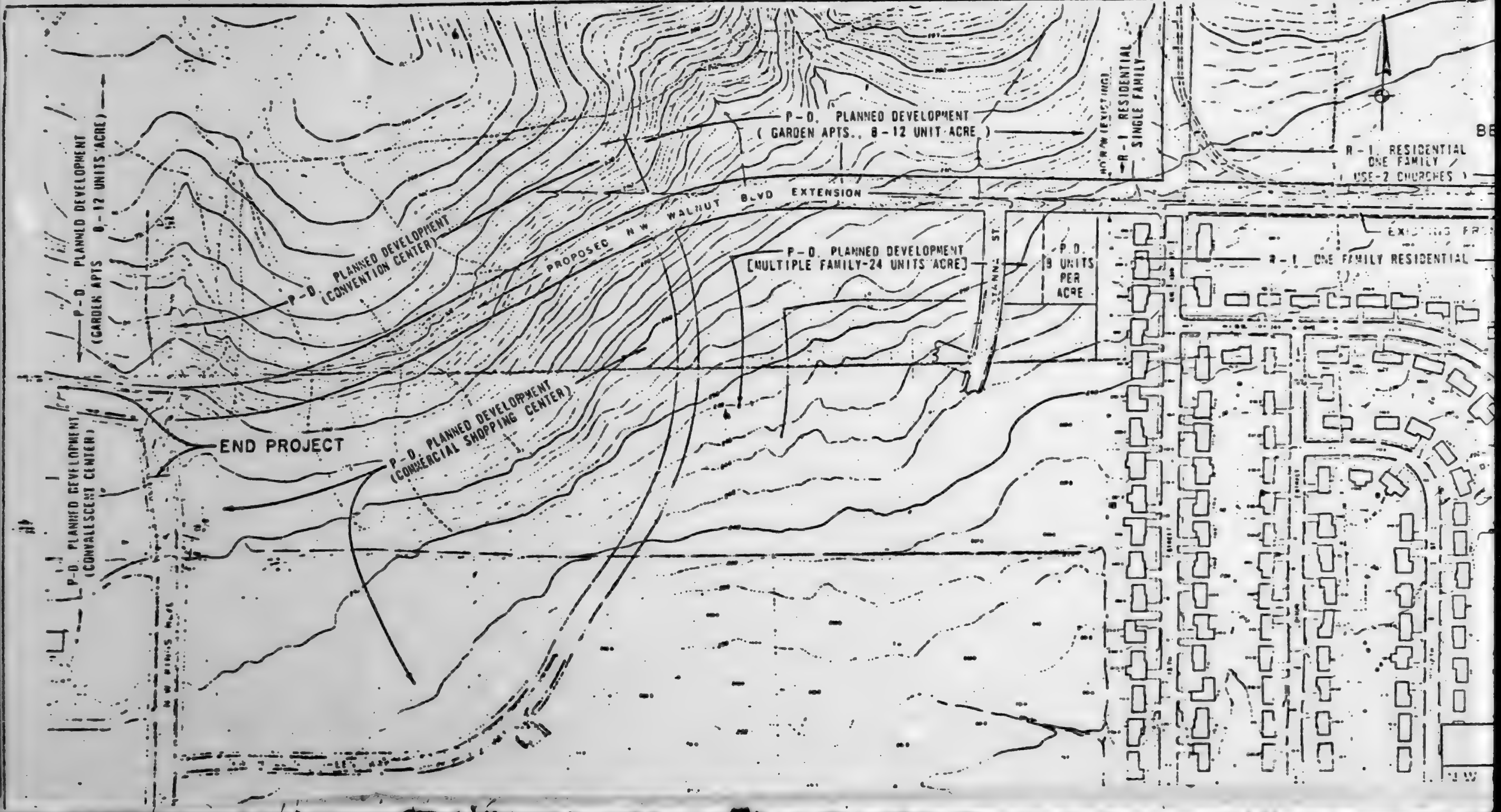
This project is proposed by the City of Corvallis, local government and the State Highway Division in cooperation with the Federal Highway Administration.

A Corridor/Design hearing will be offered.

CITY OF CORVALLIS
ENGINEERING DEPT.

N.W. WALNUT BLVD. EXTENSION
from N.W. Highland Dr. to N.W. Kings Blvd.

DES. J.B.	DRN. M.C.R.	CKD.
DATE AUG. '75	SCALE 1" = 200'	SHEET I OF 1


P-D. PLANNED DEVELOPMENT (GARDEN APTS 8-12 UNITS ACRE)
P-D. PLANNED DEVELOPMENT (CONVENTION CENTER)
PROPOSED N.W. WALNUT BLVD EXTENSION
P-D. PLANNED DEVELOPMENT (GARDEN APTS., 8-12 UNIT ACRE)
R/W (EXISTING)
R-1 RESIDENTIAL SINGLE FAMILY
R-1 RESIDENTIAL ONE FAMILY USE-2 CHURCHES
BE
EXISTING FR
R-1 ONE FAMILY RESIDENTIAL
P-D. PLANNED DEVELOPMENT [MULTIPLE FAMILY-24 UNITS ACRE]
STANNA ST.
P.D. 19 UNITS PER ACRE
P-D. PLANNED DEVELOPMENT (CONVALLESCENT CENTER)
N.W. KINGS BLVD.
END PROJECT
P-D. PLANNED DEVELOPMENT (COMMERCIAL SHOPPING CENTER)

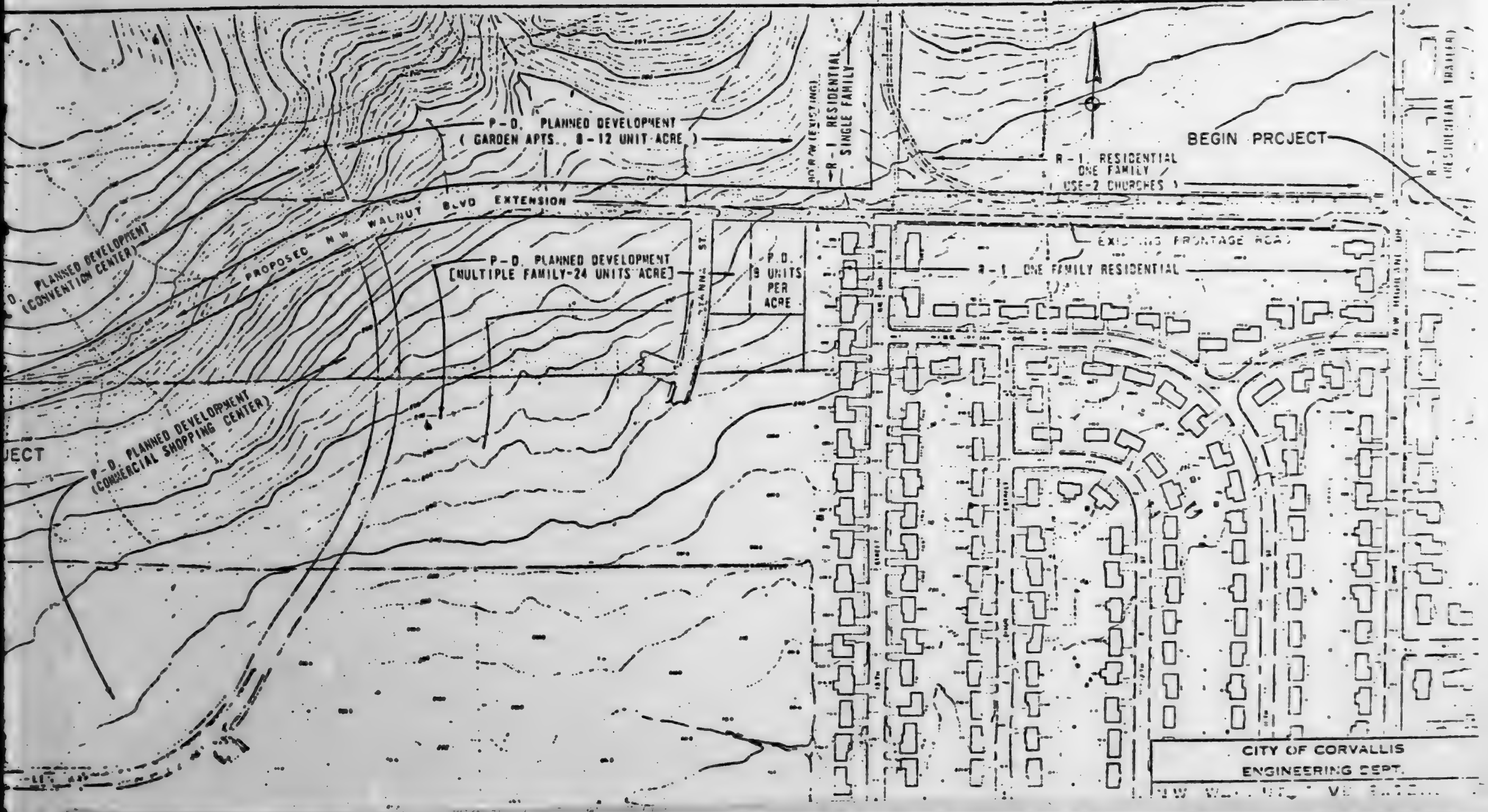
CITY OF CORVALLIS

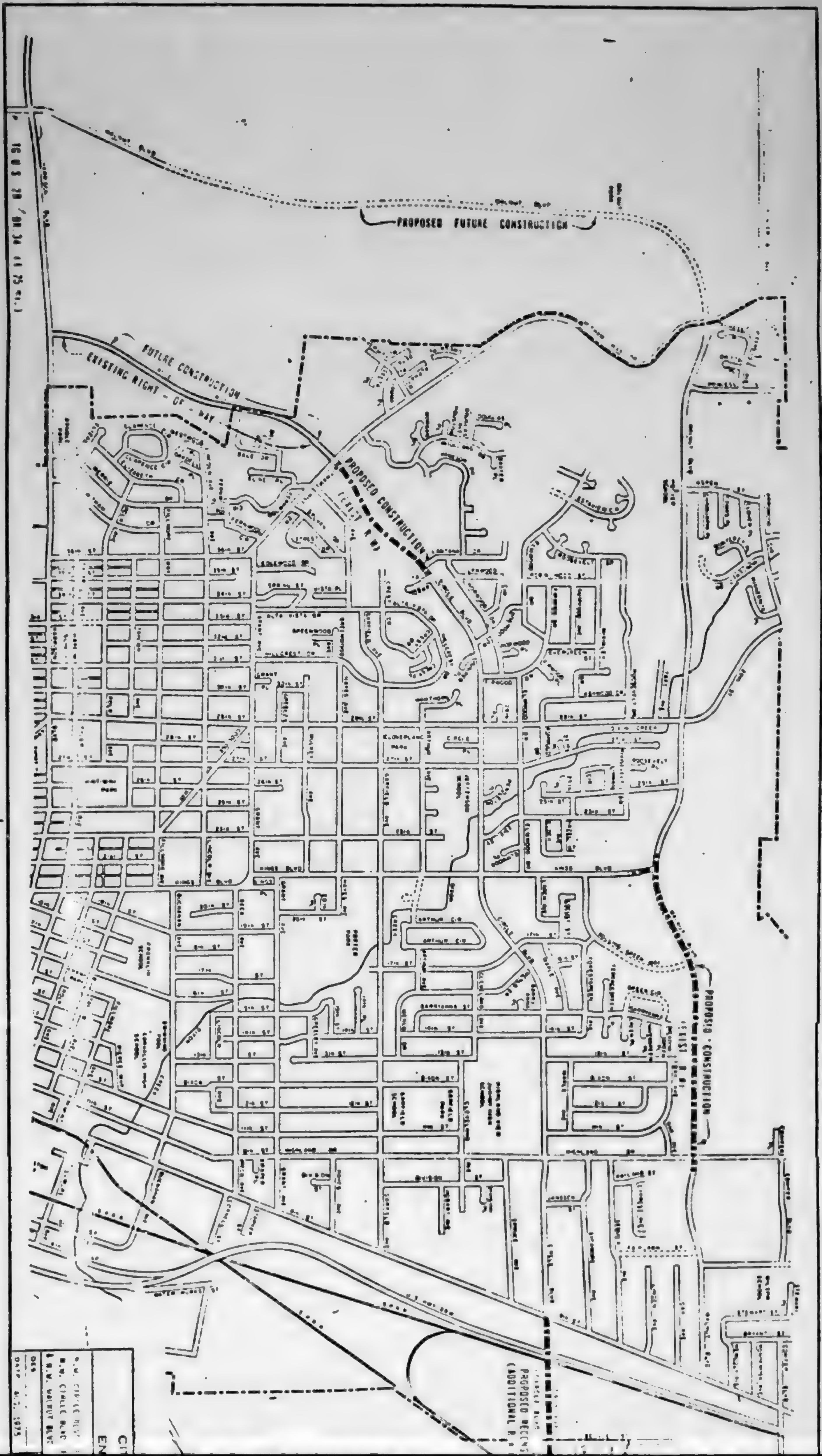
ENGINEERING DEPT.

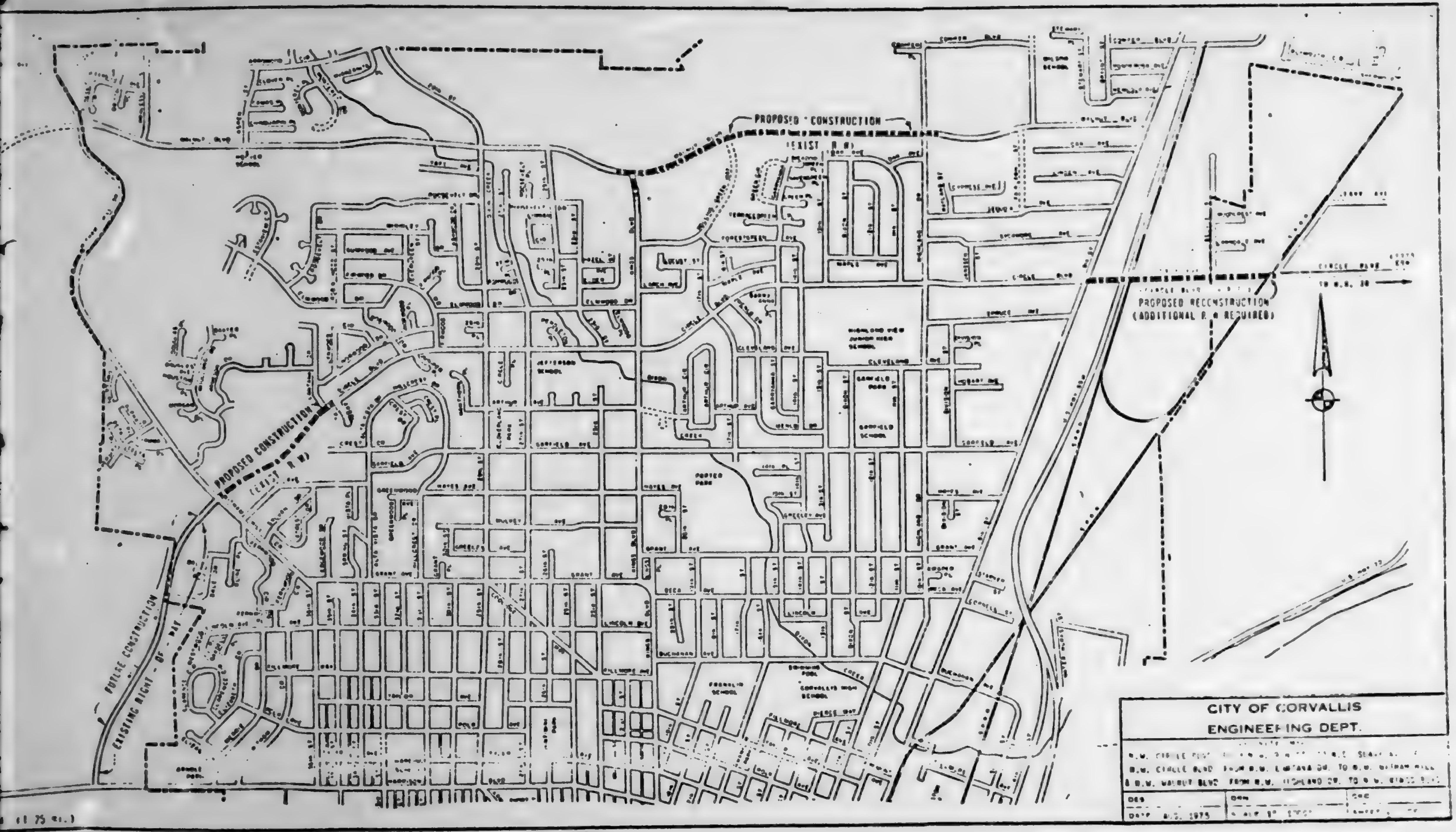
N.W. WALNUT BLVD. EXTENSION

from N.W. Highland Dr. to N.W. Kings Blvd.

DES. J.B.	DRN. M.C.R.	CKD.
DATE AUG. '75	SCALE 1" = 200'	SHEET I OF 1


P-D. PLANNED DEVELOPMENT
(GARDEN APTS., 8-12 UNIT ACRE)
R-1 RESIDENTIAL SINGLE FAMILY
80' R/W (EXISTING)
BEGIN PROJECT
R-1 RESIDENTIAL ONE FAMILY (USE-2 CHURCHES)
R-T (RESIDENTIAL TRAILER)
PROPOSED N.W. WALNUT BLVD EXTENSION
P-D. PLANNED DEVELOPMENT (CONVENTION CENTER)
P-D. PLANNED DEVELOPMENT [MULTIPLE FAMILY-24 UNITS ACRE]
STANNA ST.
P.D. 9 UNITS PER ACRE
EXISTING FRONTAGE ROAD
R-1 ONE FAMILY RESIDENTIAL
N.W. HIGHLAND DR
P-D. PLANNED DEVELOPMENT (COMMERCIAL SHOPPING CENTER)
JECT
CITY OF CORVALLIS
ENGINEERING DEPT.


PROPOSED FUTURE CONSTRUCTION
FUTURE CONSTRUCTION
EXISTING RIGHT - OF - WAY
PROPOSED CONSTRUCTION
PROPOSED CONSTRUCTION
PROPOSED RECONS
(ADDITIONAL R.O
CIRCLE
1975


PROPOSED CONSTRUCTION
(EXIST R.W)
PROPOSED CONSTRUCTION
(EXIST R.W)
PROPOSED RECONSTRUCTION
(ADDITIONAL R.W REQUIRED)
FUTURE CONSTRUCTION
EXISTING RIGHT - OF - WAY
CIRCLE BLVD
TO U.S. 20
HIGHLAND VIEW JUNIOR HIGH SCHOOL
JEFFERSON SCHOOL
GARFIELD SCHOOL
FRANKLIN SCHOOL
CORVALLIS HIGH SCHOOL

CITY OF CORVALLIS
ENGINEERING DEPT.

S.W. CIRCLE BLVD [illegible]
S.W. CIRCLE BLVD FROM S.W. LANTANA DR. TO S.W. WITHAM HILL
& S.W. WALNUT BLVD FROM S.W. HIGHLAND DR. TO N.W. KINGS BLVD.

DES	DRN	CHK
DATE AUG. 1975	SCALE 1" [illegible]	SHEET [illegible]

9367 Form FHWA 121 (Rev. 5-73)

2

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
Box 300
Salem OR 97308

DATE: October 14, 1975

In reply refer to: 1041EC.1

SUBJECT: Oregon M-2120(-)
NW. Kings Blvd. Highland Drive Section
Walnut Blvd.
Benton County
Project Assessment

FROM : G. L. Green, Division Administrator

NOTED
E. S. HUNTER

TO : Mr. F. B. Klaboe, Administrator & State Highway Engineer
Salem, Oregon

The subject project assessment submitted with Mr. Rulien's September 11 and October 7 letters has been reviewed. Your conclusion that we did concur with your finding that the contemplated project was a major action requiring the preparation of an Environmental Impact Statement is correct. We are not proposing that you change the description or termini of the project proposed to be constructed with Federal-aid Urban System funds. We are proposing, to which you concurred in your October 7 letter, that the appropriate section to be ✓ addressed in the environmental statement be that section from Witham Hill Drive Blvd. to 9th Street or possibly Harrison Blvd. to 9th Street, and that the EIS be so titled.

✓ We would recommend that future project assessments indicate the logical study termini and address those anticipated impacts within that study section.

William H. Kappus
for G. L. Green

cc:
OSHD (Potter)
OSHD (Laux)
Eddie Welsh, Reg Env

RECEIVED
STATE HWY ENGR

OCT 15 '75

REFER TO
Rulien cy Schraeder

FOR

Info	Inves	R/D	D/R	Sign	Act	File

9367

**OREGON STATE
HIGHWAY DIVISION**

ROBERT W. STRAUB
GOVERNOR

F. B. KLABOE
Administrator and
State Highway Engineer

October 7, 1975

TO G. L. Green, Division Administrator
Federal Highway Administration

FROM L. W. Rulien
Project Management Engineer

SUBJECT Project Environmental Assessment
NW Kings Blvd.-Highland Drive Section
Walnut Blvd.
City of Corvallis
Benton County

By letter of September 11 we submitted to you a project environmental assessment for the subject project. Our conclusion was that the contemplated project was of major action with significant impacts and that the environmental document should be a draft and final EIS. I believe that you concurred in these conclusions. However, by letter of September 29, 1975 you returned the assessment for reconsideration. Your point appears to be that the area to be covered by the environmental statements should be a section of the route greater than the proposed construction project, mainly from Witham Hill Drive to 9th Street, and possibly Harrison Blvd. to 9th Street. This point is valid and an appropriate section of the total route will be addressed in the environmental statement. However, we do not believe that appropriate to change the description of the project or the termini of the project from that which is proposed to be constructed with the Federal Aid Urban System funds. We also believe that considerable time could be saved if you concur in the conclusion of the assessment and then in a separate paragraph or a separate letter pass on to us such advice and counsel as you feel is in order.

LWR:ljt
cc: Gary Potter
C. O. Fredrickson

Form 81-734-3122

Form FHWA 121 (Rev. 5-73)

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
Box 300
Salem OR 97308

DATE: September 29, 1975

In reply refer to: 1041EC.1

SUBJECT: Oregon Project M-2120(-)
NW. Kings Blvd.-Highway Drive
Walnut Blvd., Benton County
Project Assessment

FROM : G. L. Green, Division Administrator

TO : Mr. F. B. Klaboe, Administrator & State Highway Engineer
Salem, Oregon

We have reviewed the subject assessment submitted with Mr. Rulien's September 11, 1975 letter. While we agree with your major action determination and the need for an EIS, we do not concur with the project termini.

The assessment indicates that subject proposal is a segment of an improvement plan aimed at establishing Walnut Blvd. as a major arterial-collector street. Such a conversion would be the true generator of social, economical, and environmental impacts to the community and would require analysis prior to construction of the subject segment. We therefore recommend the study of the section from Witham Hill Drive to 9th Street with consideration given to the section from Harrison Blvd. to 9th Street.

We are returning the assessment for your reconsideration.

William H. Kappus
for G. L. Green

cc:
OSHD (Potter)
OSHD (Laux)
OSHD (Eddie Welsh, Reg Env)

BEN GIFFORD

RECEIVED
STATE HWY ENGR
OCT 1 '75
REFER TO
Rulien
FOR

cy Schroeder

PROJECT MANAGEMENT SECTION		
ROUTING	ACTION	INFO
P.M. ENGINEER		
PROJ. DEV. ENGR.		
OFFICE ENGR.		
COUNTY-CITY		
FEDERAL AID		
INVENTORY-NEEDS		
MILEAGE CONTROL		
PROG. & SCHEDULE		
REMARKS:		

OCT - 1 1975

Oregon State Highway Division

PROJECT ENVIRONMENTAL ASSESSMENT

Date September 8, 1975

A. PROJECT IDENTIFICATION

Name of Project N.W. Kings Blvd. to N.W. Highland Drive (Section) M-2120 (-)

Location of Project - Walnut Blvd. (Highway Name) FAU 2120 (Highway No., US - ORE)

Corvallis (City) Benton (County) II (Region)

Program FAUS (Funding) $245,000 (Estimated Cost) (Prefix)

B. PURPOSE AND ORIGIN OF PROJECT

Purpose: To open an unimproved section of Walnut Blvd. and provide arterial system continuity between N.W. Witham Hill Drive (near northwesterly corner of the Corvallis Urban Area as approved 12/23/74) and N.W. Ninth Street.

Origin and History: See attached pages 1a and 1b.

C. DESCRIPTION OF PROJECT (PROSPECTUS)

Length 0.75 miles

Termini Easterly--N.W. Kings Blvd; Westerly--N.W. Highland Drive (see Appendix A)

Alignment (new or existing) The alignment for this project exists as a result of right-of-way dedications provided with subdivision plat approvals (see Origin and History; page 1a and 1b).

CATEGORY 2 PROJECT

MAJOR - Sig.

Form (2)9-74

ORIGIN AND HISTORY

Prior to 1960 the major highway travel through the Corvallis area was in the north-south direction along the Pacific Highway West (ORE 99W) route. U.S. 20 and ORE 34 highways also provided major connecting routes through Corvallis between the Willamette Valley and the Oregon Coast and U.S. 20 provided a connecting route to Central and Eastern Oregon. The construction of the Interstate Highway, I-5, through the Willamette Valley (late 1950's and early 1960's) de-emphasized the north-south travel pattern through Corvallis and emphasized the east-west travel along the U.S. 20 and ORE 34 routes as these routes provided the major access to the Interstate Highway.

In the years following World War II automobile travel and traffic congestion multiplied rapidly, particularly in urban areas. To cope with these problems urban and transportation planners began developing plans for highway bypass and circumferential routes around the urban areas. Following this planning philosophy, the record shows that a circumferential routing was included in the major street plan for the City of Corvallis as early as 1945. The portion of this circumferential routing that relates to this project was a route connecting N.W. Ninth Street at a point between Grant and Garfield Avenues to the Corvallis-Philomath Highway (US 20 - ORE 34) at a point about S.W. 35th Street. Prior to 1956, ORE 99W (US 99W) was routed along N.W. 9th Street.

Comprehensive planning studies conducted for the city of Corvallis and surrounding areas in the 1950's and 1960's included the study of major street and highway routes. The Circle Blvd. and Walnut Blvd. routes were included in these studies as part of the circumferential street system in the northwest section of the urban area. The 1964 Corvallis Comprehensive Plan and the 1968 Benton County Comprehensive Plan for the Urbanized Area included Circle and Walnut Blvd. The records clearly show that these routes have been included as part of the comprehensive land use and transportation plans for 25 years or more.

The existing and planned major street network has been the subject of two additional in-depth studies: (1) The Corvallis Area Transportation Study (CATS), 1965-1969; and, (2) Corvallis Urban Area Traffic Safety Study and Recommended Street System Improvements, 1971. The first of these studies was primarily oriented toward an efficient transportation system to provide for existing and future traffic movements in the urban area and the latter study was primarily oriented toward system safety and the improvements that were necessary to provide a safer transportation system. Completion of the Circle and Walnut Blvd. routes are included in the recommendations of both of these studies.

These studies and plans have provided the basis for obtaining rights-of-way and construction for major portions of these routes as they presently exist. The following is a summary of right-of-way acquisitions and construction along Walnut Blvd. from N.W. Ninth Street to N.W. 25th Street.

1958-1960	Right-of-way -- Highland to 13th (80 feet wide) Dedicated with the following plats: 1958 -- Carter-Rawie Addition 1959 -- Carter-Rawie First Addition 1960 -- Carter-Rawie Second Addition
1963	Right-of-way -- Highland to Satinwood
1963-1964	Right-Of-way -- Satinwood to Ninth
1964	Construction -- Satinwood to Ninth (46' curb-to-curb)
1971	Right-of-way and Construction -- Kings Blvd. to 25th
1971	Right-of-way -- W. Line Carter-Rawie Second Addn. to Kings Blvd. dedicated 80 feet with Timberhill - Southeast and Timberhill-Southeast First Addn.
1972	Construction -- Highland to Satinwood
1974	Construction -- Walnut Avenue Frontage Road - Highland to 13th to serve residential properties along south side of Walnut.
1974	Construction -- Completion of Walnut between Highland and 9th at Satinwood.

During 1974, City and County officials prepared and recommended a revised Urban Boundary and Street System to meet the requirement of the Federal Highway Act of 1973 and for establishing a Federal-aid Urban (FAU) System in the Corvallis Urban Area. These recommendations were approved by the U.S. Department of Transportation, Federal Highway Administration on December 23, 1974. Subsequently, a project priority list was prepared and approved by City, County, and State officials. Project requests for the first two priority projects, Circle and Walnut Blvds., were approved by the Oregon Transportation Commission. The City, with the approval of the Oregon Highway Division has proceeded with the preliminary engineering within the realm of the Oregon Action Plan but without Federal-aid assistance for these engineering functions. Work has proceeded concurrently on both the Circle Drive and Walnut Blvd. projects.

* * * * * * * * * * * *

Description of Project (cont

Right-of-Way (acreage and type of land use) See page 2a.

Typical Section The typical section will provide for a 50-foot[1] wide curbed street with widening to 60 feet[2] near Kings Blvd. and near Highland Blvd. to provide for separated left-turn movements.

Bikeway A Class II Bikeway is planned for the southerly side of the roadway for the entire length.

Structures None.

Additional Facilities None

Access Control See page 2a.

Materials All materials required for construction will be obtained through commercial sources.

Borrow and Waste Disposal None required.

Special Construction Methods None required. Geological borings taken along the entire proposed project did not reveal any special construction requirements, e.g., rock excavation.

Characteristics (ADT) It is estimated that the ADT during the first year following completion will reach approx. 3000 VPD. By 1990, and with the completion of Walnut to connect to Harrison Blvd. at 53rd St., this route will carry and estimated traffic volume of 10,000-12,000 VPD.

Other General Information (or Supplemental information to items)

The future plans call for the development of an arterial street connection between 53rd St., at N.W. Harrison Blvd. to N.W. Walnut at Witham Hill Drive. This is included as a part of FAU 2120 and will provide the connecting link for the northwesterly portion of a circumferential route between U.S. 20 and ORE 99W (See App. B & C).

Project Sketch Map is Attached: ☒ Yes ☐ No

Appendix A: Site Map
Appendix B: Vicinity Map
Appendix C: Corvallis Urban Area Map; March, 1975.

See page 2a for footnotes.

Right-of-Way (acreage and type of land use) - The Walnut Blvd. right-of-way between N.W. Highland and Kings was originally dedicated as 80 feet in width as a part of the platting of adjacent lands. Some additional rights-of-way are being obtained by the city near the easterly terminus of the project and in other areas where slope construction will extend beyond existing right-of-way limits. The city has obtained and recorded easements for street and utility purposes from the properties along the northerly side of Walnut Blvd. and on both sides of N.W. 13th Street. These easements conform to the right-of-way required for the Walnut Blvd. construction.

The land along both sides of Walnut from a point approximately 150 feet westerly of N.W. 13th Street easterly to Highland Drive is zoned R-1, One Family Residential. Churches are an allowable use in the R-1 zone (see zoning excerpts and zoning map, Appendix D) and the land along the northerly side between Highland Drive and 13th Street is presently occupied by one church and a second is planned for construction beginning in 1975. A church also exists at the southeasterly corner of the intersection of Highland Drive with Walnut Blvd. The property located at the northeasterly corner of this intersection is zoned and occupied as R-T, Residential Trailer. The balance of the property along both sides of the proposed project is zoned as P-D, Planned Development and the proposed uses are as shown on the site map, Appendix A. Where the proposed use is shown as Multiple Family or Garden Apartments the proposed and allowable density is shown as units per acre (no. in parenthesis). Final development will require site maps submitted and approval.

Access Control - Access Control will be obtained by the city wherever additional rights-of-way are required and the city will control access by approval of final plans for development under the P.D. zoning requirements. It is intended that all abutting land access will be provided only at the street intersections - Highland Drive, 13th Street, Garryanna Street, Rolling Green Way, and Kings Blvd. A frontage street was constructed (1974) to provide private driveway access for the residential properties abutting the south side of Walnut between Highland and 13th. The two church properties along the northerly side of Walnut have or will be allowed access only to Highland Drive or 13th Street. The city has purchased access rights to Walnut Blvd. from the residential property located at the southwesterly corner of the intersection of Highland Drive with Walnut Blvd.

---

[1] The 50 foot section will provide four traffic lanes with a four foot painted median (12-11-4-11-12)

[2] The 60 foot section will provide four traffic lanes plus one left turn lane (12-11-14-11-12)

D. LOCATION AND/OR DESIGN ALTERNATIVES (IDENTIFY AND DESCRIBE)

The location of Walnut Blvd. in the project area has been determined by previous street right-of-way dedications resulting from subdivision platting and approvals. No alternative route location has been considered. The preliminary design will provide for arterial traffic movement eventually connecting between major highway routes (ORE 99W and U.S. 20-ORE 34) through and around the northwest sector of the city. The arterial corridor has been identified in a number of preceding planning studies. The design criteria will utilize minimum design standards included in the policies of the American Association of State Highway Officials.

E. PUBLIC PARTICIPATION AND INTERAGENCY COORDINATION

Public Input to Date (hearing held, etc.,) Some public input has been provided at meetings of the Corvallis City Counil, but no organized citizen activity has been provided for to date.

Public Hearing(s) Schedule: ☐ Not Required ☒ Required

Type Corridor/Design Hearing Tentative Date(s)________

A-95 Review: ☐ Not Required ☒ Required

Date Submitted________ Date Received________

Expected Coordination with Local, State and Federal Agencies Oregon District 4 Council of Governments, Local Planning Agencies, County & City Agencies, OSHD, FHWA, and such other public agencies that can be identified as parties of interest.

Expected Coordination with Individuals, Groups, and Organizations During EIS Preparation Citizens Advisory Committee, Interdisciplinary Team, utilities, community interest groups, and other parties of interest.

F. STATUS OF PROJECT DEVELOPMENT

OSHD

Status **Date**

☐ Survey Authorization________________

☐ Reconnaissance________________

☐ Field Location________________

☐ Office Location________________

☐ Field Prel. Design________________

☐ Office Prel. Design________________

☐ Final Design________________

☐ Contract Plans________________

FHWA

Status **Date**

☐ Systems Planning________________

☐ Prel. Engineering________________

☐ Corridor Approval________________

☐ Design Approval________________

☐ Plans, Specifications and Estimates Approval________________

G. BRIEF ENVIRONMENTAL SETTING OF PROJECT AREA

Natural (Topography, Flora, Fauna, Soils, Water Features, Drainage, etc.)__________

The natural topography includes a rolling terrain with moderate to steep side slopes of mostly open, undeveloped fields throughout the project area and with mostly residential development lying to the south and timbered foothills to the north. Through the proposed project area there is a vertical rise and fall of about 70 feet. There are about fifty small Douglas Fir Trees (4-6" diameter and max. height 20 feet) within the right-of-way and required slope easement areas. The vegetation is primarily volunteer field grass, wild blackberry vines, wild rose bushes, and brushy growth. The easterly one-half of the proposed street project will have an effect on existing drainageways (ditches) that presently handle the runoff from small drainage basins lying to the north. Deer, rabbits, opossum, racoon, squirrels, other vermin, and a variety of wild birds have been observed in the area. The soils are generally of a tillable clay type with some underlying clay hardpan. No evidence of solid rock materials were discovered by drilling even though there is a rock outcrop lying just northerly of the westerly terminus. Some topographic reference can be identified on the site map, Appendix A.

Environmental Setting (cont.)

Cultural (Land Use, Noise, Air Esthetics, Utilities, etc.) There is existing residential development and a church located adjacent to Walnut and another church planned to start construction in 1975 along the easterly one-third of the proposed street improvement project. No other development presently exists immediately adjacent to the proposed street. The adjacent areas are frequently used by motorcycle riders under illegal tresspass. In general, the existing noise and air qualities are similar to other semi-developed urban areas. Prevailing wind patterns in the area rarely create inversions or allow the air to stagnate. Industrial pollutants do not appear to reach the area. There is no through traffic along the route at present. Public utilities, water and sewer facilities, power, telephone, and TV cable facilities are located at the westerly terminus and serve the developed areas near the east end.

H. PRELIMINARY ASSESSMENT OF ENVIRONMENTAL IMPACTS

1. **Estimated Right-of-Way Requirements:**
Additional right-of-way will be required along the northerly side of Walnut from about 150 feet west of 13th Street to the easterly terminus. In addition, some permanent slope easements will be required in other areas to construct the roadway.

Consequences:

The city is acquiring the necessary right-of-way, easements, and access control and these needs will not be included in the project.

2. **Estimated Changes in Traffic Patterns:** The construction and opening of Walnut Blvd. as proposed will provide another continuous route between N.W. Ninth Street and Witham Hill Drive which will help relieve traffic on Circle Blvd. and other streets. The eventual construction of the Walnut Blvd. extension from Witham Hill Drive to connect with NW 53rd at Harrison will provide a continuous route around the northwesterly perimeter of Corvallis that will (cont. on page 5a)

Consequences:
Improved circulation and traffic operations will result from arterial continuity and some motorist benefits should result from decreased travel time and distances. Arterial continuity will provide additional street mileage that will require additional police patrols but public safety access for police, fir, and ambulence services will be enhanced . Walnut Blvd. will provide a major access route for the Corvallis area to the new Good Samaritan Hospital facility lying northerly of Walnut Blvd. and easterly of N.W. 9th Street. There will be

(cont. on page 5a)

2. Estimated Changes in Traffic Patterns: (continued from page 5)

relieve through traffic between ORE 99W and US 20-34 that must now pass through the CBD or along other city streets. This route will provide a major access route for the entire urban area as well as from surrounding areas to major hospital facilities.

Consequences: (continued from page 5)

greatly increased traffic volumes traveling through areas along existing portions of Walnut Blvd. that presently have very light volumes. When completed, Walnut will provide relief for other congested arterials and collector streets. A proposed bicycle path along Walnut will provide better access and improve circulation for bicyclists. Additional pedestrian facilities will be provided and the new route may permit better utilization of public transportation facilities.

Preliminary Assessment of Impacts (cont.)

3. **Estimated Changes in Land Use:** Opening Walnut Blvd. will provide direct access to large undeveloped land areas (principally the 800 acre Timberhill project) which are presently within the City and Urban Area and areas that are presently zoned for development. This access will substantially increase the probable marketability of these properties. Properties abutting the project are controlled by limited ownership and the City has control of land (cont. on page 6a)

   Consequences:
   Improved access for the abutting properties will substantially increase the supply of developable land in the community providing potential relief for the city's "tight" housing market. In addition, provision of access may cause modifications in some sections of the Timberhill Development where inital proposals are no longer applicable. Land improvements would (cont. on page 6a)

4. Expected Adverse Effects on Natural Ecological Resources:

   The roadway may disturb existing wildlife and birds. The embankments and excavations will create change in present landscape and topography. Existing drainage will be intercepted and put into a closed storm sewer system.

   Consequences:

   Some road kill might be anticipated for some of the smaller animals but should have little effect on deer. As the areas adjacent to Walnut Blvd. develop the wild animal and bird population will naturally decrease.

5. Expected Adverse Effects on Cultural and Scenic Resources:

   Increased traffic may increase noise, decrease air quality, and may increase traffic hazards. Some land scars will be created but landscaping, seeding, etc., can reduce this effect.

   Consequences:

   Some people may feel the necessity to move as a result of increased traffic volumes, noise, and effect on environment.

6. Preliminary Identification of Areas of Critical Environmental Concern:

   Noise and air qualities, effect on natural environment, effect on wildlife, new street facility will provide access and encourage growth of areas presently zoned for development and this may assist the control of urban sprawl.

7. Potential for Controversial Issues:
   (1) Noise and air qualities.
   (2) Effect on natural environment.
   (3) Effect on wildlife
   (4) New street facility will provide access and encourage development of lands that are presently zoned but remain undeveloped primarily because of poor access. Such development may become a major controversy with the community.

3. Estimated Changes in Land Use (continued from page 6)

use and access through the Planned Development processes. No additional zone changes should be required.

Consequences (continued from page 6)

... increase property values and consequently distribute tax burdens throughout the community.

8. Potential Consistency of Proposal with (complete when applicable):

   a. Clean Air Implementation Plans

   b. Noise Standards

   c. Water Quality Standards

The Corvallis Area is included within the Mid-Willamette Valley area under supervision of the Oregon Environmental Commission and the Department of Environmental Quality. Criteria pertaining to clean air, noise, and water quality is or will be established as a result of their review and project analysis.

I. HIGHWAY DIVISION STAFF REQUIREMENTS TO COMPLETE ENVIRONMENTAL IMPACT STUDIES AND DOCUMENTATION

ENVIRONMENTAL SECTION -

PERSONNEL	EFFORT REQUIRED*		
	Minimum	Average	Maximum
Biologist			
Urban Economist		X	
Water Quality Spec.			
Acoustical Engineer		X	
Air Quality Engineer		X	
Cultural Geographer			
Urban Planner		X	
Geologist			

* For the sake of clarification and mutual understanding the terms minimum, average and maximum effort have been defined as follows:

MINIMUM - Research and Project Management Staff consultation. No formal typewritten report.

AVERAGE - Routine analysis. Short to medium length report including consideration of existing setting, probable impact, and steps to minimize harm.

MAXIMUM - Special detail of analysis. Comprehensive technical report.

Staff Requirements (cont.)

LOCATION SECTION -
(Location, Hydraulics, Photocopy, Photogrammetry)

DESIGN SECTION -
(Preliminary Design/Final Design, Specifications)

PROJECT MANAGEMENT SECTION -
(Typing, Graphics)

REGION -
(Environmentalist, Resident Engineer)

J. PROJECT (ACTION PLAN) CLASSIFICATION:

☐ Category 1 ☒ Category 2 ☐ Category 3 ☐ Category 4

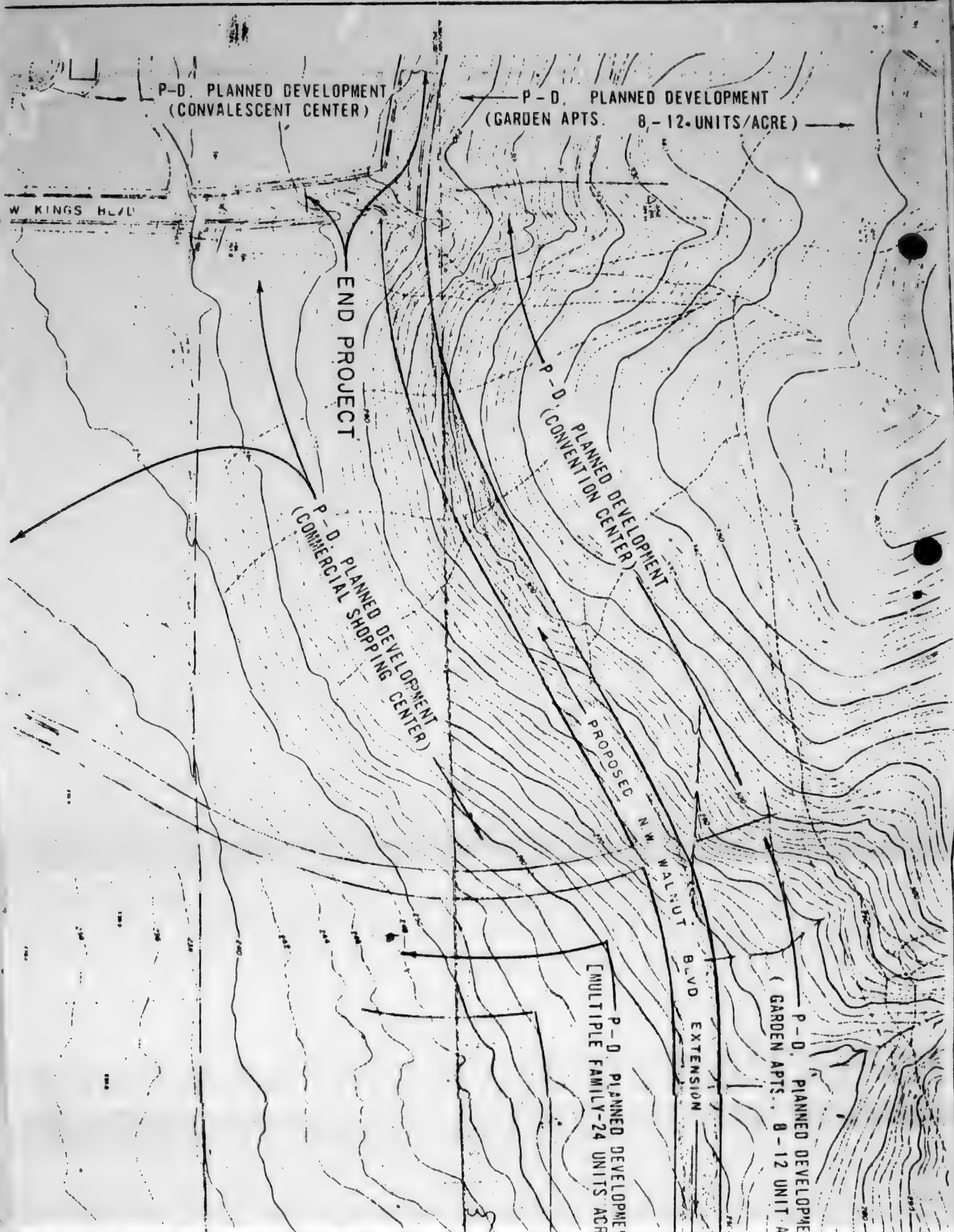
K. TYPE OF ACTION

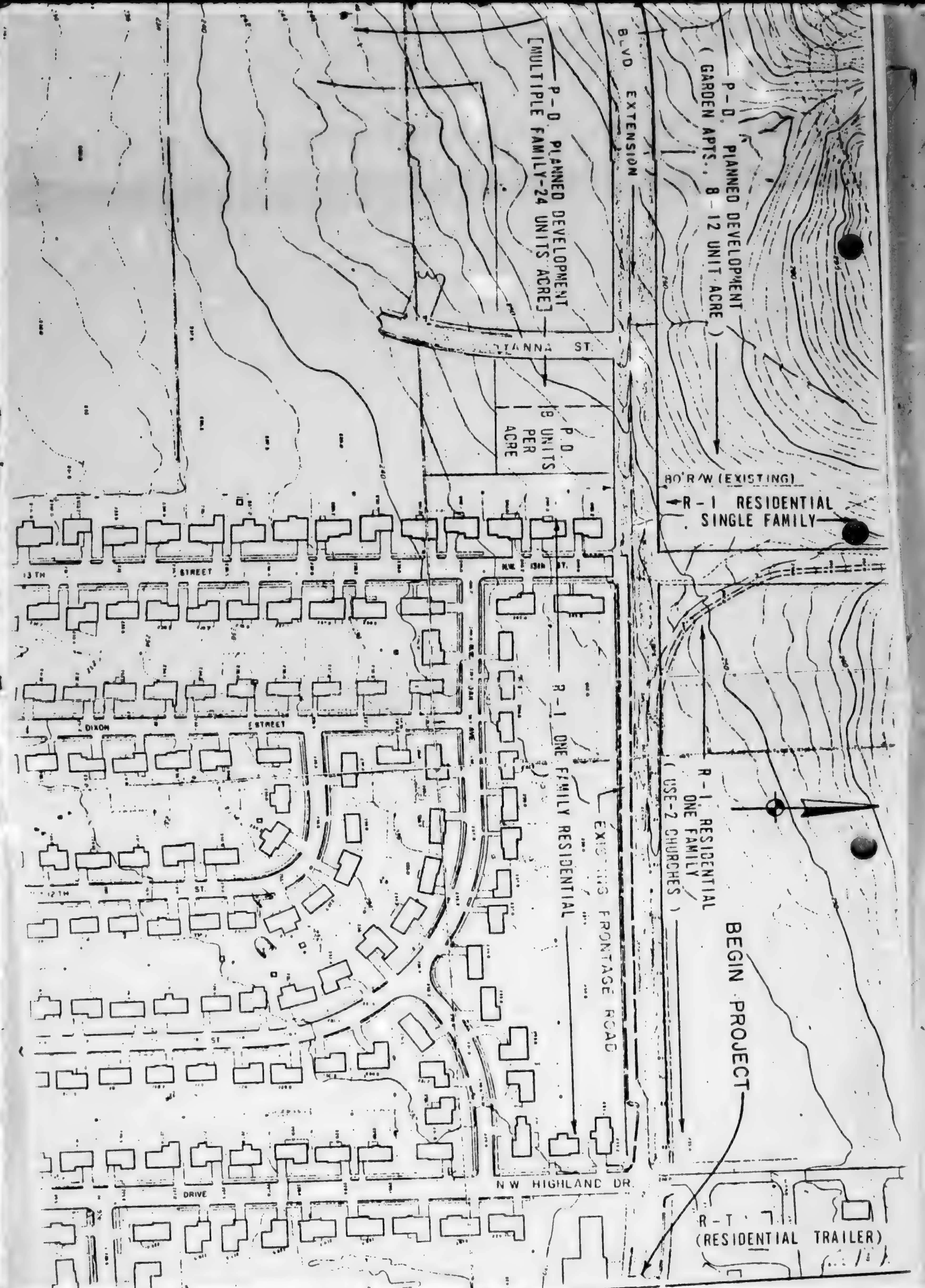
- ☒ Major Action
  - ☒ Significant ☐ Non-Significant
- ☐ Non-Major Action

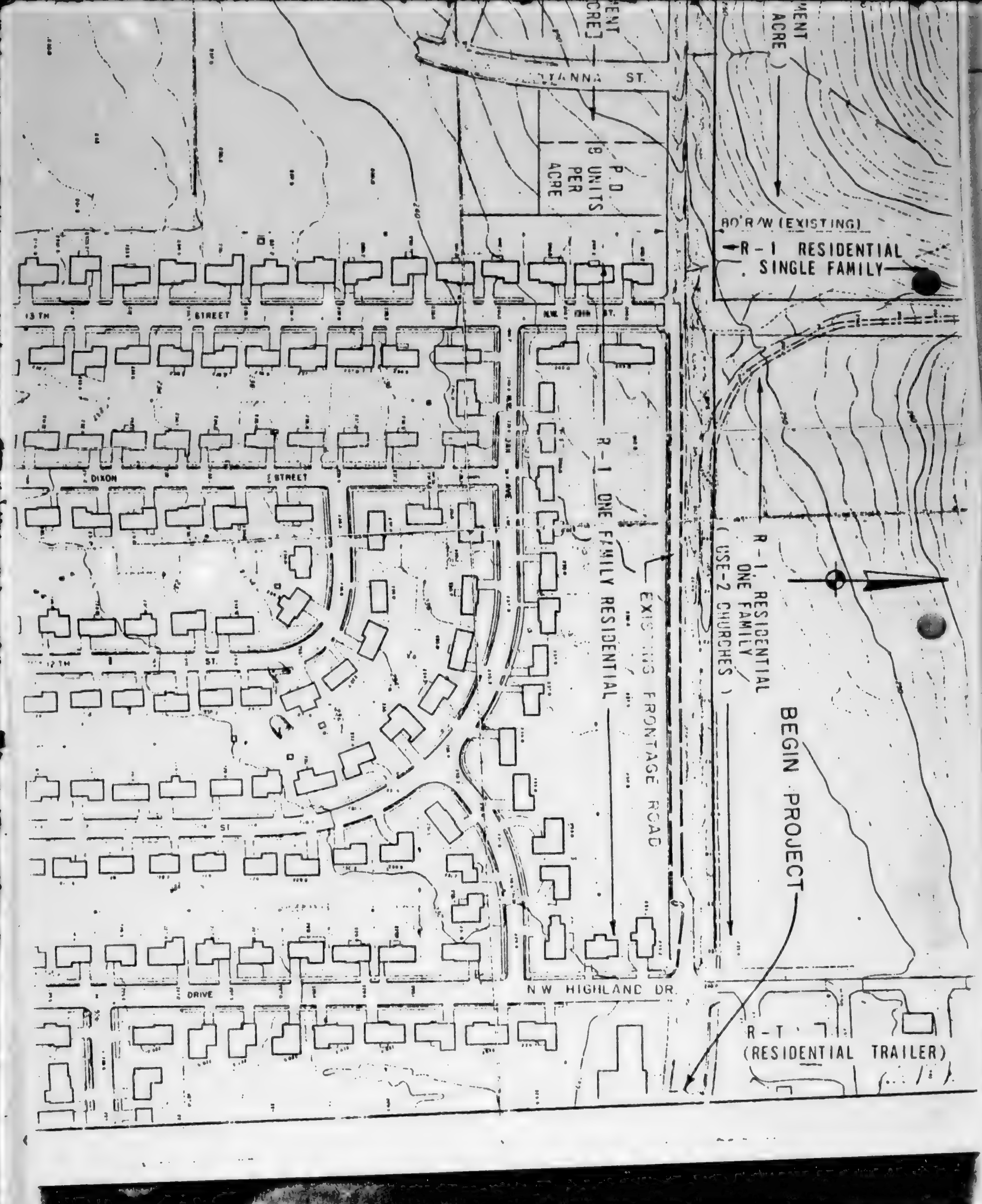
L. TYPE OF DOCUMENTATION RECOMMENDED

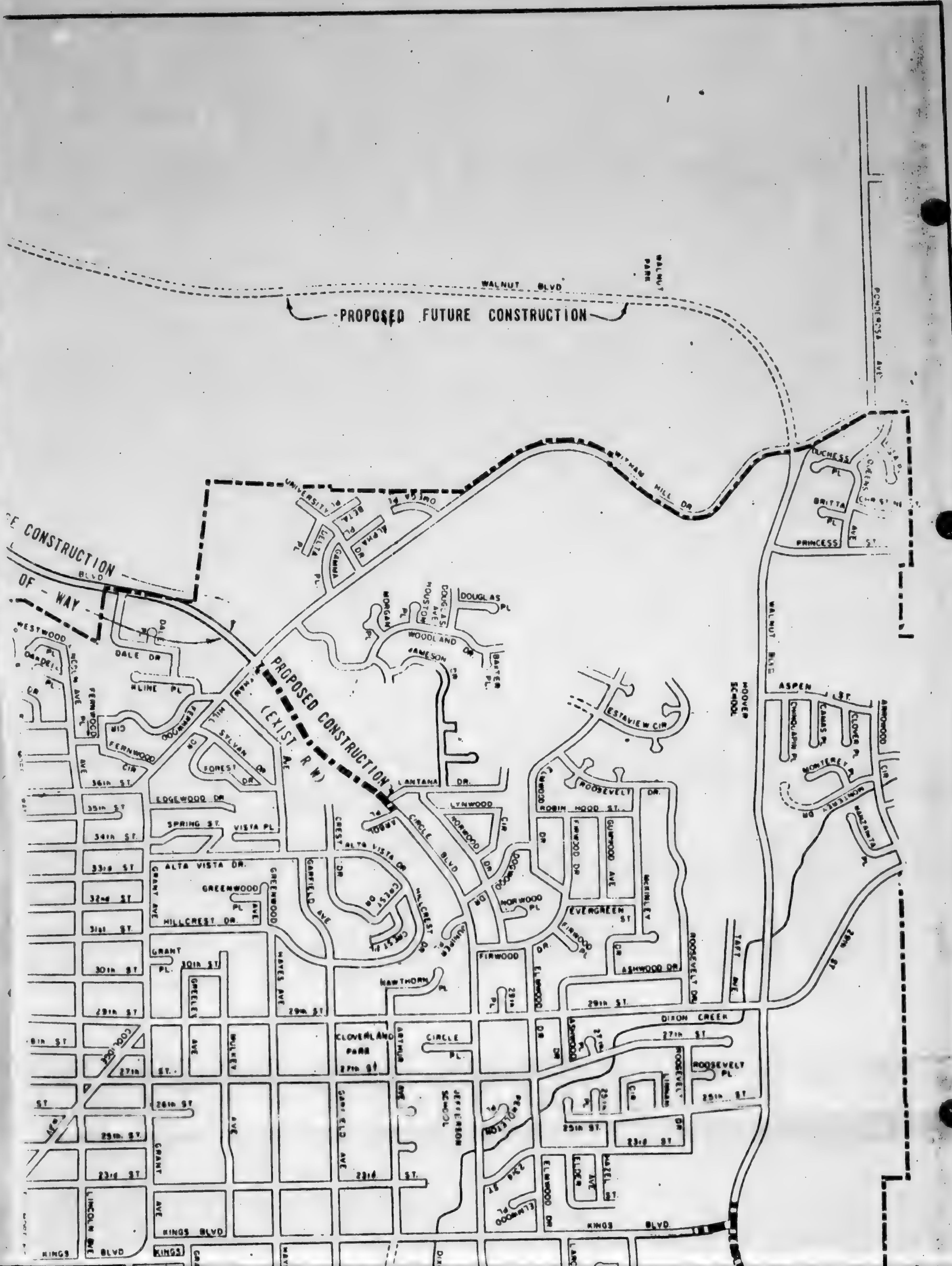
☒ Draft EIS
☒ Final EIS
☐ Supplemental Draft EIS
☐ Supplemental Final EIS
☐ Assessment Only

☐ Section 4(f)
☐ Negative Declaration
☐ State-Wide Negative Declaration
☐ Preliminary EIS
☐ OTHER ______________________

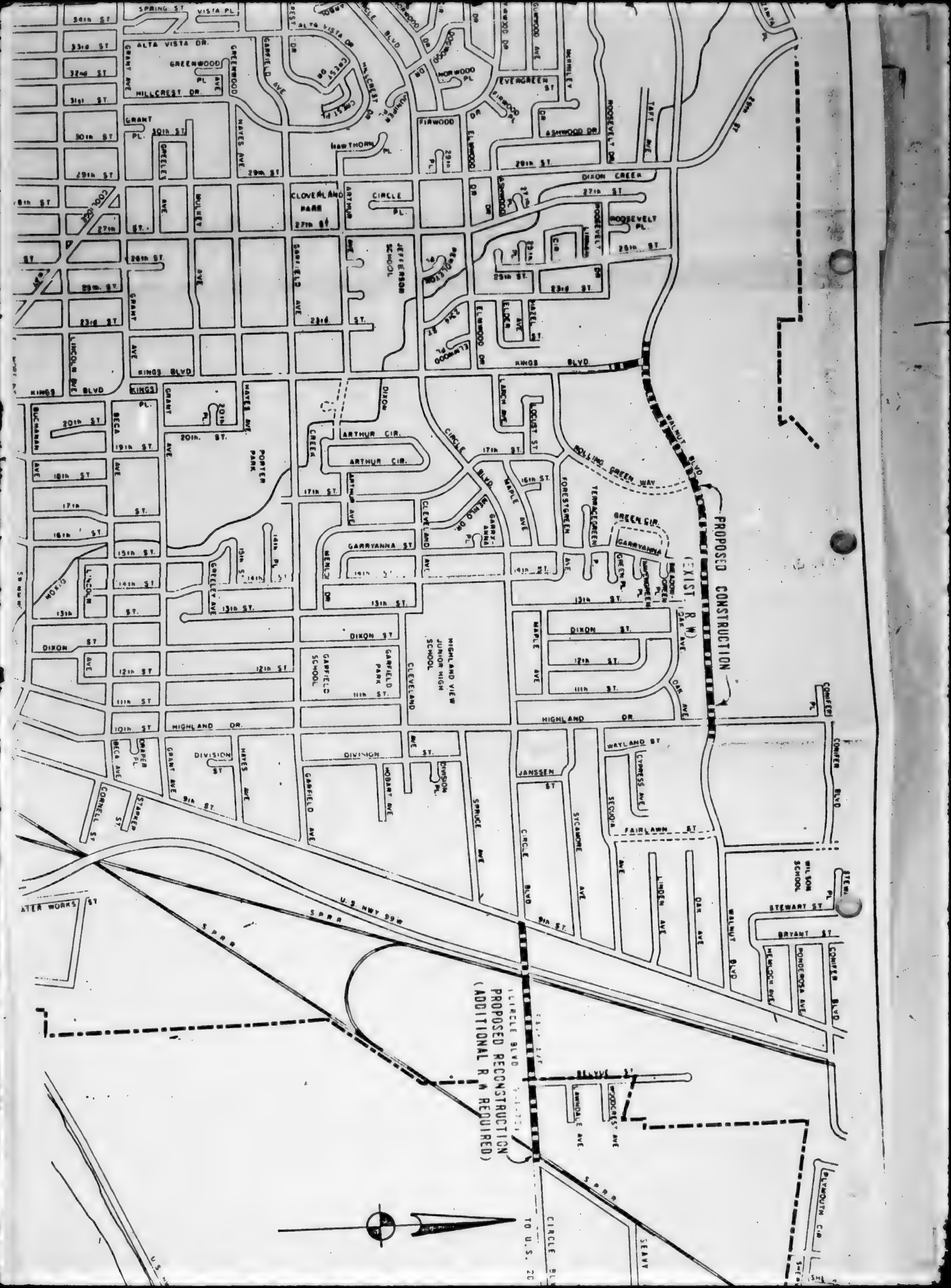

P-D. PLANNED DEVELOPMENT
(CONVALESCENT CENTER)
P-D. PLANNED DEVELOPMENT
(GARDEN APTS. 8-12 UNITS/ACRE)
W KINGS BLVD
END PROJECT
P-D. PLANNED DEVELOPMENT
(CONVENTION CENTER)
P-D. PLANNED DEVELOPMENT
(COMMERCIAL SHOPPING CENTER)
PROPOSED N.W. WALNUT BLVD EXTENSION
P-D. PLANNED DEVELOPME
[MULTIPLE FAMILY-24 UNITS ACR
P-D. PLANNED DEVELOPME
(GARDEN APTS. 8-12 UNIT A

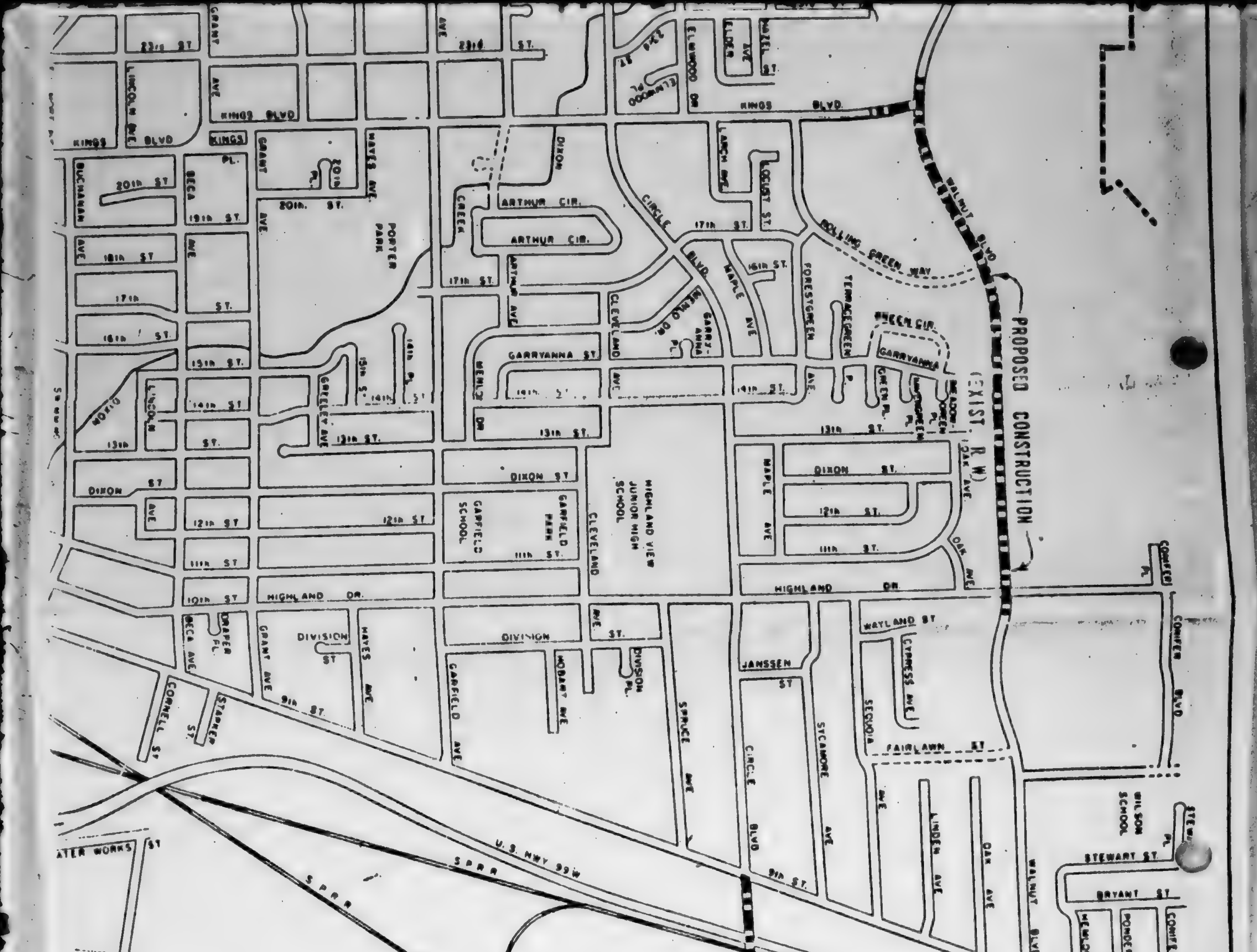

P-D PLANNED DEVELOPMENT
[MULTIPLE FAMILY-24 UNITS ACRE]
P-D PLANNED DEVELOPMENT
(GARDEN APTS., 8-12 UNIT ACRE)
BLVD EXTENSION
YANNA ST.
P.D. 18 UNITS PER ACRE
80' R/W (EXISTING)
R-1 RESIDENTIAL SINGLE FAMILY
13TH STREET
NW 13TH ST.
R-1 ONE FAMILY RESIDENTIAL
EXISTING FRONTAGE ROAD
R-1 RESIDENTIAL ONE FAMILY (USE-2 CHURCHES)
BEGIN PROJECT
DIXON STREET
12TH ST.
ST.
N W HIGHLAND DR.
DRIVE
R-T (RESIDENTIAL TRAILER)


ANNA ST.
P.D.
18 UNITS
PER
ACRE
80' R/W (EXISTING)
R-1 RESIDENTIAL
SINGLE FAMILY
13TH STREET
N.W. 13TH ST.
DIXON STREET
12TH ST.
ST.
DRIVE
R-1 ONE FAMILY RESIDENTIAL
EXISTING FRONTAGE ROAD
R-1 RESIDENTIAL
ONE FAMILY
(USE-2 CHURCHES)
BEGIN PROJECT
N W HIGHLAND DR.
R-T
(RESIDENTIAL TRAILER)



WALNUT BLVD
WALNUT PARK
PROPOSED FUTURE CONSTRUCTION
PONDEROSA AVE
CONSTRUCTION
OF - WAY
BLVD
UNIVERSITY
WITHAM HILL DR.
DUCHESS PL
QUEENS
BRITTA PL
CHRISTINE
PRINCESS ST.
DOUGLAS PL
DOUGLAS AVE
HOUSTON PL
MORGAN PL
WOODLAND DR.
JAMESON
BAXTER PL
WESTWOOD
DALE DR
KLINE PL
PROPOSED CONSTRUCTION
(EXIST. R/W)
ESTAVIEW CIR
HOOVER SCHOOL
WALNUT BLVD
ASPEN ST.
ARROWOOD
MONTEREY PL
MONTEREY DR
FERNWOOD CIR
SYLVAN
FOREST DR
36th ST.
LANTANA DR.
LYNWOOD CIR
ROOSEVELT DR.
ROBIN HOOD ST.
35th ST.
EDGEWOOD DR
SPRING ST.
VISTA PL
34th ST.
CIRCLE BLVD
33rd ST
ALTA VISTA DR.
32nd ST
GREENWOOD PL
GREENWOOD AVE
GRANT AVE
HILLCREST DR.
31st ST.
GARFIELD AVE
HILLCREST DR
NORWOOD PL
EVERGREEN ST
FIRWOOD DR
McKINLEY
GRANT PL.
30th ST
HAYES AVE
FIRWOOD DR.
ELMWOOD
TAFT AVE
ASHWOOD DR.
ROOSEVELT DR
29th ST
GREELEY
HAWTHORN PL
29th ST.
DIXON CREEK
27th ST
CLOVERLAND PARK
ARTHUR
CIRCLE PL.
27th ST
ROOSEVELT PL
25th ST
JEFFERSON SCHOOL
26th ST
25th ST.
23rd ST
GRANT
23rd ST.
KINGS BLVD
LINCOLN AVE
KINGS BLVD
KINGS


PROPOSED CONSTRUCTION
(EXIST. R/W)
CIRCLE BLVD
PROPOSED RECONSTRUCTION
(ADDITIONAL R/W REQUIRED)
TO U.S. 20
WALNUT BLVD
KINGS BLVD
HIGHLAND DR.
U.S. HWY 99W
S.P.R.R.
CIRCLE BLVD
DIXON CREEK
CLOVERLAND PARK
JEFFERSON SCHOOL
PORTER PARK
GARFIELD SCHOOL
GARFIELD PARK
HIGHLAND VIEW JUNIOR HIGH SCHOOL
WILSON SCHOOL
ROLLING GREEN WAY
GARRYANNA ST.
ARTHUR CIR.
DIXON ST
DIVISION ST.
WAYLAND ST
FAIRLAWN ST
STEWART ST
BRYANT ST
BELVUE ST
CONIFER BLVD
SEAVY
WATER WORKS ST
CORNELL ST
GRANT AVE
HAYES AVE
GARFIELD AVE
CLEVELAND AVE
SPRUCE AVE
SYCAMORE AVE
SEQUOIA AVE
LINDEN AVE
OAK AVE
MAPLE AVE
JANSSEN ST
LINCOLN AVE
BUCHANAN AVE
BECA AVE
GREELEY AVE
ALTA VISTA DR.
HILLCREST DR.
SPRING ST
VISTA PL.
GREENWOOD PL
NORWOOD PL
EVERGREEN ST
FIRWOOD
ASHWOOD DR
ELMWOOD DR
ROOSEVELT DR
TAFT AVE
HAWTHORN PL.
PLYMOUTH CIR.


PROPOSED CONSTRUCTION (EXIST. R/W)
CIRCLE BLVD
PROPOSED RECONSTRUCTION (ADDITIONAL R/W REQUIRED)
CIRCLE BLVD
TO U.S. 20
(1975 CONST)
WALNUT BLVD
KINGS BLVD
HIGHLAND DR
U.S. HWY 99W
S P R R
U.S. HWY 20
ROLLING GREEN WAY
GARRYANNA ST
HIGHLAND VIEW JUNIOR HIGH SCHOOL
GARFIELD SCHOOL
GARFIELD PARK
PORTER PARK
WILSON SCHOOL
ARTHUR CIR.
CLEVELAND AVE
DIXON ST
DIVISION ST
FAIRLAWN ST
STEWART ST
BRYANT ST
CONIFER BLVD
BELVUE ST
WATER WORKS ST
SEAVY AVE

9367 Form FHWA 121 (Rev. 5-73)

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

Box 300
Salem OR 97308

DATE: September 29, 1975

In reply refer to: 1041EC.1

SUBJECT: Oregon Project M-2120(-)
NW. Kings Blvd.-High~~way~~land Drive
Walnut Blvd., Benton County
Project Assessment

FROM : G. L. Green, Division Administrator

TO : Mr. F. B. Klaboe, Administrator & State Highway Engineer
Salem, Oregon

NOTED
E. S. HUNTER

We have reviewed the subject assessment submitted with Mr. Rulien's September 11, 1975 letter. While we agree with your major action determination and the need for an EIS, we do not concur with the project termini.

The assessment indicates that subject proposal is a segment of an improvement plan aimed at establishing Walnut Blvd. as a major arterial-collector street. Such a conversion would be the true generator of social, economical, and environmental impacts to the community and would require analysis prior to construction of the subject segment. We therefore recommend the study of the section from Witham Hill Drive to 9th Street with ✓ consideration given to the section from Harrison Blvd. to 9th Street.

We are returning the assessment for your reconsideration.

William H. Kappum
for G. L. Green

cc:
OSHD (Potter)
OSHD (Laux)
OSHD (Eddie Welsh, Reg Env)

RECEIVED
STATE HWY ENGR
OCT 1 '75
REFER TO Rulien
FOR
Info Inves R/D D/R Sign

cy Schroeder

9367

Corvallis

STATE OF OREGON 1859

OREGON STATE HIGHWAY DIVISION
East Salem Highway Building
2960 State Street
Salem, OR 97310

ROBERT W. STRAUB
GOVERNOR

F. B. KLABOE
Administrator of Highways

MANAGEMENT SECTION
ACTION
SEP 22 1975

September 19, 1975

Mr. Rolland Baxter
City Engineer
Corvallis City Hall
Corvallis, OR

Circle Blvd. & [redacted].
City of Corvallis

Attention: Mr. Gordon Wyatt

Dear Mr. Wyatt:

After talking with you this morning I contacted Leo Quesnel of the Federal Highway Administration and reviewed the Federal Aid requirements for both of these projects.

The FHWA agrees that your proposal to assess the adjoining property owners is a proper method of financing the City's share of the project. They also feel that using assessments to offset right of way costs is also proper if the Federal guidelines for right of way acquisition are followed. This will make it necessary for you to appraise the right of way in order to assure each property owner that the value of their right of way does not exceed the assessment.

The FHWA also pointed out that right of way acquisition should not be started until after the EIS has been completed. I am enclosing a portion from the Federal Aid Highway Program Manual which outlines these requirements.

In order to assure Federal participation in this project I would suggest you suspend right of way activity until the draft EIS has been approved. At that time I will be happy to meet with you and review your procedures for right of way acquisition. ?

Very truly yours,

ROD J. HENRY
Regional Right of Way Supervisor

RECEIVED
COUNTY & CITY SECTION
SEP 22 1975
☐ ENGR. ☐ COOR. ☐ OE ☐ AE ■ UE
☑ UPE ☒ CE ☑ RE ☐ RPE ☐

RJH:ns

cc: J. B. BOYD
PHIL STEARNS
RICHARD UNREIN

Form 81-734 3122

93167

L.

May 16, 1975

City of Corvallis
City Hall
Corvallis, OR 97330

Attention: Jerry Hortsch
City Recorder

MISC. CONTRACTS and
AGREEMENTS No. 5312

Gentlemen:

Attached for your records is a fully executed copy of an agreement covering the N.W. Kings Boulevard-N.W. Highland Drive (Corvallis) Section of N.W. Walnut Boulevard, FAU 2120, project in Benton County.

We have retained a fully executed copy of this agreement for the Transportation Commission's files.

Very truly yours,

C. W. Head
COMMISSION SERVICES

js

Attachment

bc: Don Harwell (agree. att.)

9367

Fall Ext'n

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

FILE: 37-1467

INTER-OFFICE CORRESPONDENCE
Salem, Oregon
April 25, 1975

Phillip O. Stearns

FROM: Phillip O. Stearns
REGIONAL FEDERAL AID ENGINEER

TO: D. N. Harwell Dick
COUNTY-CITY ENGINEER

SUBJECT: FAUS Project Agreements
Orders to Reader Service
Advance Deposit
City of Corvallis

Enclosed is Rolland Baxter's transmittal letter with subject agreements.

I have also enclosed three copies of the Order to Render Service for each project and a check from the City in the amount of $6,600,00. Please have a prefix assigned to each "Order" and return one copy to this office. ← did 4/30/75 RJ.

POS/la
cc: L. W. Rulien

RECEIVED
COUNTY & CITY SECTION
APR 29 1975
☑ ENGR. ☐ COOR. ☑ OE ☐ AE ☒ UE
☑ UPE ☑ CE ☑ RE ☐ RPE ☐

Fau Eftn

City of Corvallis
INCORPORATED JANUARY 1857

CORVALLIS CITY HALL
501 S.W. MADISON AVENUE
CORVALLIS, OREGON 97330

PUBLIC WORKS DEPARTMENT
(503) 752-4292

April 23, 1975

REGION 2 ENGINEER
RECEIVED
APR 24 1975
☐ RE ☐ RCE ☐ LNE ☐ RTE ☐ ROE
☐ UTE ☐ GEO ☐ FEO ☐ LLC ☐ RFE

Phillip O. Stearns
Region 2, Federal-aid Engineer
205 East Salem Highway Building
2960 State Street
P.O. Box 30
Salem, OR 97310

Dear Phil:

Enclosed please find three copies of project agreements for the Circle and Walnut Blvd. FAU projects. Attached to each agreement is also a copy of the City's resolution authorizing the Mayor and Recorder to sign said agreements.

On page 1, item 5, it should be noted that the width of the proposed improvement will probably be 50 feet as opposed to the indicated 40 feet. This is required to meet the guidelines established by the Federal and State agencies involved.

In accordance with paragraph 1, section 1, we are submitting herewith our deposit in the amount of $6,600. This sum is your estimated amount for the State's share in preliminary engineering costs which are being pursued at this time.

Your continued cooperation and assistance is certainly appreciated.

Sincerely yours,

Rolland Baxter

Rolland Baxter
City Engineer

RB/scr
cc: Public Works Director
Principal Engineer

RECEIVED
OSHD FINANCE BRANCH
Check # 06379 Amt $6,600.00
By Ce Date 4-29-75
For Circle Blvd (FAU 2110) Ext'n
Walnut Blvd (FAU 2120) Conn'n

RECEIVED
COUNTY & CITY SECTION
APR 29 1975
☑ ENGR. ☐ COOR. ☐ DE ☐ AE ☐ UE
☑ UPE ☐ CE ☐ RE ☐ RPE ☐

F.A.U.

Form E-[illegible]

RECEIVED
COUNTY & CITY SECTION
APR 29 1975
☒ ENGR. ☐ COOR. ☐ GE ☐ AE ☐ UE
☒ UPE ☐ CE ☐ RE ☐ RPE ☐

Oregon State Highway Department

Order to Render Service

(Or to Furnish Materials)

Party Requesting Service: City of Corvallis

Order No. 2-162

Date April 9, 1975

By: C. Dean Smith

City Manager (Official Capacity)

Prefix and account number to which work is to be charged 7823-900

Description and Location of Work To Be Performed or Materials To Be Furnished:

Perform preliminary engineering functions for the construction of Walnut Boulevard, FAU 2120, between Kings Boulevard and Highland Drive.

Estimate of Quantities and Cost

Citizens Input	(902)	$300
Final Design	(904)	750
Soils & Geology	(910)	1,000
Specifications	(921)	250
Environmental	(923)	400
Hearings	(980)	200
		$2,900

Basis of Payment:
☐ Monthly payments
☐ Single payment on completion of work
☒ Other basis as follows:

Advance Deposit

Amount of advance deposit (if any) $ 2,900

Deposit received by Secretary on

Authority from Requisitionist:
☒ Agreement dated March 21, 1975
☐ Letter to ...., date ....
☐ Oral request to ...., date ....

Department Authority:
☐ Order of Highway Commission
☐ Order of State Highway Engineer
☐ Head of department issuing order

Field information submitted by .... in letter dated ....

Expected date of completion of work or delivery of materials ....

Superintendent or engineer responsible for performance of work and submission of information for billing C.O. Fredrickson

Record of billing requests:

Number . . .			
Date			
Amount . . .			

Order prepared by Region 2 Office Department

Signed ....

Instructions: Department head or staff engineer approving order will send original copy to Office Engineer and will retain duplicate copy. He will also send copies to interested division engineer, resident engineer and/or maintenance superintendent.

SP*F190

9367

fan

FORM E-30

OREGON STATE HIGHWAY DIVISION
INTER-DEPARTMENT CORRESPONDENCE

Salem, Oregon
April 25, 1975

SUBJECT: N.W. Kings Blvd.-N.W. Highland
Drive Section
N. W. Walnut Blvd.
City of Corvallis
FAUS Project

To: Memo to File

The right of way for this project was obtained by the City of Corvallis several years ago through the dedication of various subdividions. The only additional right of way required will be slope easements and access control.

Rolland Baxter City Engineer has indicated that most of the owners have already agreed to donate the easements and access control. He said that the City will inform the owners in writing of their right to just compensation and request that the right of way be donated.

This method conforms to the requirements of Title III of the Uniform Act; and if the procedure outlined above is followed, the City will be in compliance with the Uniform Act.

ROD J. HENRY
Regional Right of Way Supervisor

RJH:ph
cc J. R. OAKES
P. STEARNS
D. UNREIN

RECEIVED
COUNTY & CITY SECTION
APR 28 1975
☑ ENGR. ☐ COOR. ☐ OE ☐ A ☒ UE
☑ UPE ☑ CE ☐ RE ☐ CPE ☐

9367

37-1467

OREGON STATE
HIGHWAY DIVISION

REGION 2

2960 E. STATE STREET • SALEM, OREGON • 97310 • Phone 378-2626

TOM McCALL
GOVERNOR

F. B. KLABOE
Administrator of Highways

April 10, 1975

Mr. C. Dean Smith
City Manager
Corvallis, Oregon 97330

Dear Mr. Smith:

Enclosed are four copies each of the proposed project agreements for the Circle Boulevard extension and Walnut Boulevard connection on the City of Corvallis FAU system.

Please review the agreements, and if satisfactory, have them presented to your City Council for their consideration. If approved, have the Council adopt a resolution authorizing the Mayor and Recorder to sign the agreement. Then forward three copies of the signed agreement and resolution authorizing the signatures to this office. Retain the extra copy of the agreement for your information. A fully-executed copy will be returned for your records.

In accordance with paragraph 1, Section 1, THINGS TO BE DONE BY CITY, please submit your deposit in the amount of $6,600.00, which is the estimated total cost of State's involvement in preliminary engineering for both projects. For your information, I have included copies of our form, "Order to Render Service". This shows a breakdown of cost for PE functions. A copy of Gordon Wyatt's letter indicating City's desires for State participation, is also enclosed.

Yours very truly,

C. O. Fredrickson
REGION 2 ENGINEER

By Phillip O. Stearns
Phillip O. Stearns
REGION 2 FEDERAL AID ENGINEER

APR 11 1975

POS/elk

Enc.

cc: L. W. Rulien

9367 fan

PROJECT RIGHT-OF-WAY ACQUISITION NOTIFICATION

2-28-75

The following project has been requested by a local government agency. This project will involve Federal Aid Highway Funds and the acquisition of right-of-way.

Section: NW Kings Blvd.-NW Highland Dr. Sec.
NW Walnut Blvd.

Project Federal Aid Number: M-2120(-)

Applicant: City of Corvallis

Contact: Rolland Baxter

Federal Aid Funds: FAS____ FAUS XX Other____

Date Project Approved by Trans. Comm.: 1/22/75

State to: ___ Review applicant's right-of-way acquisition program, or

X Acquire right-of-way in behalf of applicant, or

___ Not determined (contact applicant)

Remarks: Right-of-way acquisition is anticipated on the north side of Walnut Blvd. from Rolling Green Way to Highland Dr. and will be confirmed during the survey.

Richard Unrein

Richard Unrein, Urban Engineer
County-City Unit

February 28, 1975
Date

RU:scr

cc: Right-of-Way Engineer
Region 2 Engineer
Region 2 Federal Aid Engineer
Region 2 Right-of-Way Supervisor
FHWA Right-of-Way Officer

☑ ENGR. ☐ ASST. ☑ OE ☐ AE ■ UE
☑ UPE ☐ CE ☐ RE ☐ RPE ☐

2/18/75

Rev. 5/28/74 9367

12-9-74

FEDERAL AID URBAN SYSTEM PROJECT REQUEST

NOTE: This form is intended to collect general information for proposed projects so that the State and Federal Highway Administration will have a better understanding of the requested project. Please use the footnote area to answer any ambiguous questions or to explain any unusual conditions.

Date December 9, 1974

Applicant Agency City of Corvallis

Federal Aid System Route No. ______ Route Name ______

Project Name N. W. Walnut Blvd. Extension - Highland Drive to Kings Blvd.

Project Length 3600' Project Location (Attached sketch map)

Project Description Construction of a limited access roadway with a 44 foot curb to curb width. The roadway will flare to match a 60 foot existing street width at Kings Blvd. on the west end. The roadway between Highland Drive and 13th St. has a frontage road already constructed.

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COUNTY & CITY SECTION
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☐ UPE ☐ CE ☐ RE ☐ RPE ☐

Average Daily Traffic New Design Speed 35

Complete Applicable Sections:

I. ROADWAY DATA

1. Existing Roadway: (Attach sketch) Frontage Road (Highland to 13th)

Width 26' Travel Lanes 2 Shoulders No

Medians - Parking South side only

Sidewalks 5 foot curbline on south side only

Other ______

2. Desired Roadway Cross Section: (Attach sketch)

Width 44 Travel Lanes 4 Shoulders No

Medians No Parking No Parking

Curbed Full length of project Length Curb Radii 20-25 feet

Sidewalk/Bikeway No

Other Outer separator strip between construction and frontage road to be 10 feet wide (Highland to 13th)

FOOTNOTES: Storm drainage system to be constructed with catchbasins in roadway.

Description of Proposed Roadway Work Construction of a limited access roadway with a 44 foot curb to curb width, with a flare to match a 60 foot existing street width at Kings Blvd.

II. RIGHT-OF-WAY DATA

1. Existing Right-of-Way:

General Width 80 Minimum 80 Maximum 80

2. Will Additional Right-of-Way Be Needed? Yes Explain Some additional right-of-way is required on north side of project area, from Highland to approximately Rolling Green Way --- 15 feet maximum.

3. Will cost of additional right-of-way be included in project or will applicant acquire without cost to project? right-of-way is included in the project.

4. Will applicant acquire right-of-way and have State review negotiations? Yes ____ No X

5. Should State negotiate and acquire right-of-way in behalf of applicant? Yes

6. Should State prepare options? Yes X No ____

7. Is a public hearing necessary? Unknown
   (NOTE: If additional right-of-way is needed, or the improvement would have an adverse effect upon abutting real property, or if the layout or function of the facility or connecting streets or roads would be changed, an opportunity for a hearing must be afforded.)

8. Will there be any persons displaced from their homes, farms or business? No If so, explain ____
   (NOTE: No property owner shall be required to move from his home, farm, or business without at least 90 days' written notice prior to the intended vacation date.)

9. Will this project affect any park or recreation facility? No
   If so, explain ____

III. TRAFFIC CONTROL DATA

1. Existing Signalization: None

2. Proposed Signalization:

   Location None

   Type ____

   Phases ____

   Type of Suspension ____

Interconnected
Other

FOOTNOTES:

3. Permanent Signing:

Include in project or by applicant? By applicant

4. Permanent Striping:

Include in project or by applicant? By applicant

IV. ILLUMINATION DATA

1. Present Illumination and Location: None except on existing frontage road and intersections of Highland Drive and Kings Blvd. (21,000 lumen mercury vapor).

2. Proposed Illumination:

Location At intersections, by applicant
Type 21,000 lumen mercury vapor

V. STRUCTURE DATA

1. Existing Structure:

Location Not applicable
Type
Size
To Remain in Place?

2. Proposed Structure:

Location Not applicable

Is a particular type of structure and design desired?

Approximate size of proposed structure

Are sidewalk/bikeways desired?

Are any utilities to be attached to structure?

FOOTNOTES:

Are provisions for illumination desired?

Are there any unusual or complicating conditions?

VI. RAILROAD DATA

1. Are there any railroad crossings? Location
   Not applicable

   Type of existing crossing
   Existing crossing protection

   Name of Railroad
   Number of tracks: Mainline Siding Total
   Angle of Intersection
   Sight distance: (Direction) Distance
   (Direction) Distance
   Number of Trains: Passenger Speed
   Freight Speed

2. Will existing railroad crossing be altered?
   Extension of 48 inch storm drain system from Highland Drive west to approximately Garryanna Street.

VII. GENERAL INFORMATION

1. Other work or conditions not covered by proceeding sections

2. Applicant's Estimate of Cost for Requested Project:

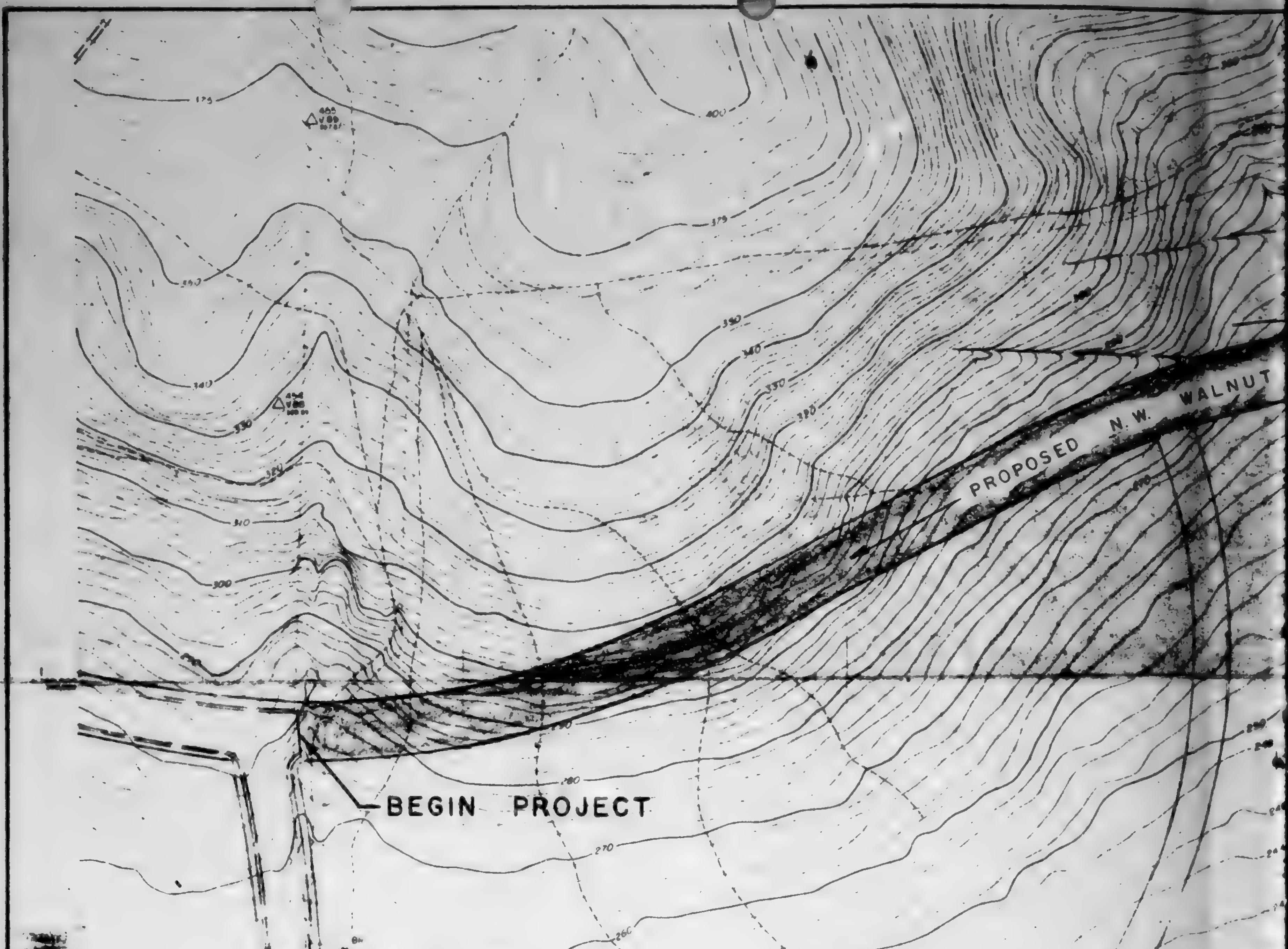
Roadway Work	$190,000
Right-of-Way Costs (If participating)	21,400
Traffic Control	600
Illumination	-0-
Structures	-0-
Railroad	-0-
Other	-0-
XXXXXXXXXy Engineering	32,000
PROJECT TOTAL	$244,000

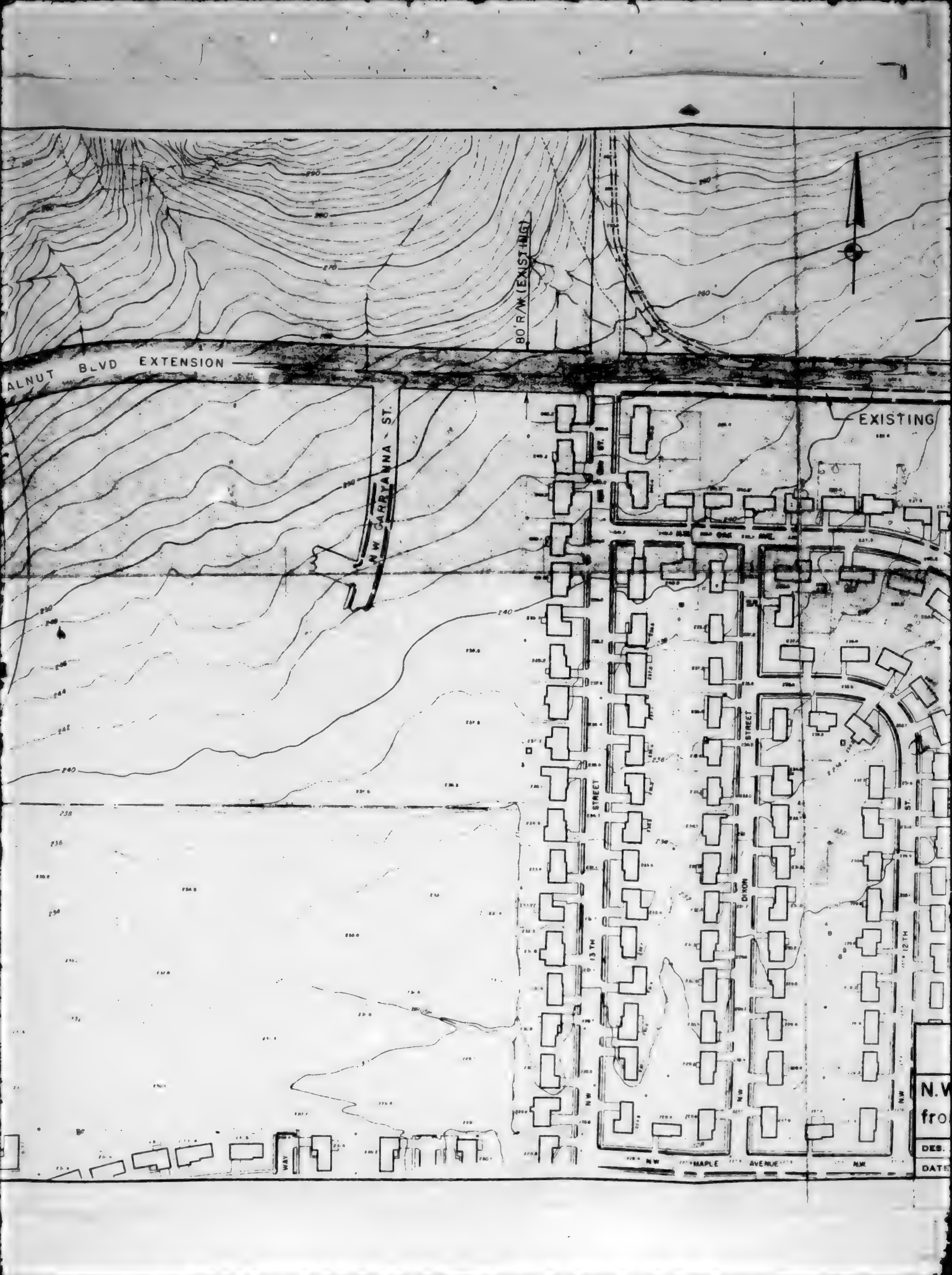
FOOTNOTES:

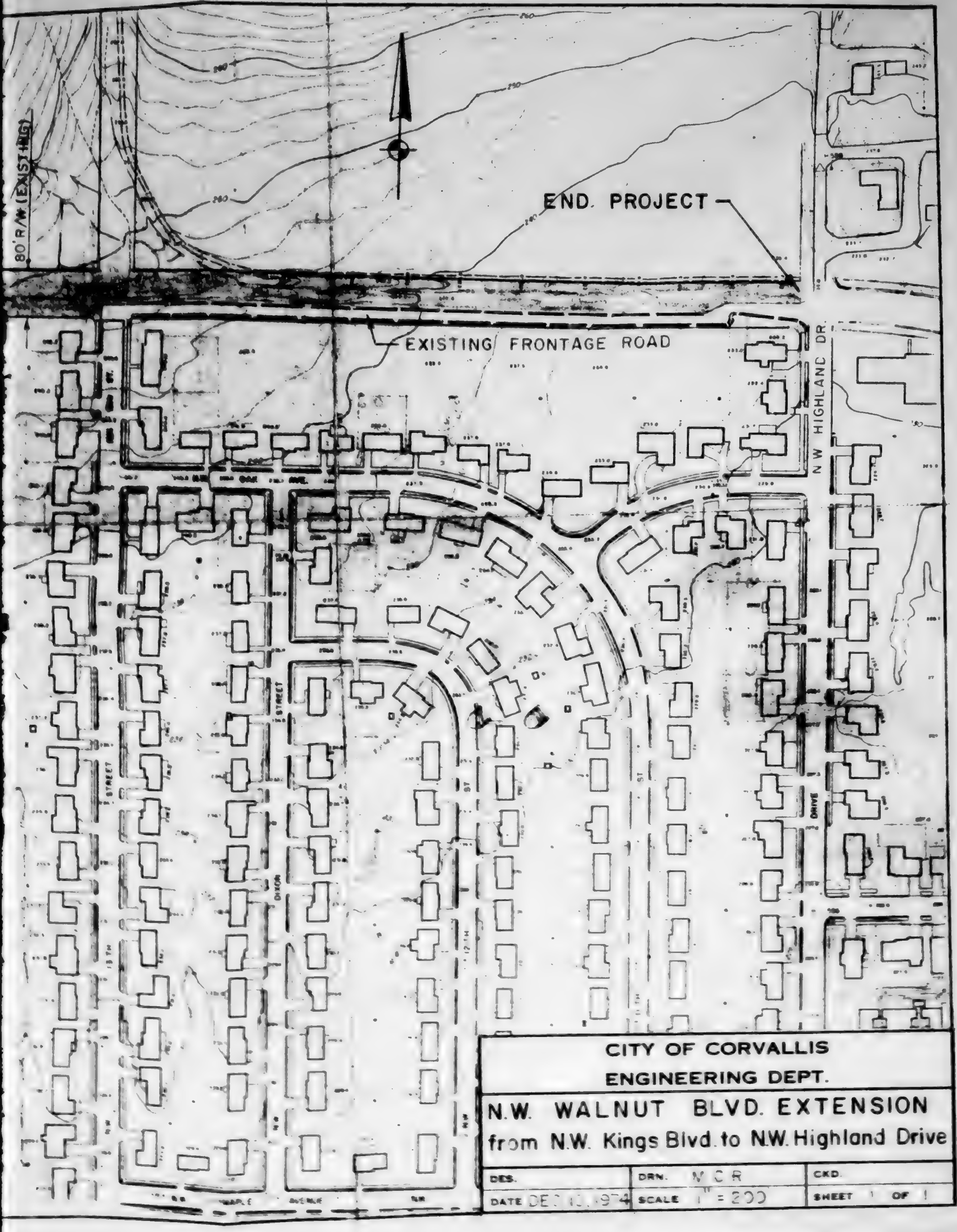
THIS APPLICATION IS AN OFFICIAL REQUEST FROM:

City of Corvallis
By G. Mc[illegible] Supt. Wtr. Div. 12/15/70
By C. Dean [illegible] City Mgr

Benton County
By
By
By


PROPOSED N.W. WALNUT
BEGIN PROJECT
N W VIKINGS BLVD
NW ROLLING GREEN WAY
400
370
350
340
330
320
310
300
280
270
260

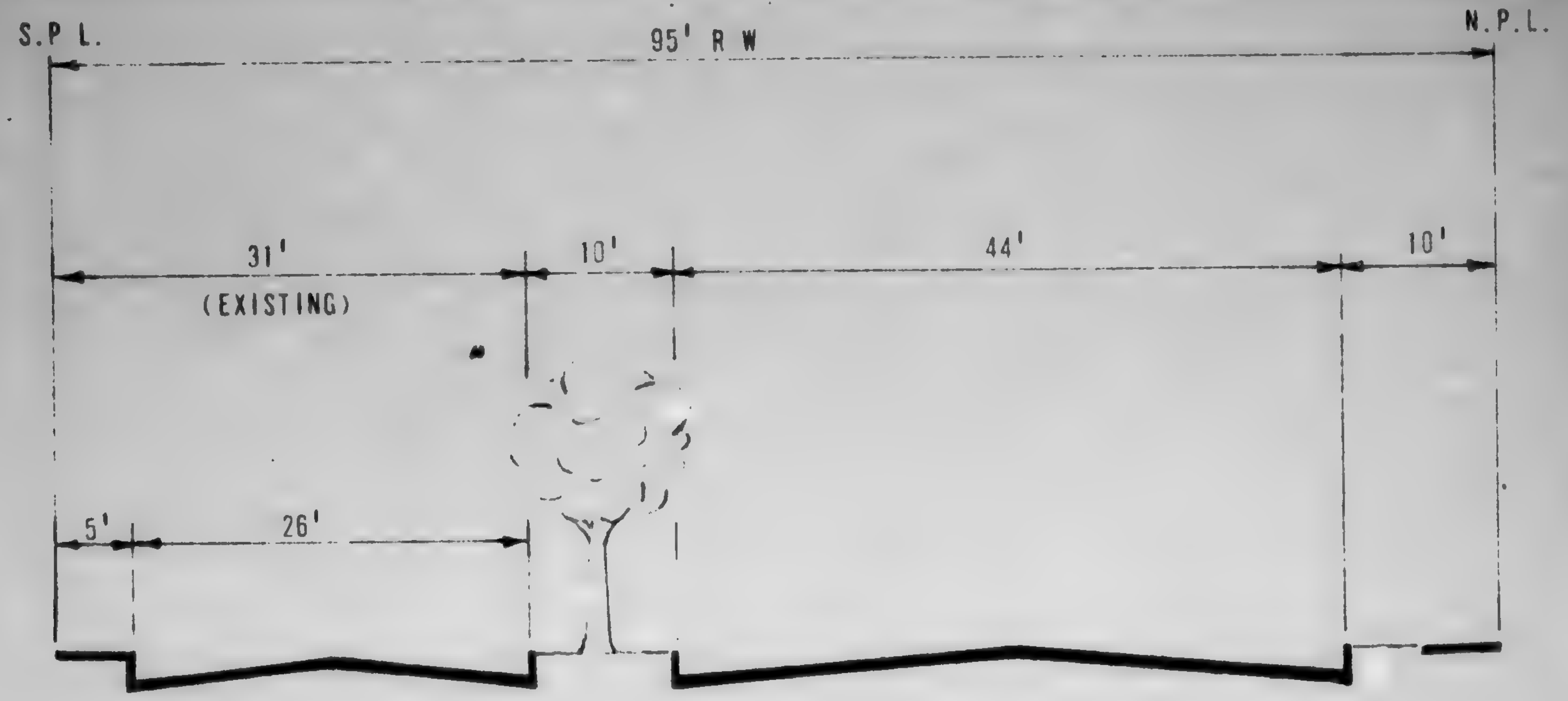

ALNUT BLVD EXTENSION
80' R/W (EXISTING)
N W GARRYANNA ST.
EXISTING
280
270
260
240
238
236
NW 13TH STREET
NW DIXON STREET
NW 12TH ST.
NW MAPLE AVENUE
N.W.
WAY
N.W
fro
DES.
DATE


80' R/W (EXISTING)
END PROJECT
EXISTING FRONTAGE ROAD
N W HIGHLAND DR.
STREET
ST
DRIVE
MAPLE
AVENUE

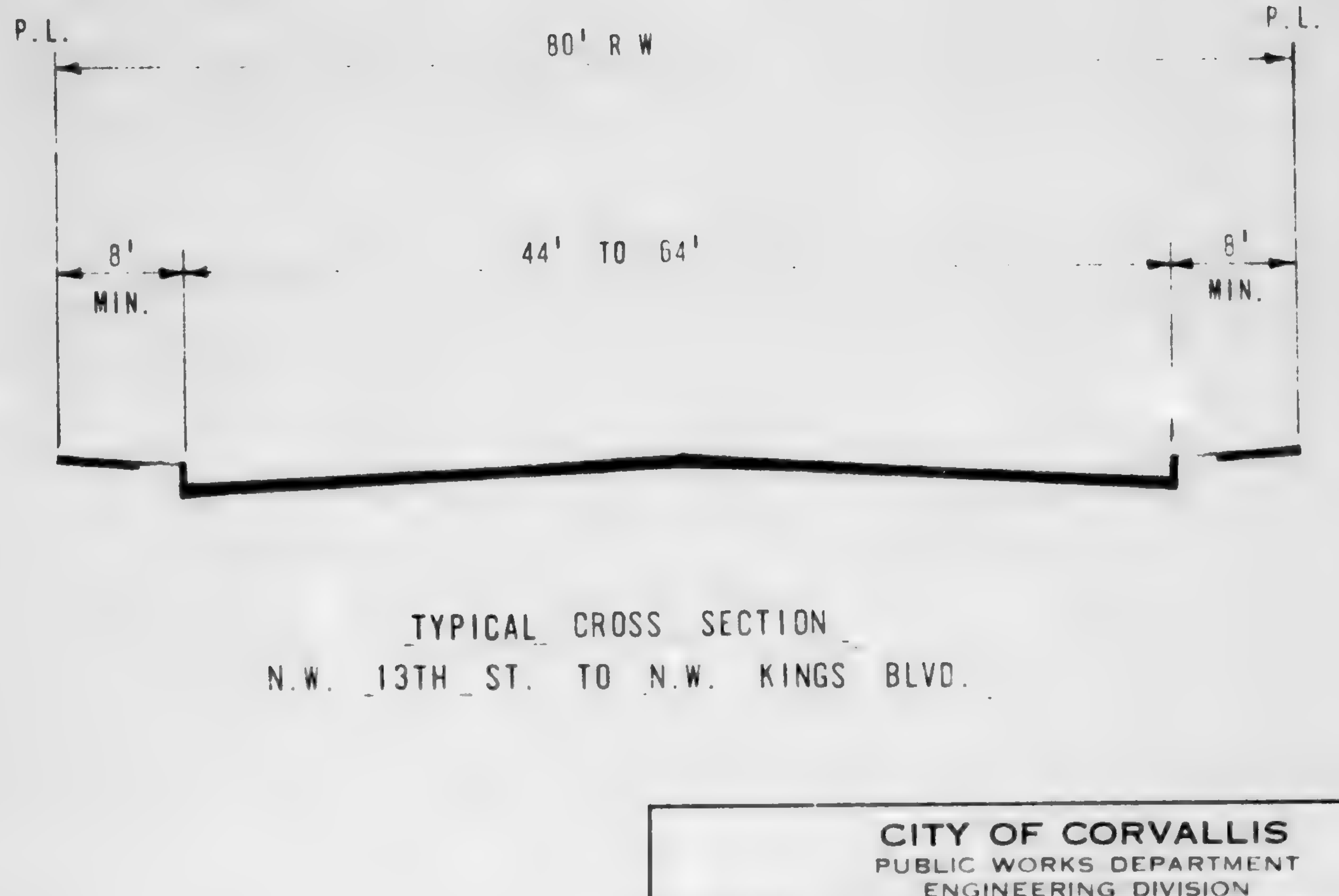
CITY OF CORVALLIS
ENGINEERING DEPT.

N.W. WALNUT BLVD. EXTENSION
from N.W. Kings Blvd. to N.W. Highland Drive

DES.	DRN. W C R	CKD.
DATE DEC 10, 1974	SCALE 1" = 200	SHEET 1 OF 1


S.P L.
95' R W
N.P.L.
31'
(EXISTING)
10'
44'
10'
5'
26'

TYPICAL CROSS SECTION
N.W. HIGHLAND DR. TO N.W. 13TH ST.

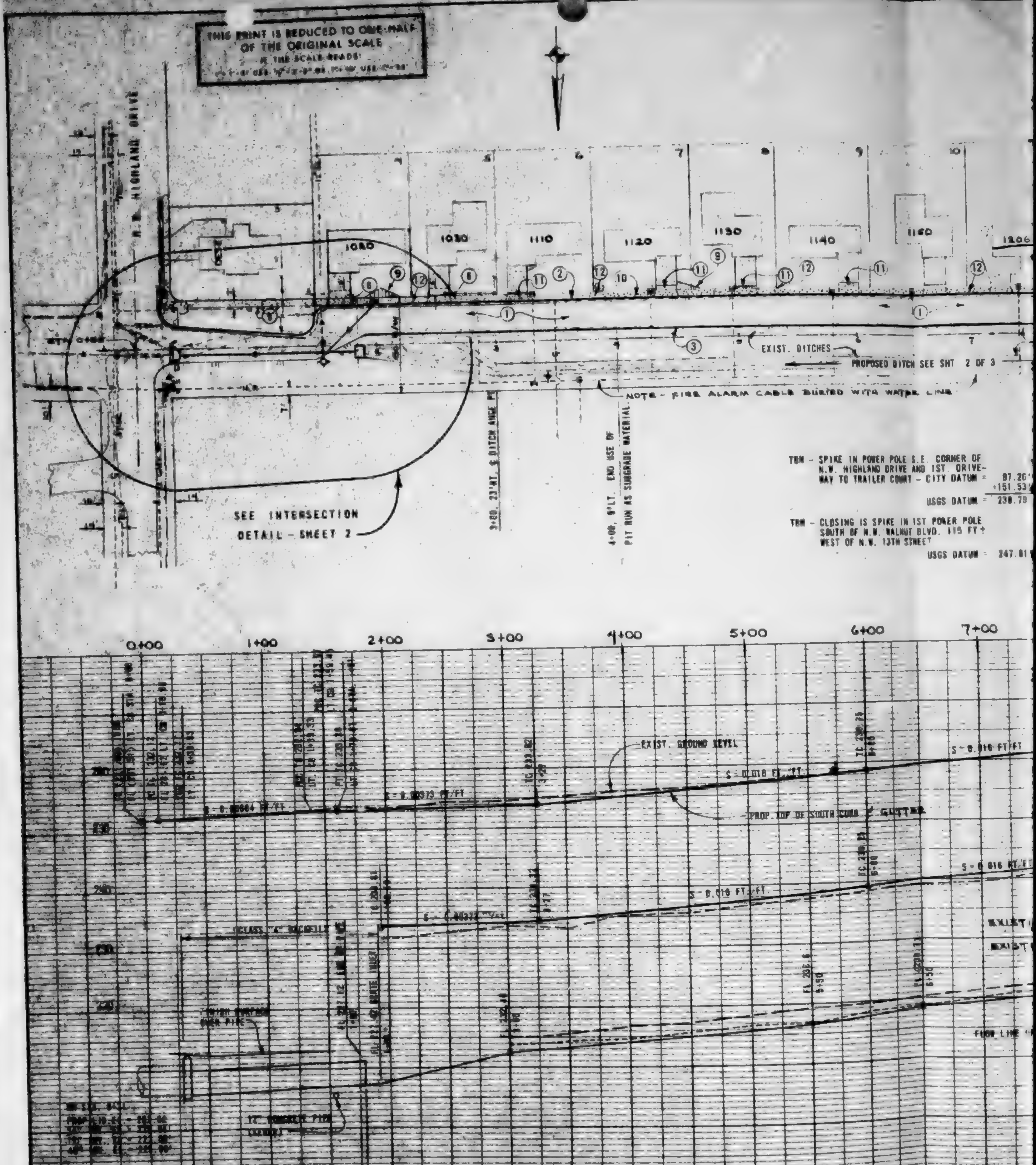

P.L.
80' R W
P.L.
8'
MIN.
44' TO 64'
8'
MIN.

TYPICAL CROSS SECTION
N.W. 13TH ST. TO N.W. KINGS BLVD.

CITY OF CORVALLIS
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

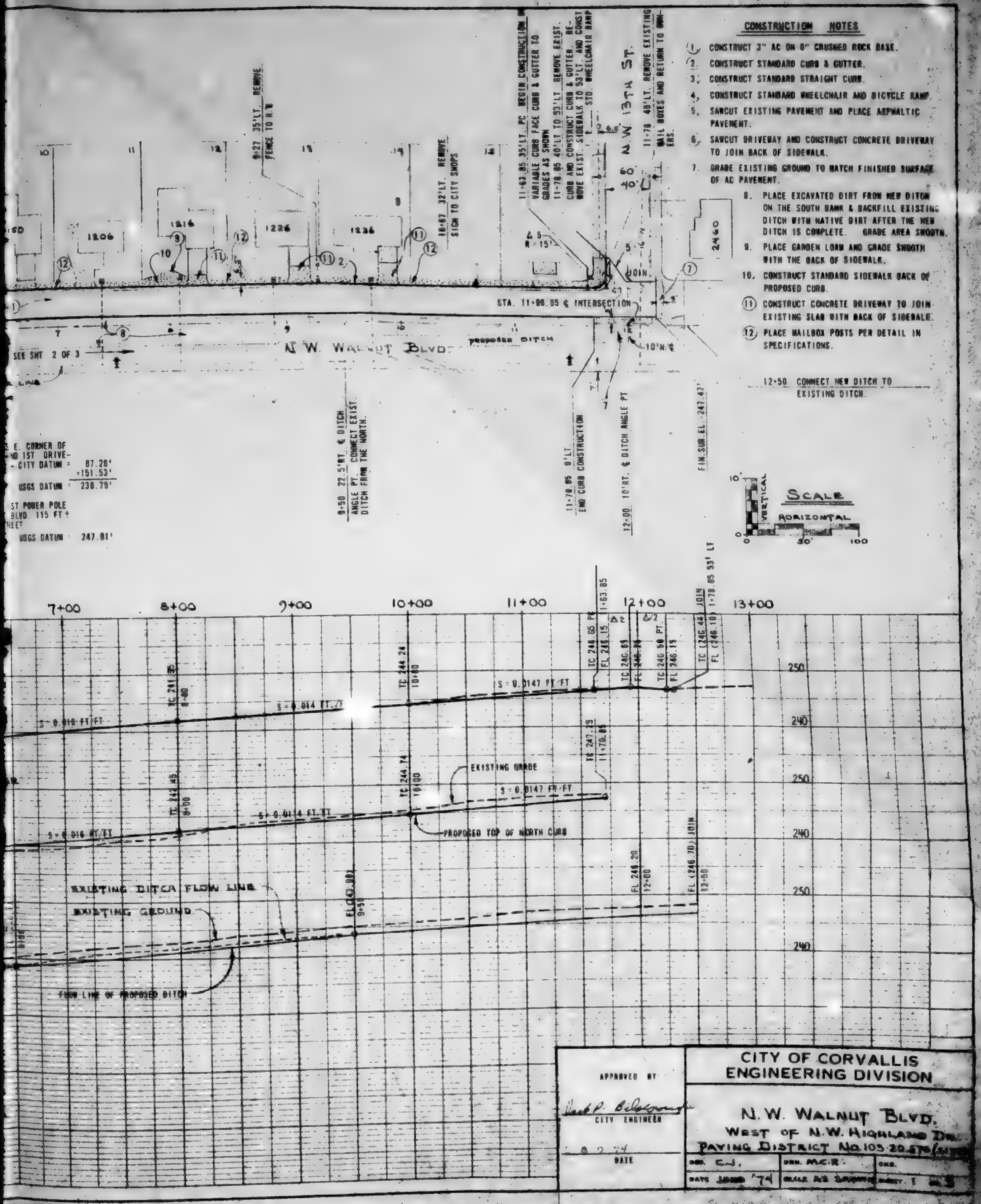
DESIRED ROADWAY CROSS SECTIONS
N.W. WALNUT BLVD. EXTENSION
N.W. HIGHLAND DR. TO N.W. KINGS BLVD

DES.	DRN. M.C.W.	CKD.
DATE DEC. 1974	SCALE NOT TO SCALE	SHEET OF


THIS PRINT IS REDUCED TO ONE-HALF
OF THE ORIGINAL SCALE
N.W. HIGHLAND DRIVE
1020
1030
1110
1120
1130
1140
1150
1206
EXIST. DITCHES
PROPOSED DITCH SEE SHT 2 OF 3
NOTE - FIRE ALARM CABLE BURIED WITH WATER LINE
3+00, 23'RT. & DITCH ANGLE PT.
4+00, 9'LT. END USE OF PIT RUN AS SUBGRADE MATERIAL.
SEE INTERSECTION DETAIL - SHEET 2
0+00
1+00
2+00
3+00
4+00
5+00
6+00
7+00
EXIST. GROUND LEVEL
S = 0.018 FT/FT
S = 0.00373 FT/FT
S = 0.00664 FT/FT
S = 0.016 FT/FT
PROP. TOP OF SOUTH CURB & GUTTER
CLASS "A" BACKFILL
12" CONCRETE PIPE
FLOW LINE
K+E

TBM - SPIKE IN POWER POLE S.E. CORNER OF N.W. HIGHLAND DRIVE AND 1ST. DRIVEWAY TO TRAILER COURT - CITY DATUM = 87.26'
+151.53'
USGS DATUM = 238.79

TBM - CLOSING IS SPIKE IN 1ST POWER POLE SOUTH OF N.W. WALNUT BLVD. 115 FT ± WEST OF N.W. 13TH STREET
USGS DATUM = 247.81


N. W. 13TH ST.
N.W. WALNUT BLVD.
PROPOSED DITCH
SEE SHT 2 OF 3
STA. 11+06.85 ℄ INTERSECTION
1206
1216
1226
1236
2460
60'
40'
Δ 5
R = 15'
JOIN
10' N ℄
9+27 35'LT. REMOVE FENCE TO R.W.
10+67 32'LT. REMOVE SIGN TO CITY SHOPS
11+63.85 35'LT. PC BEGIN CONSTRUCTION OF VARIABLE CURB FACE CURB & GUTTER TO GRADES AS SHOWN
11+70.85 40'LT TO 53'LT REMOVE EXIST. CURB AND CONSTRUCT CURB & GUTTER. REMOVE EXIST. SIDEWALK TO 53'LT. AND CONST STD. WHEELCHAIR RAMP
11+78 45'LT. REMOVE EXISTING MAIL BOXES AND RETURN TO OWNERS.
9+50 22.5'RT. ℄ DITCH ANGLE PT. CONNECT EXIST. DITCH FROM THE NORTH.
11+70.85 9'LT. END CURB CONSTRUCTION
12+00 10'RT. ℄ DITCH ANGLE PT
FIN.SUR.EL.-247.47'
S. E. CORNER OF
ND 1ST DRIVE-
- CITY DATUM = 87.26'
+151.53'
USGS DATUM = 238.79'
ST POWER POLE
BLVD. 115 FT ±
REET
USGS DATUM = 247.81'
SCALE
VERTICAL
10'
0
HORIZONTAL
0
50'
100
7+00
8+00
9+00
10+00
11+00
12+00
13+00
11+63.85
1+70.85 53' LT JOIN
Δ2
PT.
TC 241.85 8+00
TC 244.24 10+00
TC 246.65 PC
FL 246.15
TC 246.85
FL 246.35
TC 246.50 PT.
FL 246.15
TC (246.44) JOIN
FL (246.10)
S = 0.016 FT/FT
S = 0.014 FT./FT
S = 0.0147 FT/FT
TC 242.85 8+00
TC 244.74 10+00
TS 247.19 11+70.85
EXISTING GRADE
PROPOSED TOP OF NORTH CURB
FL 243.80 9+50
FL 246.20 12+00
FL (246.70) JOIN 12+50
EXISTING DITCH FLOW LINE
EXISTING GROUND
FLOW LINE OF PROPOSED DITCH
250
240
250
240
250
240

CONSTRUCTION NOTES

1. CONSTRUCT 3" AC ON 8" CRUSHED ROCK BASE.
2. CONSTRUCT STANDARD CURB & GUTTER.
3. CONSTRUCT STANDARD STRAIGHT CURB.
4. CONSTRUCT STANDARD WHEELCHAIR AND BICYCLE RAMP.
5. SAWCUT EXISTING PAVEMENT AND PLACE ASPHALTIC PAVEMENT.
6. SAWCUT DRIVEWAY AND CONSTRUCT CONCRETE DRIVEWAY TO JOIN BACK OF SIDEWALK.
7. GRADE EXISTING GROUND TO MATCH FINISHED SURFACE OF AC PAVEMENT.
8. PLACE EXCAVATED DIRT FROM NEW DITCH ON THE SOUTH BANK & BACKFILL EXISTING DITCH WITH NATIVE DIRT AFTER THE NEW DITCH IS COMPLETE. GRADE AREA SMOOTH.
9. PLACE GARDEN LOAM AND GRADE SMOOTH WITH THE BACK OF SIDEWALK.
10. CONSTRUCT STANDARD SIDEWALK BACK OF PROPOSED CURB.
11. CONSTRUCT CONCRETE DRIVEWAY TO JOIN EXISTING SLAB WITH BACK OF SIDEWALK.
12. PLACE MAILBOX POSTS PER DETAIL IN SPECIFICATIONS.

12+50 CONNECT NEW DITCH TO EXISTING DITCH.

APPROVED BY

Vecl P. Bilodeau
CITY ENGINEER

8 2 74
DATE

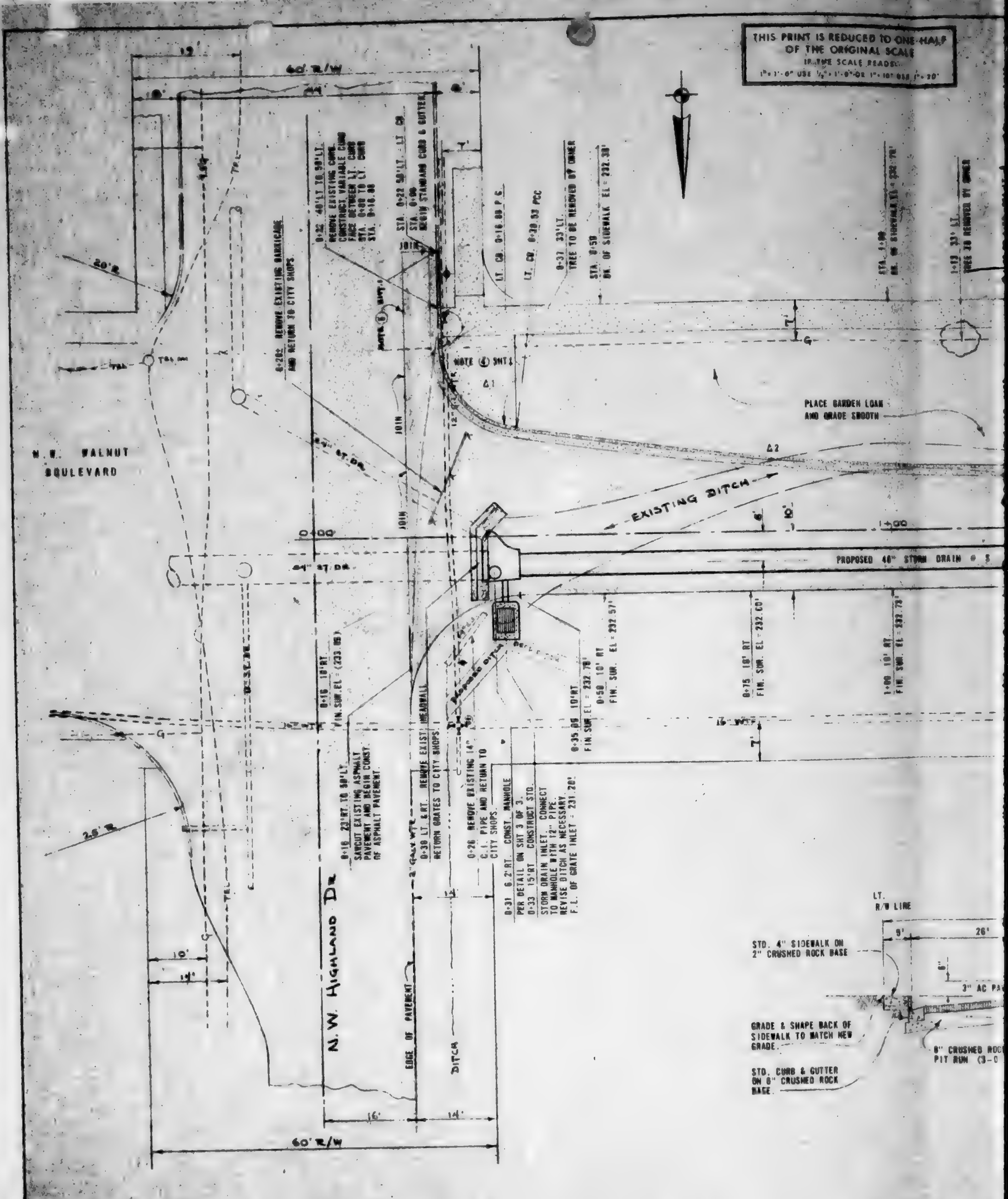
CITY OF CORVALLIS
ENGINEERING DIVISION

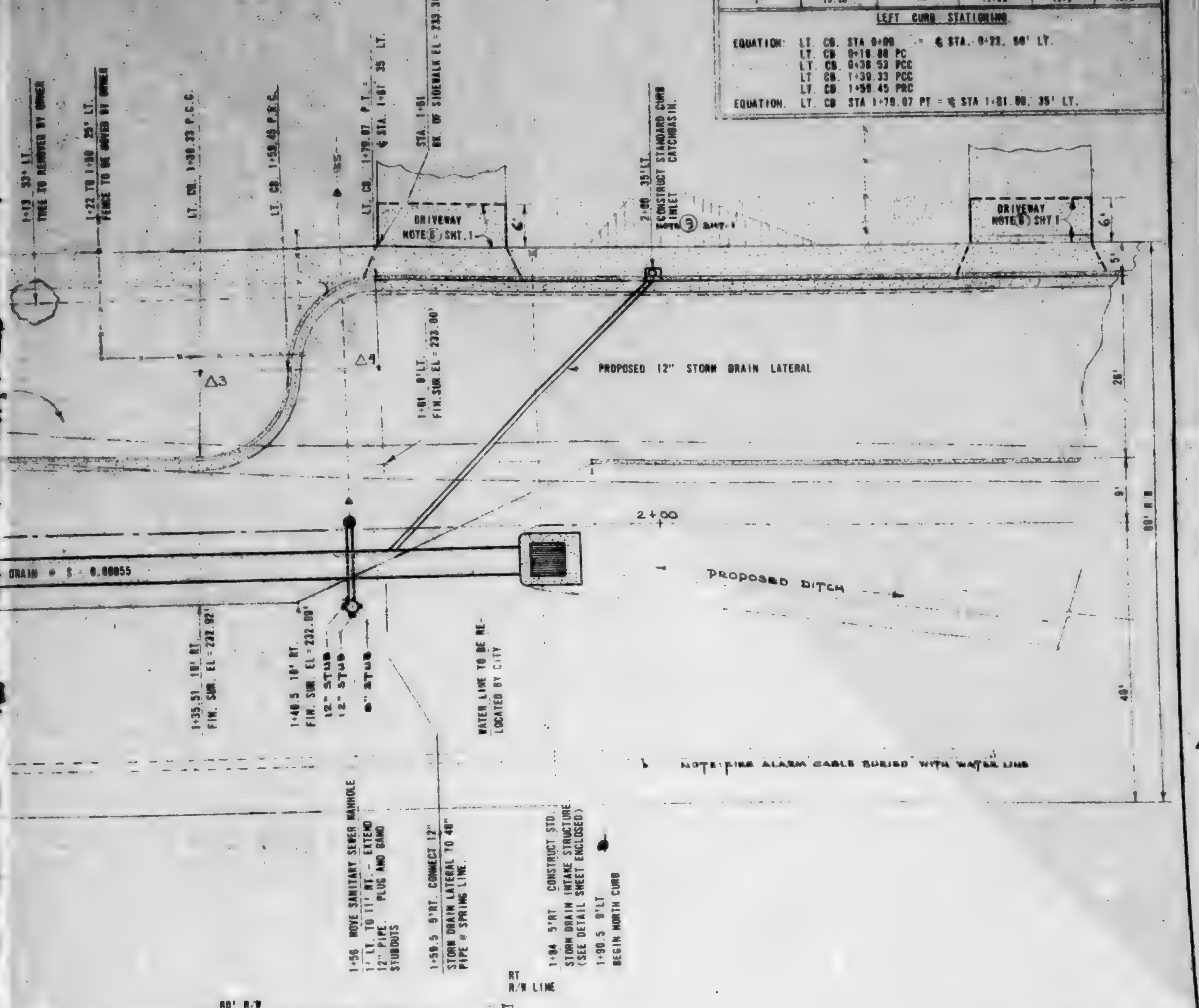
N.W. WALNUT BLVD.
WEST OF N.W. HIGHLAND DR.
PAVING DISTRICT No. 103-20.570 [illegible]

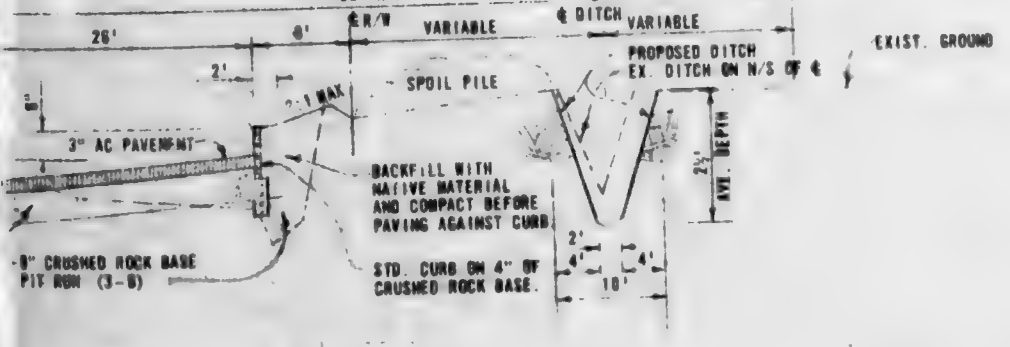
DSN. C.J.	DRN. M.C.R.	CKD.
DATE JUNE '74	SCALE AS SHOWN	SHEET 1 OF 3

ATS 1, PLAN-PROFILE

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'


60' R/W
19'
10'
24'
8'
7'
20' R
TEL
N.W. WALNUT BOULEVARD
0+20± REMOVE EXISTING BARRICADE AND RETURN TO CITY SHOPS
0+32 40'LT TO 90'LT. REMOVE EXISTING CURB. CONSTRUCT VARIABLE CURB FACE BETWEEN LT. CURB STA. 0+00 TO LT. CURB STA. 0+16.00
STA. 0+22 50'LT. - LT. CR. STA. 0+00 BEGIN STANDARD CURB & GUTTER
JOIN
NOTE ⑥ SHT 1
NOTE ④ SHT 1
Δ1
Δ2
LT. CR. 0+16.00 P.C.
LT. CR. 0+30.53 PCC
0+37 33'LT. TREE TO BE REMOVED BY OWNER
STA. 0+50 BK. OF SIDEWALK EL = 232.30'
STA. 1+00 BK. OF SIDEWALK EL = 232.70'
1+13 33' LT. TREE TO BE REMOVED BY OWNER
PLACE GARDEN LOAM AND GRADE SMOOTH
G
24" ST. DR.
EXISTING DITCH
0+00
1+00
6'
10'
PROPOSED 48" STORM DRAIN # 5
0+16 10'RT. FIN. SUR. EL = (233.05)
0+16 23'RT. TO 50'LT. SAWCUT EXISTING ASPHALT PAVEMENT AND BEGIN CONST. OF ASPHALT PAVEMENT
2" GALV WTR
0+30 LT. & RT. REMOVE EXIST. HEADWALL RETURN GRATES TO CITY SHOPS
0+26 REMOVE EXISTING 14" C.I. PIPE AND RETURN TO CITY SHOPS
0+31 6.2'RT. CONST. MANHOLE PER DETAIL ON SHT 3 OF 3.
0+33 15'RT CONSTRUCT STD. STORM DRAIN INLET. CONNECT TO MANHOLE WITH 12" PIPE. REVISE DITCH AS NECESSARY. F.L. OF GRATE INLET = 231.20'
PROPOSED DITCH
0+35.00 10'RT FIN. SUR. EL = 232.78'
0+50 10' RT FIN. SUR. EL = 232.57'
0+75 10' RT FIN. SUR. EL = 232.60'
1+00 10' RT FIN. SUR. EL = 232.73'
16" WTR
7'
26' R
N.W. Highland Dr.
EDGE OF PAVEMENT
DITCH
10'
14'
16'
14'
60' R/W
LT. R/W LINE
9'
26'
6"
3" AC PA
STD. 4" SIDEWALK ON 2" CRUSHED ROCK BASE
GRADE & SHAPE BACK OF SIDEWALK TO MATCH NEW GRADE.
STD. CURB & GUTTER ON 8" CRUSHED ROCK BASE.
8" CRUSHED ROC
PIT RUN (3-0


1+13 33' LT.
TREE TO BE REMOVED BY OWNER
1+22 TO 1+80 25' LT.
FENCE TO BE MOVED BY OWNER
LT. CB. 1+30.33 P.C.C.
LT. CB. 1+58.45 P.R.C.
35'
LT. CB. 1+79.07 P.T. = ℄ STA. 1+81 35' LT.
STA. 1+81
BK. OF SIDEWALK EL = 233.30'
DRIVEWAY
NOTE ⑥ SHT. 1
6'
2+00 35' LT.
CONSTRUCT STANDARD CURB INLET CATCHBASIN.
NOTE ③ SHT. 1
DRIVEWAY
NOTE ⑥ SHT. 1
6'
5'
Δ3
Δ4
1+81 9' LT.
FIN. SUR. EL = 233.00'
PROPOSED 12" STORM DRAIN LATERAL
26'
9'
60' R/W
2+00
DRAIN @ S = 0.00055
PROPOSED DITCH
1+35.51 10' RT.
FIN. SUR. EL = 232.92'
1+40.5 10' RT.
FIN. SUR. EL = 232.99'
12" STUB
12" STUB
8" STUB
WATER LINE TO BE RE-LOCATED BY CITY
40'
NOTE: FIRE ALARM CABLE BURIED WITH WATER LINE
1+56 MOVE SANITARY SEWER MANHOLE
1' LT. TO 11' RT. - EXTEND
12" PIPE. PLUG AND BAND
STUBOUTS
1+59.5 5' RT. CONNECT 12"
STORM DRAIN LATERAL TO 48"
PIPE @ SPRING LINE.
1+84 5' RT CONSTRUCT STD.
STORM DRAIN INTAKE STRUCTURE
(SEE DETAIL SHEET ENCLOSED)
1+90.5 9' LT
BEGIN NORTH CURB
RT
R/W LINE


60' R/W
26'
8'
℄ R/W
VARIABLE
℄ DITCH
VARIABLE
EXIST. GROUND
PROPOSED DITCH
EX. DITCH ON N/S OF ℄
2'
SPOIL PILE
2:1 MAX
6"
3" AC PAVEMENT
BACKFILL WITH
NATIVE MATERIAL
AND COMPACT BEFORE
PAVING AGAINST CURB
8" CRUSHED ROCK BASE
PIT RUN (3-8)
STD. CURB ON 4" OF
CRUSHED ROCK BASE.
2½'
AVE. DEPTH
2'
4'
4'
10'

TYPICAL SECTION

NOT TO SCALE

LEFT CURVE DATA					
CURVE INFO.	Δ1	Δ2	Δ3	Δ4	Δ5
R	15'	1140.23'	12.5'	12.5'	15'
Δ	82°41'50"	5°3'54"	82°14'10"	90°0'	90°0'
L	21.65'	100.80'	18.12'	19.63	23.56'
T	13.20'	—	12.99'	12.5'	15.0

LEFT CURB STATIONING

EQUATION: LT. CB. STA 0+00 = ℄ STA. 0+22, 50' LT.
LT. CB 0+16.88 PC
LT. CB. 0+38.53 PCC
LT CB. 1+30.33 PCC
LT. CB. 1+58.45 PRC
EQUATION. LT. CB STA 1+79.07 PT = ℄ STA 1+81.00, 35' LT.

APPROVED BY:

CITY ENGINEER

7-9-74
DATE

CITY OF CORVALLIS
ENGINEERING DIVISION

INTERSECTION DETAIL
N.W. WALNUT BOULEVARD
@ N.W. HIGHLAND DRIVE
PAVING DISTRICT NO. 103-20.576(51772)

NO.	DATE:	REVISION	BY:	DES. C.J.	DSN. MCE	CHK.
				DATE JUNE, 1974	SCALE 1" = 10'	SHEET 2 OF 3

1981 Lake Rd. @ Oatfield Rd.- 9368
34th Ave. (Milwaukie) & Oatfield Rd.
(Grading, paving & signals)

C+A 6875 1-26-79
6-25-80
5-18-81

6963 4-11-79

9368

CITY OF MILWAUKIE

PUBLIC WORKS DEPARTMENT
In the City Hall • phone 659-5171

April 24, 1987

Gary Zehner
State Highway Department
309 Transportation Building
Salem, Oregon 97310

RE: Oatfield Road at Lake Road
IX 9665 (5) (8) (10)
Contract 9368, Agreement 6875
Final cost

As per your request, enclosed is a copy of the letter I sent to Rick Kuehn last December regarding cost overruns for the Oatfield/Lake Road project.

Please accept my apologies for overlooking the need to send you a copy at the time. I will try to include you in future correspondence.

Thank you for your attention to this matter. Please contact me if you have any further questions.

Sincerely yours,

Steven M. Hall, P.E.
Public Works Director

enclosure: letter, analysis

cc: Wayne Schulte
Anne Hernandez

PROGRAM SECTION
Manager ____ Resource Unit ____
FA Unit ____ Program Unit ____
APR 27 1987
Refer To ________
R/D ____ Act ____ Reply ____
Disc ____ Info ____ File ____

CITY HALL • 10722 S.E. MAIN STREET • MILWAUKIE, OREGON 97222 • TELEPHONE (503) 659-5171

December 23, 1986

Richard A. Kuehn, P.E.
Region Engineer
Highway Division, Region 1
Dept. of Transportation
9002 SE McLoughlin Blvd.
Milwaukie, Oregon 97222

RE: Oatfield Road at Lake Road
Final Cost
IX 9665 (5) (8) (10)
Contract 9368, Agreement 6875

Dear Rick:

I wish to thank you for your assistance in resolving the storm drainage problem at Highway 224 and Lake Road a few months ago.

Unfortunately, our second contact involves a major problem over the final billing for the Oatfield and Lake Road project. I am including a copy of the intemized billing and my analysis of the charges. As I note in the report, the increased right-of-way costs was expected and I was regularly informed of the progress and difficulties involved during acquisition of the parcels of land.

On the other hand, I was never informed of the increased costs of design (PE), construction, or construction engineering; with the exception of a notice to increase PE costs from $9,000 to $16,000, and one change order. I had anticipated about $8,000 to $9,000 in additional billings because of the right-of-way acquisition difficulties. I realize that you were not District Engineer at the time of this project, but you have inherited it at this point in time.

The City's Street Department cannot afford $25,000 surprises!

I have included a letter from Donald Bieker of ODOT with reasons and details of the construction engineering overrun. As you will note, the substantial overrun was attributable almost entirely to what I would term an "incomplete or deficient" design. I do not believe the City should be responsible for costs incurred because of these internal ODOT errors.

If I were using a private sector engineering firm, the contract would normally be a cost-plus contract to a maximum amount for services. In this instance, the firm would "absorb" those overruns unless a written agreement between the parties allowed changes in the written contract.

I am asking ODOT, as our "public sector engineering firm" to reconsider the overruns and billing to the City of Milwaukie.

Until this is resolved, the City shall not remit any funds to ODOT.

I will await your response and be available for discussion of this request. If this cannot be resolved at your office, I would like to know with whom I should continue my appeal on behalf of Milwaukie.

Sincerely yours,

Steven M. Hall, P.E.
Public Works Director

cc: Hugh Brown, City Manager

enclosure: ASCE Cost graphs
invoice
itemized statement
letter, Bieker
letters, background (6)
cost analysis

SMH/cjl

CITY OF MILWAUKIE
Department of Public Works
OATFIELD & LAKE ROADS
COST ANALYSIS
December 1986

Final billing from the Oregon Department of Transportation (ODOT) for Project IX-9665-(5)(8)(10) was received on 1 December 1986. Cost overruns on the project were substantial, particularly in Preliminary Engineering (P.E.) and Construction Engineering. There was also a large overrun in Right-of-Way (R/W) acquisition which was due to the difficulty in reaching agreement with property owners and litigation costs. The R/W costs seem appropriate, considering the circumstances. The following information is for comparison of what is considered "normal" versus the billed costs for P.E. and Construction Engineering.

PRELIMINARY ENGINEERING (P.E.)

P.E. includes surveying, design, right-of-way analysis and specification preparation to have a project bid-ready. The project construction costs are $172,930.87 excluding liquidated damages in the amount of $2,250. The total P.E. costs billed is $25,474.17, or 14.7% of the construction costs.

The American Society of Civil Engineers Manual 45 (1972) is a well accepted "norm" for setting engineering fees in the private sector.

COMPARISON/HISTORY

ITEM	DATE/SOURCE	AMOUNT	CONSTRUCTION % COSTS
ODOT PE Estimate	1/79	$ 9,000	5.2
ODOT PE Revised Estimate	4/80	16,000	9.3
ODOT PE Actual Billing	2/86	25,474	14.7
ASCE Manual 45	"Average Index"*	14,350	8.3*
ASCE Manual 45	"Above Average" Index*	18,330	10.6*

* See Exhibit "A"

This project would compare to the ASCE "Average" index which should have P.E. costs of about 8.3%, not 14.7% as charged by ODOT. Based on the many private sector project contracts I have negotiated, costs are "out of line" and high.

CONSTRUCTION ENGINEERING (C.E.)

C.E. includes construction surveying and full-time project inspection. The total C.E. costs billed is $32,791.98 with an additional $4,160.71 in the materials testing and miscellaneous administrative costs. The C.E. billed costs is $19.0% of the construction cost ($172,930.87). The original C.E. authorized was $13,763.79 or 8.0% of the construction costs.

Using ASCE Manual 45 figures, surveying should be 2 - 3% and full-time inspection at 2 - 3%. Using the high number, inspection and surveying should be about $10,400.

The Federal grant places a limitation of 15% of their 85%* participation for C.E., and ODOT exceeded the Federal maximum by $8,775.55. This amount is billed in total to the City of Milwaukie. These billed costs are totally unacceptable to the City of Milwaukie as they are about 5% above the liberal Federal guidelines.

A letter and background from Donald Bieker gives an explanation of the cost overrun. He attributes a bulk of the overrun to "a major alignment change....to correct this unsafe condition". This "unsafe condition" was produced during the design phase, or P.E.

* ODOT Salem, Gary Zehner

SUMMARY

Preliminary Engineering (P.E.)

- Overran a revised "authorization" by 59%!

Original P.E.	$ 9,000
Revised P.E.	$16,000
Actual Billing	$25,474

Construction Engineering (C.E.)

- Overran "authorization" by 138%!

Authorized	$13,764
Actual Billing	$32,792

- A majority of the overrun in C.E. is admitted to be caused by correction of a design flaw in P.E.
- Total C.E. costs overran maximum allowable 15% by $8,775.55!
- The total P.E. & C.E. are 33.7% of the construction costs.

P.E.	$ 25,474
C.E.	$ 32,792
Construction	$172,931

- According to American Society of Civil Engineers Manual 45, total PE plus CE should be 12.3 - 18.6%.

HIGHWAY DIVISION 9368

INVOICE

		A 02	CURRENT DOCUMENT NUMBER **144392**
YOUR ORDER NUMBER	BILLING REQ. NUMBER CA 5329	DATE 11/24/86	VENDOR NUMBER 0001022678-00

City of Milwaukie
10722 SE Main St.
Milwaukie, OR 97222

SEND REMITTANCE TO:
OREGON STATE HIGHWAY DIVISION
434 TRANSPORTATION BUILDING
SALEM OR 97310-0780

T.C.	E.A. SUB JOB	SPECD	ORG. UNIT	OBJ DTL	ACT.	REVENUE SOURCE	AGY. SRC.	AMOUNT
617	C09368-011	L02	8017			844010		$24,970.87

PROG	APP SYM	FUND CODE	FUND DETAIL	FUND SOURCE

FOLD

DESCRIPTION:	TOTAL PRICE
Final Billing 1X-9665 (5) (8) (10)	
Contract 9368 Agreement 6875	
Oatfield Road at Lake Road	
Itemized statement attached.	
Preliminary Engineering	$ 2,471.13
Right-of-Way	7,620.85
Construction	14,878.89
Amount Due	$24,970.87
TOTAL AMOUNT DUE	$24,970.87

IF YOU HAVE QUESTIONS ABOUT THIS INVOICE PLEASE CONTACT: Gary Zehner ph. 378-6011 or Anne Hernandez (INVOICE PREPARER) PH. 378-5034

734-1150 (3-86)

Letter to
Rick Kuehn

9368

OREGON STATE HIGHWAY DIVISION

ITEMIZED STATEMENT OF FINAL COSTS DATE: February 21, 1986

CITY: Milwaukie AGREEMENT NO: 6875 PROJECT NO: IX-9665(5)(8)(10)

CONTRACT NO: 9368 SECTION: Oatfield Road @ Lake Road

PRELIMINARY ENGINEERING (Prefix No. 203-1910):

Project Manager	$ 8,047.77
Final Design	7,682.69
Preliminary Design	299.46
R/W Descriptions	1,824.06
Region Geology	369.40
Traffic Section	2,941.56
R/W Liaison	894.02
Region-Utility Liaison	709.92
Program Section	115.80
Specifications	2,071.36
Administrative Services	10.01
Environmental Section	508.12
TOTAL P.E. COST	$ 25,474.17

RIGHT-OF-WAY (Prefix No. 303-2528):

Net Cost of Land	$ 12,100.00
Value of Buildings & Equipment	5,200.00
Value of Trees, Shrubs, Etc.	1,000.00
Severance & Consequential Damages	5,500.00
Appraisals, Witness Fees, Etc.	6,720.99
Miscellaneous	100.00
Title Cost & Recording Fees	508.96
Negotiation Expense	1,978.76
Relocation Computation	1.67
Legal ($3,329.95 Non-Partic.)	16,636.19
Appraisal Review	950.51
Program Section	104.58
R/W Office Expense ($27.18 Non-Partic.)	980.24
TOTAL RIGHT-OF-WAY COST	$ 51,781.90

CONSTRUCTION (Prefix No. 303-1031):

Payment to Contractor ($460.00 Non-Partic.)	$168,298.18	167,838.18 ✓
Credit for Liquidated Damages ($4.50 Non-Partic.)	(2,250.00)	
SFO #1 Permanent Striping	892.28 ✓	
SFO #2 State Furnished Software Program	500.00 ✓	
SFO #3 Signal Controller Testing	2,425.00 ✓	
SFO #4 Adjust Meters & Valve Boxes	815.41 ✓	

Construction Engineering ($8,775.55 Non-Partic.)	32,791.98
Program Section	31.91
Salem Lab	2,494.97
Portland Lab	181.74
Technical Services	495.09
Construction Section	499.32
Region Office	396.67
EEO Monitoring	61.01
TOTAL CONSTRUCTION COST	$207,633.56

SUMMARY:

Total P.E. Cost	$ 25,474.17
Total R/W Cost	51,781.90
Total Construction Cost	207,633.56
TOTAL PROJECT COST	$284,889.63

Less Federal Funds:	
P.E.	(21,653.04)
R/W	(41,161.05)
Construction	(168,642.14)
CITY SHARE	$ 53,433.40

Less City Advance Deposits:	
P.E. 2/6/79	$ (1,350.00)
R/W 8/13/80	(3,000.00)
Construction 10/9/81	(24,112.53)
BALANCE DUE FROM CITY	$ 24,970.87

GEZ:me

cc: J. Peterson
W. Schulte
LPG Files

9368

OREGON STATE HIGHWAY DIVISION

ITEMIZED STATEMENT OF FINAL COSTS DATE: February 21, 1986

COUNTY: Clackamas AGREEMENT NO: 6963 PROJECT NO: IX-9665(6)

CONTRACT NO: 9368 SECTION: Oatfield Road @ Aldercrest Drive

PRELIMINARY ENGINEERING (Prefix No. 203-1911 & 403-1912):

Project Manager	$ 3,551.91
Work by County	261.94
Final Design	1,362.02
R/W Descriptions	241.36
Region Geology	129.96
Traffic Section	454.14
Landscape Section	32.90
R/W Liaison	104.06
Program Section	57.42
Specifications	93.08
Environmental Section	560.60
TOTAL P.E. COST	$ 6,849.39

CONSTRUCTION (Prefix No. 303-1031):

Payment to Contractor	$ 9,535.33
SFO #1 Permanent Striping	99.15
Construction Engineering ($963.71 Non-Partic.)	2,088.90
Work by County	58.28
Program Section	2.04
Salem Lab	159.27
Portland Lab	11.60
Technical Services	31.95
Construction Section	31.88
Region Office	25.32
EEO Monitoring	3.89
TOTAL CONSTRUCTION COST	$ 12,047.25

SUMMARY:

Total P.E. Cost	$ 6,849.39
Total Construction Cost	12,047.25
TOTAL PROJECT COST	$ 18,896.64
Less Federal Funds:	
P.E.	(5,821.98)
Construction	(9,421.01)
TOTAL COUNTY SHARE	$ 3,653.65
Less Credit for Work by County	(39.29)
Less County Advance Deposit 10-19-81	(3,460.00)
BALANCE DUE FROM COUNTY	$ 154.36

GEZ:me
cc: J. Peterson
W. Schulte
LPG Files

9368

(ORIGINAL)

FORM APPROVED BY
COMPTROLLER GENERAL,
U.S. MAY 12, 1966

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

10-14-85

VOUCHER FOR WORK PERFORMED UNDER PROVISIONS OF THE FEDERAL AID AND FEDERAL HIGHWAY ACTS, AS AMENDED

STATE VOUCHER NO.

FHWA VOUCHER NO.

FHWA SCHEDULE NO.

APPROPRIATION

THE UNITED STATES, DR., TO *(Insert official or depositary named in project agreement)*
TREASURER OF THE STATE OF OREGON

ADDRESS
CAPITOL BUILDING
SALEM, OREGON 97310

PAID BY

(For use of Paying Office)

STATE
OREGON

VOUCHER PERIOD
FROM 8/14/80
TO 9/25/85

VOUCHER TYPE *(Check Appropriate Block)*
☐ CURRENT BILLING
☐ OTHER PROGRESS
☒ FINAL VOUCHER (*)

FEDERAL AID PROJECT NO.
IX - 9665 (8)

(*) Use Form FHWA-1447 for Final Voucher for a project constructed under certification acceptance or secondary road procedures (23 U.S.C. 117).

	TOTAL ACTUAL COST	TOTAL PARTICIPATING COST	PRO-RATA OF PARTICIPATING COST CLAIMED FROM U.S.	TOTAL AMOUNT CLAIMED FROM U.S.	LESS PREVIOUS PAYMENTS	NET AMOUNT CLAIMED
RW 823	51,754.72	48,424.77	85%	41,161.05	41,161.05	$ 0.00
	$51,754.72	$48,424.77	85%	$41,161.05	$41,161.05	$ 0.00

I certify that the costs shown in this voucher have been incurred in accordance with terms of project agreements; applicable State and Federal laws or regulations; and that no claim has previously been submitted for costs claimed.

STATE HIGHWAY AGENCY: Oregon
DATE: 10/14/85
SIGNATURE OF AUTHORIZED OFFICIAL
Controller

OATFIELD AT LAKE
R/W

I certify that supporting records for costs claimed, and the referenced project (if applicable), have been subjected to required reviews, approvals and inspections by the Federal Highway Administration and that the amount approved is justly due.

AMOUNT SUBMITTED

ADJUSTMENTS

AMOUNT APPROVED

SIGNATURE OF FHWA REPRESENTATIVE
(SIGN ORIGINAL ONLY)

DATE APPROVED

FORM PR-20
(REV. 5-78)

PREVIOUS EDITIONS ARE OBSOLETE

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

ITEM NO.	ITEM	QUANITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (Payee must not use this column)
	OATFIELD ROAD @ LAKE ROAD (MILWAUKIE) CLACKAMAS COUNTY					
	Type Code ROW Right-of-Way Right-of-Way	All Required			$23,800.00	
	Total R/W Costs				$23,800.00	
	Acquisition Expense State	All Required			$24,624.77	
	Total Participating Costs				$48,424.77	
	Non-Participating Costs Acquisition Expense	All Required			$3,329.95	
	TOTAL COSTS				$51,754.72	
	Totals areas of the FHWA Billing Voucher dated 9/25/85.					
	Participating Right-of-Way costs are for Right-of-Way actually incorporated into the final project, and all costs have been previously certified by the Right-of-Way Engineer.					
	AMOUNT CARRIED FORWARD					

```
ACCOUNT SUMMARY - EXPENDITURES & LEDGERS                                    JUNE 1985          PAGE 1327
                                                                              FISCAL            GRAND TOTAL
     DESCRIPTION                 PREFIX  FUNCTION SUB F.  GR  CURRENT MONTH  YEAR TO DATE         TO DATE
                                                                                                13,527.07
                                        TOT       P1                                             2,200.00
                                        TOT       N1                                            15,727.07  **
                                      ** JOB TOTALS **                  **             **
                                                                                                           STATE
                                          FA PROJ NOS X1  9665008 100                            2,750.00
  OATFIELD RD-LAKE RD        CONT NO
                              303     2528      295     00 N 9                     15,028.09CR  42,697.00CR
                              303     2528      296     00 N 9                     15,028.09    39,947.00
                              303     2528      298     00 N 9                      1,000.00    12,100.00
                              303     2528      401     00 P 1 NET COST LAND                     5,200.00
                              303     2528      403     00 P 1 VALUE BLDGS & EQ.                 1,000.00
                              303     2528      404     00 P 1 VALUE TREES, SHRUBS, ETC. 1,000.00   5,500.00
                              303     2528      405     00 P 1 SEVERANCE & CONSEQ DAM.           6,720.99
  "N"   # 27.18               303     2528      407     00 P 1 APPRAISALS, WITNESS FEES, ETC.      100.00
                              303     2528      409     00 P 1 MISC.                                508.96
          ↓                   303     2528      412     00 P 1 TITLE COST & REC. FEES     42.28   1,978.76
                              303     2528      414     00 P 1 NEGOTIATION EXP.                       1.67
  Lump Sum                    303     2528      415     00 P 1 RELOCATION COMP.         995.56  13,306.24
                              303     2528      426     00 P 1 LEGAL                     207.58   3,329.35
                              303     2528      426     00 N 1   "                                  950.51
                              303     2528      430     00 P 1 APPRAISAL REV.                       104.58
                              303     2528      920     00 P 1 PROG. SEC.                   23.15     953.06
                              303     2528      930     00 P 1 R/W OFFICE EXP. 11CR      3,060.99  48,424.77
                                        TOT       P1                       .16CR           207.58  ~~3,329.35~~  3357.73
                                        TOT       N1                                                ~~51,754.72~~  **
                                      ** JOB TOTALS **              .16CR**       3,268.57   **
                                                                                               51,781.90
                                                                                                           STATE
                                        * FA PROJ NOS X10 9714005 100                             7,000.00
  CLACK HWY-SE 32ND AV (MILWK)  CONT NO
                              303     2531      295     00 N 9                                 28,436.69CR
                              303     2531      296     00 N 9                                 21,436.69
                              303     2531      298     00 N 9                                 13,724.00
                              303     2531      401     00 P 1                                    526.00
                              303     2531      403     00 P 1                                  1,400.00
                              303     2531      404     00 P 1                                  3,100.00
                              303     2531      405     00 P 1                                  1,090.00
                              303     2531      406     00 P 1                                  1,074.16
                              303     2531      407     00 P 1                                    400.00
                              303     2531      409     00 P 1                                  1,137.71
                              303     2531      412     00 P 1                                    113.99
                              303     2531      413     00 P 1                                       .85
                              303     2531      413     00 N 1                                  1,065.40
                              303     2531      414     00 P 1                                      1.60
                              303     2531      414     00 N 1                                     26.42
                              303     2531      415     00 P 1                                    279.43
                              303     2531      426     00 P 1                                     16.00
                              303     2531      426     00 N 1                                    114.03
                              303     2531      430     00 P 1                                     47.70
                              303     2531      920     00 P 1
```

9308 t

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6-2

Date: August 16, 1984

To: Dale E. Wilken
Division Administrator
Federal Highway Administration

From: Gary A. Potter, Manager
Program Section

Subject: Review of Management and Monitoring of Projects
Memo of February 16, 1983
HAM-OR/380.2
18 Projects

The following updated information is provided in regards to the subject matter to supplement information previously submitted on a project by project basis as follows:

> M-1685(1) Chemawa Road - Claxter Road Section: The MWV COG FY 84 Tip shows construction of the bikeway under the subject project in fiscal year 1988. A request for an extension of the preliminary engineering phase is being submitted under separate action.
>
> M-2470(1) Biddle Road - Genesee Street (Medford) Section: The RV COG FY 84 Tip shows construction of this project in fiscal year 1986. A request for an extension of the preliminary engineerng phase is being submitted under separate action.
>
> M-5262(1) Front Street - Pacific Highway (Woodburn) Section: Right-of-way was authorized on this section on December 15, 1978. Therefore, the five year limitation on preliminary engineering has been satisfied and no further action is required.
>
> F-62(1) Pacific Highway - Brownsville Section: This preliminary engineering project is listed in the development section of the Six Year Highway Improvement Program on page 82. The project agreement was executed on December 5, 1980 and the five year limitation is due to expire on September 30, 1986. No further action is required at this time. However, we will have a bring-up on this project in August, 1986.

F-2-1(10) Nesika Beach - Wedderburn Section: There was no activity on this project and it has been withdrawn.

U-F-329(4) Foothills Blvd. - Redwood & Rogue Valley Highway (Grants Pass) Section: This project is listed in the development section of the Six Year Highway Improvement Program on page 83. The P.S.&E. phase of preliminary engineering was authorized on June 6, 1982 and we are of the opinion that the five year limitation will expire on September 30, 1987. No further action is required at this time.

I-205-7(82)297 Willamette Falls Safety Rest Area: The current Six Year Highway Improvement Program does not list construction in this rest area. The project agreement was executed on November 26, 1980 which makes the expiration date September 30, 1986. Only minor costs have been charged to date. Therefore, I propose to have the costs transferred to nonparticipating and submit a request for withdrawal of the project.

RF-F-124(25) Rogue River Bridge - Gold Beach Section: This project is listed in the Development Section of the Six Year Highway Improvement Program on page 83. The project requires the preparation of an Environmental Impact Statement and preliminary engineering has been authorized to obtain approval of an EIS. The project agreement was executed on November 3, 1975. However, since the P.S.&E. phase has not been authorized, we are of the opinion that the five year limitation is not in effect and that no further action is required at this time.

RF-F-HES-170(24) Adams - Athena Section: This project is in the Six Year Highway Improvement Program on page 44, item 427, for construction in FY 86. A request for an extension on this project is being submitted under separate action.

IX-47(7) Willamette River (Salem) Bridges: The construction of these bridges is contracted. Therefore, the five year limitation is no longer applicable. The landscaping of areas along the ramps were prepared to be contracted in the future. However, this work is not included in the Six Year Highway Improvement Program. Therefore, we will request the Accounting Section to submit a final voucher on the project.

IX-9659(2) Harmony Road - Clackamas Highway (Lake Road) Section: The final voucher on this project was submitted on July 24, 1984. Therefore, no further action is required.

SU-104(3) McKenzie Highway - Jasper Section: Construction in connection with this right-of-way project is not shown in the Six Year Highway Improvement Program. The project agreement was executed on June 6, 1975 and the 10 year limitation on right-of-way makes the expiration date September 30, 1985. We will either request an extension of time or withdraw the project in September 1985.

RS-B349(1) BNRR (Murphy Road) U'Xing Section: The proposed construction under this preliminary engineering project has proven too costly for Deschutes County. Therefore, work was halted upon completion of approximately 50% of the field work. The Accounting Section is being requested to submit a final voucher on the project.

BROS-3400(3) Christensen Creek (Robinson Road) Bridge Section: The final voucher on this project was submitted on February 9, 1984. Therefore, no further action is required.

SOS-2601(4) S.W. 9th Ave. - S.W. 8th Ave. (Portland) Section: This project was finaled in April 1983.

LSF-14(6) N. Fork Coquille River Falls Scenic Strip: This project was withdrawn in January 1983.

IX-9665(6) Oatfield Road @ Aldercrest Drive Section: This project included construction as well as preliminary engineering. The final voucher on the project was submitted on May 17, 1984.

IX-9721(1) S.E. King Road - S.E. Harmony Road (Price Fuller Road) Section: The final voucher on this project was submitted on March 30, 1984.

I realize that action needs to be taken towards a more timely project monitoring and to accomplish this, steps are being undertaken to have a machine program initiated for preliminary engineering projects with information necessary to setforth these projects approaching the five year expiration. This will allow for a timely submission of a request for extension of the project, withdrawal or final voucher, whichever is applicable.

CL:me
cc: R. Bothman
General Files

9368

403-1912
203-1911
303-1031

(ORIGINAL)

FORM APPROVED BY
COMPTROLLER GENERAL,
U.S. MAY 12, 1966

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

5-8-84

VOUCHER FOR WORK PERFORMED UNDER PROVISIONS OF THE FEDERAL AID AND FEDERAL HIGHWAY ACTS, AS AMENDED

STATE VOUCHER NO.

FHWA VOUCHER NO.

FHWA SCHEDULE NO.

APPROPRIATION

PAID BY

(For use of Paying Office)

THE UNITED STATES, DR., TO (Insert official or depositary named in project agreement)
Treasurer of the State of Oregon

ADDRESS
Capitol Building
Salem, OR 97310

STATE: Oregon

VOUCHER PERIOD
FROM: 9-2-81
TO: 9-28-83

VOUCHER TYPE (Check Appropriate Block)
☐ CURRENT BILLING
☐ OTHER PROGRESS
☒ FINAL VOUCHER (*)

FEDERAL AID PROJECT NO.
IX-9665(6)

(*) Use Form FHWA-1447 for Final Voucher for a project constructed under certification acceptance or secondary road procedures (23 U.S.C. 117).

	TOTAL ACTUAL COST	TOTAL PARTICIPATING COST	PRO-RATA OF PARTICIPATING COST CLAIMED FROM U.S.	TOTAL AMOUNT CLAIMED FROM U.S.	LESS PREVIOUS PAYMENTS	NET AMOUNT CLAIMED
823	3,340.39	3,340.39	85%	2,839.33	2.839.33	-0-
772	3,247.06	3,247.06	85%	2,760.00	2,760.00	-0-
	261.94	261.94	85%	222.65	222.65	-0-
823	12,047.25 const.	11,083.54	85%	9,421.01	9,421.01	-0-
	18,896.64	17,932.93	.8500	15,242.99	15,242.99	-0-

I certify that the costs shown in this voucher have been incurred in accordance with terms of project agreements; applicable State and Federal laws or regulations; and that no claim has previously been submitted for costs claimed.

STATE HIGHWAY AGENCY: Oregon
DATE: 5/8/84
SIGNATURE OF AUTHORIZED OFFICIAL: Controller

OATFIELD AT ALDERCREST

I certify that supporting records for costs claimed, and the referenced project (if applicable), have been subjected to required reviews, approvals and inspections by the Federal Highway Administration and that the amount approved is justly due.

AMOUNT SUBMITTED: $0.00
ADJUSTMENTS
AMOUNT APPROVED

SIGNATURE OF FHWA REPRESENTATIVE
(SIGN ORIGINAL ONLY)

DATE APPROVED

FORM PR-20
(REV. 5-76)

PREVIOUS EDITIONS ARE OBSOLETE

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

ITEM NO.	ITEM	QUANITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (Payee must not use this column)
	Oatfield Rd. at Alderwood Drive Oatfield Road in Clackamas County					
	Preliminary Engineering					
	Type Code PE					
	State	All Required			$ 6,587.45	
	Work by Clackamas County	All Required			261.94	
	823 3,340.39					
	772 3,247.06					
	Total Participating Preliminary Engineering				6,849.39	
	Construction					
	Type Code Y008					
	Channelization					
	Final Contract Payment Summary (823)	Lump Sum			9,535.33	
SFO	#1 Permanent Pavement striping (State)	All Required			99.15	
	Total Participating Construction Cost				9,634.48	
	Construction Engineering					
	State (823)	All Required			1,386.89	
	Work by Clackamas County (823)	All Required			58.28	
	Total Participipaiting Construction Engineering				1,445.17	
	Misc. Project Cost					
	EEO Monitoring Expense (823)	All Required			3.89	
	Total Participating Project Cost				$17,932.93	
	Non Participating Project Cost					
	Construction Engineering (823)	All Required			963.71	
	Total Cost				18,896.64	
	Prepared based on the Participating cost as shown on the Federal Billing as of 5-10-84					
	AMOUNT CARRIED FORWARD					

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                                                                        APRIL 1984        PAGE  789
ACCOUNT SUMMARY - EXPENDITURES & LEDGERS
                                                                          FISCAL          GRAND TOTAL
                                 PREFIX  FUNCTION SUB F. GR  CURRENT MONTH    YEAR TO DATE      TO DATE
     DESCRIPTION
                                                                                                      STATE
SPTC @ SW 3RD ST(NEWBURG)   CONT NO      FA PROJ NOS RRS 5830001 100               15.66CR         15.66CR
                              336   1984     296     00 N 9                         15.66           15.66
                              336   1984     298     00 N 9                         17.40           17.40
                              336   1984     920     00 P 1                         17.40           17.40
                                             TOT     P1                             17.40 **        17.40 **
                                         ** JOB TOTALS **                **

                                                                                                      STATE
SLEEPY HOLLOW BRIDGE        CONT NO      FA PROJ NOS SOS 0300005 100                                609.57CR
                              403   1906     598     00 N 9                                         609.57
                              403   1906     903     00 P 1                                         196.98
                              403   1906     915     00 P 1          120.33         196.98          806.55
                                             TOT     P1              120.33         196.98          609.57CR
                                             TOT     N9                                             196.98 **
                                         ** JOB TOTALS **            120.33 **      196.98 **

                                                                                                      STATE
SKOGAN ROAD @ 362ND         CONT NO      FA PROJ NOS SOS 0300008 100                              3,513.67CR
                              403   1908     598     00 N 9                                       3,513.67
                              403   1908     903     00 P 1                                       3,513.67
                                             TOT     P1                                           3,513.67CR
                                             TOT     N9                                                  **
                                         ** JOB TOTALS **                **              **

                                                                                                      STATE
PAC HWY E-OATFIELD RD       CONT NO     * FA PROJ NOS XI  9674003 100                               114.72CR
                              403   1910     598     00 N 9                                         114.72
                              403   1910     903     00 P 1                                         114.72
                                             TOT     P1                                             114.72CR
                                             TOT     N9                                                  **
                                         ** JOB TOTALS **                **              **

                                                                                                      STATE
SE KING RD-SE HARMONY RD    CONT NO     * FA PROJ NOS XI  9721001 100                               693.04CR
                              403   1911     598     00 N 9                                         693.04
                              403   1911     903     00 P 1                                         693.04
                                             TOT     P1                                             693.04CR
                                             TOT     N9                                                  **
                                         ** JOB TOTALS **                **              **

                                                                                                      STATE
OATFIELD RD@ALDERCREST DR   CONT NO      FA PROJ NOS XI  9665006 100                                222.65CR
                              403   1912     598     00 N 9                                         222.65
                              403   1912     903     00 P 1                                         222.65
                                             TOT     P1                                             222.65CR
                                             TOT     N9                                                  **
                                         ** JOB TOTALS **                **              **
```

B02

823 BILLING NUMBER 45

OREGON STATE HIGHWAY DEPARTMENT
FHWA BILLING VOUCHER

PREFIX GRP FI	FED AID PROJ	AGREEMENT AMOUNT	TOTAL COSTS TO DATE	PARTIC. AMOUNT	% OF PARTIC	FEDERAL SHARE	AMOUNT PREV. CLAIMED	ADJUSTMENT AND CODE	AMOUNT OF THIS VOUCHER
>026-1012 1	XI -9565-012	3490,612.00	3967,830.03	3903,495.95	85.00	3312,971.56	3312,971.56		
303-1910 1	XI -9647-002	18,190.00	18,108.02	18,108.02	85.00	15,391.82	15,120.10		271.72
203-1914 1	XI -9653-005	170,000.00	78,685.05	78,515.96	85.00	66,738.57	66,686.82		51.75
203-1912 1	XI -9659-002	4,250.00	3,551.18	3,504.76	85.00	2,979.05	2,979.05		
>303-1903 1#	XI -9659-003	7,101.38	8,514.69	8,354.56	85.00	7,101.38	7,101.38		
303-1907 1	XI -9659-004		13.40		85.00				
>303-1913 1#	XI -9659-005	6,730.21	7,949.13	7,917.89	85.00	6,730.21	6,730.21		
>403-1915 1#	XI -9659-005	1,195.00	1,195.00	1,195.00	100.00	1,195.00	1,195.00		
	PROJ TOTALS	7,925.21	9,144.13	9,112.89		7,925.21	7,925.21		
203-1017 1#	XI -9659-006	704.23	828.51	813.98	85.00	691.88	691.88		
>403-1022 1#	XI -9659-006	25,150.00	25,150.00	25,150.00	100.00	25,150.00	25,150.00		
	PROJ TOTALS	25,854.23	25,978.51	25,963.98		25,841.88	25,841.88		
>203-2533 2	XI -9659-007	7,820.00			85.00				
>303-2534 2	XI -9659-009	12,155.00	14,300.00	14,300.00	85.00	12,155.00	12,155.00		
303-1901 1#	XI -9665-003	92.22	108.49	108.49	85.00	92.22	92.22		
203-1901 1#	XI -9665-004	21,324.90	25,102.66	25,088.12	85.00	21,324.90	21,324.90		
>403-1913 1#	XI -9665-004	1,200.76	1,200.76	1,200.76	100.00	1,200.76	1,200.76		
	PROJ TOTALS	22,525.66	26,303.42	26,288.88		22,525.66	22,525.66		
203-1910 1#	XI -9665-005	21,653.04	25,474.17	25,474.17	85.00	21,653.04	21,653.04		
>303-1031 2*	XI -9665-006	9,421.01	12,047.25	11,083.54	85.00	9,421.01	9,421.01	ONTFIEL [illegible]	
>203-1911 1	XI -9665-006	2,839.33	3,340.39	3,340.39	85.00	2,839.33	2,839.33		
>403-1912 1*	XI -9665-006	222.65	222.65	222.65	100.00	222.65	222.65		
	PROJ TOTALS	12,482.99	15,610.29	14,646.58		12,482.99	12,482.99		
>303-1912 1	XI -9665-007	13,400.00	13,397.29	13,289.77	85.00	11,296.30	11,296.30		
>403-1914 1	XI -9665-007	1,000.00	549.35	549.35	100.00	549.35	549.35		
	PROJ TOTALS	14,400.00	13,946.64	13,839.12		11,845.65	11,845.65		
303-2528 1	XI -9665-008	24,918.91	48,403.26	45,280.89	85.00	38,488.76	24,918.91	13,569.85 B	
203-1908 1#	XI -9674-003	4,275.36	5,029.84	5,029.84	85.00	4,275.36	4,275.36		
>403-1910 1#	XI -9674-003	114.72	114.72	114.72	100.00	114.72	114.72		
	PROJ TOTALS	4,390.08	5,144.56	5,144.56		4,390.08	4,390.08		

9368

4-84

ACCOUNT SUMMARY - EXPENDITURES & LEDGERS

DESCRIPTION	PREFIX	FUNCTION	SUB	F. GR		CURRENT MONTH	FISCAL YEAR TO DATE	GRAND TOTAL TO DATE	
									STATE
OATFIELD RD- at LAKE RD	CONT NO	* FA PROJ NOS XI 9665005 100							
	203	1910	295	00 N 9	Tr. City			1,100.00	
	203	1910	296	00 N 9	" St.			22,753.04CR	
	203	1910	298	00 N 9	" Fed.			21,653.04	
	203	1910	901	00 P 1	Proj. Mgr.			8,047.77	
	203	1910	905	00 P 1	Fin. Des.			7,682.69	
Milwaukie	203	1910	907	00 P 1	Pre Des.			299.46	
	203	1910	909	00 P 1	R/w Desc.			1,824.06	
	203	1910	910	00 P 1	Regim Geol			369.40	
	203	1910	911	00 P 1	Tr. Sec.			2,941.56	
	203	1910	913	00 P 1	R/w Liaison			894.02	
	203	1910	914	00 P 1	Reg-Ut. Lia.			709.92	
	203	1910	920	00 P 1	Prog. Sec.			115.80	
	203	1910	921	00 P 1	Specs.			2,071.36	
	203	1910	922	00 P 1	Adm. Serv.			10.01	
	203	1910	923	00 P 1	Env. Sec.			508.12	
			TOT	P1				25,474.17	
		** JOB TOTALS **				**	**	25,474.17	**
									STATE
OATFIELD RD @ ALDERCREST DR	CONT NO	* FA PROJ NOS XI 9665006 100 X10 9665006							
	203	1911	296	00 N 9	Tr. St.			6,587.45CR	
	203	1911	297	00 N 9	" Co.			988.12	
	203	1911	298	00 N 9	" Fed.			5,599.33	
	203	1911	901	00 P 1	Proj. Mgr.			304.85	
	203	1911	901	00 P 2	" "			3,247.06	
	203	1911	905	00 P 1	Fin. Des.			1,362.02	
	203	1911	909	00 P 1	R/w Desc.			241.36	
	203	1911	910	00 P 1	Reg. Geol.			129.96	
Clackamas County	203	1911	911	00 P 1	Tr. Sec.			454.14	
	203	1911	912	00 P 1	Landscape Sec.			32.90	
	203	1911	913	00 P 1	R/w Liaison			104.06	
	203	1911	920	00 P 1	Prog. Sec.			57.42	
	203	1911	921	00 P 1	Specs.			93.08	
	203	1911	923	00 P 1	Env. Sec.			560.60	
			TOT	P1				3,340.39	
			TOT	P2				3,247.06	
		** JOB TOTALS **				**	**	6,587.45	**
									STATE
HARMONY RD-CLACKAMAS HWY	CONT NO	* FA PROJ NOS XI 9659002 100							
	203	1912	296	00 N 9			267.91CR	3,479.05CR	
	203	1912	297	00 N 9				500.00	
	203	1912	298	00 N 9			267.91	2,979.05	
	203	1912	901	00 P 1				222.46	
	203	1912	903	00 P 1				2,770.92	
	203	1912	905	00 P 1				131.72	
	203	1912	910	00 N 1				46.42	

9368

(ORIGINAL)

303-1031

FORM APPROVED BY
COMPTROLLER GENERAL,
U.S., MAY 12, 1966

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

3-27-84

VOUCHER FOR WORK PERFORMED UNDER PROVISIONS OF THE FEDERAL AID AND FEDERAL HIGHWAY ACTS, AS AMENDED

STATE VOUCHER NO.

FHWA VOUCHER NO.

FHWA SCHEDULE NO.

APPROPRIATION

THE UNITED STATES, DR., TO *(Insert official or depositary named in project agreement)*
Treasurer of the State of Oregon

ADDRESS
Capitol Building
Salem, OR 97310

PAID BY

(For use of Paying Office)

STATE: Oregon

VOUCHER TYPE *(Check Appropriate Block)*
☐ CURRENT BILLING
☐ OTHER PROGRESS
☒ FINAL VOUCHER (*)

VOUCHER PERIOD
FROM: 9-2-81
TO: 9-28-83

FEDERAL AID PROJECT NO.: IX-9665(10)

(*) Use Form FHWA-1447 for Final Voucher for a project constructed under certification acceptance or secondary road procedures (23 U.S.C. 117).

TOTAL ACTUAL COST	TOTAL PARTICIPATING COST	PRO-RATA OF PARTICIPATING COST CLAIMED FROM U.S.	TOTAL AMOUNT CLAIMED FROM U.S.	LESS PREVIOUS PAYMENTS	NET AMOUNT CLAIMED
1,853.91	1,849.29	85%	1,571.90	1,571.90	-0-
205,779.65	196,553.22	85%	167,070.24	167,070.24	-0-
207,633.56	198,402.51	85%	168,642.14	168,642.14	-0-

I certify that the costs shown in this voucher have been incurred in accordance with terms of project agreements; applicable State and Federal laws or regulations; and that no claim has previously been submitted for costs claimed.

STATE HIGHWAY AGENCY	DATE	SIGNATURE OF AUTHORIZED OFFICIAL
Oregon	3/27/84	Controller

OATFIELD AT LAKE
CONST.

I certify that supporting records for costs claimed, and the referenced project (if applicable), have been subjected to required reviews, approvals and inspections by the Federal Highway Administration and that the amount approved is justly due.

AMOUNT SUBMITTED: $0.00
ADJUSTMENTS
AMOUNT APPROVED

SIGNATURE OF FHWA REPRESENTATIVE
(SIGN ORIGINAL ONLY)

DATE APPROVED

FORM PR-20
(REV. 5-73)

PREVIOUS EDITIONS ARE OBSOLETE

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

ITEM NO.	ITEM	QUANITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (Payee must not use this column)
	Oatfield Road at Lake Road (Milwaukie) Oatfield Road in Clackamas					
	Construction Type Code Y008 Channelization					
	Final Contract Payment Summary	Lump			$112,998.78	
SFO	#1 Permanent Pavement striping (State)	All Required			892.28	
SFO	#4 Relocate or adjust water meters and valve boxes (City of Milwaukie)	All Required			815.41	
	Total Participating Construction Type Code Y008				114,706.47	
	Type Code Y031 Traffic Signal					
	Final Contract Payment Summary	Lump Sum			54,839.40	
SFO	#~~1~~2 State Furnished software program	All Required			500.00	
SFO	#3 Signal Controller Testing (State)	All Required			2,425.00	
	Total Participating Construction Type Code Y031				57,764.40	
	total Participating Construction Cost				172,470.87	
	Construction Engineering					
	State	All Required			28,116.13	
	Liquidated Damages	Lump Sum			(2,245.50)	
	Total Participating Construction Engineering				$ 25,870.63	
	Misc. Project Cost					
	EEO Monitoring Expense	All Required			61.01	
	Total Participating				198,402.51	
	Non Participating Project Cost					
	Final Contract Payment Summary	Lump Sum			460.00	
	Construction Engineering	All Required			8,775.55	
	Liquidated Damages	All Required			(4.50)	
	Total Non Participating Project Cost				9,231.05	
	Total Project Cost				$207,633.56	
	Prepared based on the Participating cost as shown on the Federal Billing as of 4-5-84					
	AMOUNT CARRIED FORWARD					

OREGON STATE HIGHWAY DIVISION
FHWA BILLING VOUCHER

11/08/84

B01
BILLING NUMBER 18

PREFIX GRP FED AID PROJ FL APPR	AGREEMENT AMOUNT	TOTAL COSTS TO DATE	PARTIC. AMOUNT	% OF PARTIC	FEDERAL SHARE	AMOUNT PREV CLAIMED	ADJUSTMENT AND CODE	AMOUNT OF THIS VOUCHER
302-1005 1 M -2110-004 APPR-432	760,434.00	931,013.71	929,522.89	81.83	760,628.58	760,434.00	194.58 B	
2 M -2110-004 APPR-000		54,925.94	54,925.94					
8 M -2110-004 APPR-432	55,200.00	67,375.01	67,347.89	81.83	55,110.78	55,110.78		
9		107,151.33		88.18				
302-1005 PREFIX TOTALS	815,634.00	1160,465.99	1051,796.72		815,739.36	815,544.78	194.58	
302-1006 1# RRS -2070-002 APPR-138	57,981.44	64,423.82	64,423.82	90.00	57,981.44	57,981.44		
302-1011 1 RRP -2080-001 APPR-139	36,288.00			90.00				
302-1097 1 PMS -000S-093 APPR-140	17,300.00	15,656.64	15,656.64	100.00	15,656.64	15,656.64		
303-1012 1# XI -9718-004 APPR-823	172,517 13	204,024.06	202,961.33	85.00	172,517.13	172,517.13		
303-1025 1 PMS -000S-105 APPR-140	34,217.00	26,607.28	26,469.87	100.00	26,469.87	26,469.87		
303-1030 1# RRS -9521-001 APPR-138	84,423.36	91,549.83	93,803.73	90.00	84,423.36	84,423.36		
303-1031 1# XIO -9665-010 APPR-772	167,070.24	205,780.15	196,553.22	85.00	167,070.24	167,070.24		
2# XI -9665-006 APPR-823	9,421.01	12,047.25	11,083.54	85.00	9,421.01	9,421.01		
8 XIO -9665-010 APPR-772	1,571.90	1,853.41	1,849.29	85.00	1,571.90	1,571.90		
303-1031 PREFIX TOTALS	178,063.15	219,680.81	209,486.05		178,063.15	178,063.15		
303-1035 1 XIO -9714-006 APPR-772	157,750.00	167,670.27	167,651.33	85.00	142,503.63	142,503.63		
8 XIO -9714-006 APPR-772	8,000.00	237.34	236.75	85.00	201.24	201.24		
303-1035 PREFIX TOTALS	165,750.00	167,907.61	167,888.08		142,704.87	142,704.87		
303-1038 1 RRP -9700-001 APPR-139	72,000.00	80,939.93	80,939.93	90.00	72,845.94	72,000.00	845.94 B	
303-1039 1# RRP -000S-021 APPR-139	74,358.77	82,541.69	82,620.85	90.00	74,358.77	74,358.77		
303-1041 1 XIO -9659-008 APPR-772	297,433.92	357,125.37	355,250.40	85.00	301,962.84	297,433.92	4,528.92 B	
2 XIO -9659-010 APPR-772	228,112.00	270,631.14	266,681.17	85.00	226,678 99	226,672.14		6.85
3 XIO -9659-010 APPR-580	56,951.00			85.00				
303-1041 PREFIX TOTALS	582,496.92	627,756.51	621,931.57		528,641.83	524,106.06	4,528.92	6.85
303-1049 1 XIO -9718-006 APPR-580	327,912.00	384,123.78	383,944.80	85.00	326,353.08	326,353.08		
8 XIO -9718-006 APPR-580	15,000.00	17,559.90	17,552.44	85.00	14,919.57	14,919.57		
303-1049 PREFIX TOTALS	342,912.00	401,683.68	401,497.24		341,272.65	341,272.65		

ACCOUNT SUMMARY - EXPENDITURES & LEDGERS

DESCRIPTION	PREFIX	FUNCTION	SUB F.	GR		CURRENT MONTH	FISCAL YEAR TO DATE	GRAND TOTAL TO DATE	ACTIVE YRS BEG	END
	303	1030	298	00 N 9				84,423.36	81	83
	303	1030	298	00 N 9				7,126.47	84	84
	303	1030	[illegible]	00 P 1				305.15	81	82
	303	1030	900	00 P 1				131.51	82	83
	303	1030	900	01 N 1				93.92	82	83
	303	1030	900	01 P 1				1,103.21	83	83
	303	1030	900	00 N 1				1.30CR	83	83
	303	1030	915	00 P 1				19.13	82	83
	303	1030	915	00 N 1				.03CR	83	83
	303	1030	920	00 P 1				69.35	82	83
	303	1030	920	00 N 1				.08CR	83	83
	303	1030	946	03 P 1				47.05	82	83
	303	1030	948	00 N 1				.05CR	83	83
			TOT	P1				93,803.73		
			TOT	N1				2,253.90CR		
			XX JOB TOTALS XX			XX	XX	91,549.83 XX		
OATFIELD ROAD AT LAKE ROAD(MI CONT NO 9368 & FA PROJ NOS X10 9665010 94 X1 9665006 06								X10 9665010	STATE	
	303	1031	201	00 P 1	Pay Cont.			167,838.18	82	84
	303	1031	201	00 P 2	" "			9,535.33	82	83
	303	1031	201	00 N 1	" "			460.00	82	82
	303	1031	201	00 P 1	Cr. Liq. Dam.			2,245.50CR	82	84
	303	1031	201	00 N 1	" "			4.50CR	84	84
	303	1031	~~208~~	00 N 1	Deduct for Admin on Ref.			~~28.71CR~~	83	84
	303	1031	~~208~~	00 N 2	" "			~~1.87CR~~	83	84
	303	1031	~~208~~	00 N 8	" "			~~.50CR~~	84	84
	303	1031	210	02 P 1	SFO#2			500.00	83	83
	303	1031	270	01 P 1	SFO#1			892.28	82	83
	303	1031	270	01 P 2	SFO#1			99.15	82	83
	303	1031	270	03 P 1	SFO#3			2,425.00	83	83
	303	1031	270	04 P 1	SFO#4			815.41	84	84
	303	1031	295	00 N 9	Tr. City			21,112.53	82	82
	303	1031	295	00 N 9	" St			201,647.56CR	81	84
	303	1031	296	00 N 9	" Co			2,471.88	81	84
	303	1031	297	00 N 9	" Fed.			178,063.15	82	84
	303	1031	298	00 N 9				22,108.50	81	84
	303	1031	900	00 P 1	Const. Engr.			1,110.25	81	84
	303	1031	900	00 P 1	" "			1,675.24	81	83
	303	1031	900	00 P 8	" "			8,771.43	82	84
	303	1031	900	00 N 1	" "			963.71	82	84
	303	1031	900	00 N 2	" "			4.12	82	82
	303	1031	900	00 N 8	" "			58.28	82	83
	303	1031	903	00 P 2	Work BY Co.			31.12	81	83
	303	1031	920	00 P 1	Prog. Sec			2.04	81	83
	303	1031	920	00 P 2	" "			.79	81	82
	303	1031	920	00 P 8	" "			~~28.71~~	82	83
	303	1031	~~920~~	00 N 1	Λ			~~1.87~~	82	83
	303	1031	~~920~~	00 N 2				~~.50~~	82	82
	303	1031	~~920~~	00 N 8						

Group #1 Milwaukie
Oatfield At Lake Rd.
Group #2 Clackamas Co
Oatfield At Aldercrest

DESCRIPTION	PREFIX		FUNCTION	SUB F.	GR		CURRENT MONTH	FISCAL YEAR TO DATE	GRAND TOTAL TO DATE	ACTIVE YRS BEG	ACTIVE YRS END
	303	1031	940	00	P	1	Salem Lab.		2,364.51	82	84
	303	1031	940	00	P	2	" "		159.27	82	84
	303	1031	940	00	P	8	" "		130.46	82	84
	303	1031	941	00	P	1	Port. "		172.10	82	83
	303	1031	941	00	P	2	" "		11.50	82	83
	303	1031	941	00	P	8	" "		6.64	82	83
	303	1031	944	00	P	1	Tech. Serv.		488.77	81	84
	303	1031	944	00	P	2	" "		31.59	81	84
	303	1031	944	00	P	8	" "		6.32	81	82
	303	1031	945	00	P	1	Const. Br.		497.23	81	83
	303	1031	945	00	P	2	" "		31.88	81	83
	303	1031	945	00	P	8	" "		2.09	81	82
	303	1031	946	00	P	1	Reg. Off.		375.56	82	83
	303	1031	946	00	P	2	" "		25.32	82	83
	303	1031	946	00	P	8	" "		21.11	82	83
	303	1031	948	00	P	1	Const Engr.		232.30	82	84
	303	1031	948	00	P	2	" "		14.94	82	83
	303	1031	948	00	P	8	" "		.39	82	82
	303	1031	985	00	P	1	EEO Monitor.		57.76	82	82
	303	1031	985	00	P	2	" "		3.89	82	82
	303	1031	985	00	P	8	" "		3.25	82	82
			TOT		P1				196,563.22		
			TOT		P2				11,083.54		
			TOT		P8				1,849.29		
			TOT		N1				9,226.93		
			TOT		N2				963.71		
			TOT		N8				4.12		
			XX JOB TOTALS XX				XX	XX	219,680.81 XX		
CLACKAMAS HWY-32ND AVE(MILH) CONT NO 9396 FA PROJ NOS X10 9714006 100									X10 9714006	STATE	
	303	1035	201	00	P	1			147,463.37	82	84
	303	1035	204	00	P	1			7,125.84CR	82	84
	303	1035	204	00	P	8			218.84CR	82	82
	303	1035	210	02	P	1			1,000.00	83	83
	303	1035	270	01	P	1			1,282.85	82	83
	303	1035	270	03	P	1			4,250.00	82	83
	303	1035	270	03	N	1		300.00		82	84
	303	1035	270	05	P	1			3,019.55	82	84
	303	1035	296	00	N	9			22,840.00	82	82
	303	1035	296	00	N	9	40.69CR	86.99CR	170,493.51CR	82	84
	303	1035	298	00	N	9	40.69	86.99	142,653.51	82	84
	303	1035	900	00	P	1		103.74	13,541.01	81	84
	303	1035	900	00	P	8			376.68	81	83
	303	1035	900	00	N	1			18.94	82	82
	303	1035	900	00	N	8			.59	82	82
	303	1035	920	00	P	1			127.44	81	82
	303	1035	920	00	P	8			3.94	81	82
	303	1035	940	00	P	1	60.42	60.42	750.24	82	84

r11 9368

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OSHD (Couter)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

STATE COPY

FINAL ACCEPTANCE REPORT

REGION NO. 10	REPORT NO. 9-9-83 2	COUNTY Clackamas	DIVISION Oregon
DATE OF REPORT 9/9/83	REPORT MADE BY T.P. Lowe, Area Engineer		PROJECT NO. ~~IX-9665(10)~~ IX-9665(6)
COMPLETION DATE 7/23/82	ACCEPTANCE DATE BY CONTRACT AGENCY 6/1/83	TIME ELAPSED 106 %	CONTRACT TIME 240 c.d.
APPROVED EXTENSIONS 8	LOCATION Below		

[illegible]

*A copy of the State's materials certificate is attached to the Division office copy of this report.
There is compliance with section 1.23 of the Regulations pertaining to encroachments on the right-of-way.

REMARKS: *The project has been completed in reasonably close conformity with the approved plans and specifications including authorized changes and extra work.*

LAKE RD @ OATFIELD RD/34th AVE &
OATFIELD RD @ ALDERCREST DR (MILWAUKIE)
LAKE RD & OATFIELD ROAD
Grading, Paving & Signals

Numerous changes were required during construction to fit existing conditions. Project costs overran 28 percent. Original authorization was for $174,000. Final cost is $218,000.

The contract allowed 240 days to complete the work. An 8 day extension was granted. The contractor used 263 days to finish the work. 15 days liquidated damages are assessed to the contractor.

The minor items mentioned in the fourth paragraph of the final inspection report have been resolved.

NOTED
W. E. SCHWARTZ

RECEIVED
STATE HWY ENGR
SEP 29 '83
REFER TO Keasey
FOR
Info Inves R/D D/R Sign Act File

cy
10/4

*NOTE: Not applicable for direct federal projects.

ACCEPTANCE OF PROJECT IS RECOMMENDED		ACCEPTED BY FEDERAL HIGHWAY ADMINISTRATION	
SIGNATURE Original Signed by T. P. LOWE		SIGNATURE Original Signed By [illegible] Field Operations Engineer	
TITLE Area Engineer	DATE 9/27/83	TITLE Field Operations Egnr.	DATE 9/28/83

FORM FHWA-1446 B (12-73) FORMERLY PR-33E

Previous Editions of PR-33E Will Not Be Used.

9368

s

6-30-83

REPORT OF ACTION UNDER DELEGATED AUTHORITY BY

ASSISTANT STATE HIGHWAY ENGINEER

On behalf of the Commission and under delegated authority, the following contracts were accepted as being completed according to specifications:

Contractor and Contract No.	Section and County	Acceptance Date
Cascade Const. Co., Inc. No. 9368	Lake Rd. @ Oatfield Rd./34th (Milwaukie) & Oatfield Rd. @ SE Aldercrest Dr. Clackamas Co.	June 1, 1983
Dirt & Aggregate Intche., Inc. No. 9361	Glencoe Rd. & W. Union Rd. (North Plains) Washington Co.	June 1, 1983
Fabricators, Inc. No. 9297	Cape Cr. Tunnel-Sutton Lake Lane Co.	June 10, 1983
Hertz Electric, Inc. No. 9531	Pac. Hwy. W. @ N. Killingsworth St. (Portland) Multnomah Co.	June 20, 1983
Gervais Const., Inc. No. 9306	Ash Creek Bridge #4599A Polk Co.	June 21, 1983
Tice Electric Co. No. 9510	Columbia River Br. (N & S Channels) Mult. Co., Oregon & Clark Co., Wash.	June 27, 1983
Gresham Paving, Inc. No. 9404	Denny Rd.-Hart Rd. (Beaverton) Washington Co.	June 27, 1983

June 30, 1983

W. E. Schwartz, P.E.
Asst. State Highway Engineer

RECEIVED
STATE HWY ENGR
JUL 20 '83
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

NOTED
W. E. SCHWARTZ

9368

8

June 9, 1983

CON 5
#9368

The Travelers Indemnity Company
Surety Department
707 S.W. Washington Street
Portland, OR 97205

Gentlemen:

On June 2, 1983, we wrote to you concerning release of final payment on Contract No. 9368 awarded to Cascade Construction Company, Inc. for work on Lake Rd. at Oatfield Rd.-34th Ave. (Milwaukie) & Oatfield Rd. at S.E. Aldercrest Dr. in Clackamas County.

The total contract amount is $175,484.79 including $3,742.30 for work performed under force account.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

ks

cc: Cascade Construction Company, Inc.
P.O. Box 4267
Portland, OR 97208

Don Reger and Company
200 Market Building
Portland, OR 97201

bc: C. T. Keasey
Walt Hart
E. L. Hardt

9368

STATE COPY

TO BE COMPLETED BY FHWA

MONTHLY TRANSACTION NUMBER 5-206

PROJECT REPORT NUMBER

MODIFICATION NUMBER 1

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT

5-23-83

State Oregon

County Clackamas

Project Number IX-9665(10)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on November 19, 19 81, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 187,572.00	$ 197,180.00
Federal funds	$ 159,435.00	$ 167,602.00
Other revisions		

This modification is made for the following reasons: to include increase in construction costs & construction engineering costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 23rd day of May, 19 83.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Manager, Program Section
(Title)

~~By~~ XXX For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)
For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen. File

Federal-Aid Project
No. IX-9665(10)

Oregon State Highway Division
Salem, Oregon May 18, 1983

Oatfield Rd. @ Lake Road (Milwaukie)
Oatfield Rd. in Clackamas Count

REVISED PROJECT AGREEMENT ESTIMATE

Type Code Y008
Channelization

Subtotal of previous estimate of October 28, 1981				$ 80,340.75

Previous Estimate

Flagman	200	Hour	24.68	$ 4,936.00
General Excavation	931	Cu. Yd.	8.00	7,448.00
1"-0 Aggregate Base	960	Ton	10.65	10,224.00
Class "C" Asph. Conc.	635	Ton	33.50	21,272.50
Concrete Walks	350	Sq. Yd.	12.00	4,200.00
Concrete Curbs	1,200	Lin. Ft.	4.15	4,980.00
				$ 53,060.50

Revised Estimate

Flagman	313	Hour	24.68	$ 7,724.84
Excavation	1,091	Cu. Yd.	8.00	8,728.00
1"-0 Aggregate Base	1,694	Cu. Yd.	10.65	18,041.10
Class "C" Asph. Conc.	1,014	Ton	33.50	33,969.00
Concrete Walks	449	Sq. Yd.	12.00	5,388.00
Concrete Curbs	1,428	Lin. Ft.	4.15	5,926.20
Revise Luminaires (P.A. #1)			All Required	66.00
Dagmar Markers (P.A. #4)	25	Each	11.00	275.00
One Way Crystal Markers (P.A. #4)	37	Each	3.52	130.24
One Way Yellow Markers (P.A. #4)	79	Each	3.52	278.08
Two Way Yellow Markers (P.A. #4)	65	Each	3.85	250.25
Driveway Removal (P.A. #5)			All Required	310.00
Revise Curb (P.A. #6)			All Required	2,784.00
Bark, Mulch, Shrubs & Ground Cover (E.W.O. #2)			All Required	2,545.91
Correct Low Areas (E.W.O. #3)			All Required	500.00
				$ 86,916.62
			Increase	$ 33,856.12
			Subtotal	114,196.87
			Engineering	17,129.13
			Total	$ 131,326.00

Type Code Y031
Traffic Signal

Subtotal of previous estimate of October 28, 1981		$	57,264.40
	Engineering		8,589.60
	Total	$	65,854.00

SUMMARY OF FUNDS

Description	Total Cost	Federal Funds	City Funds
Channelization	$ 131,326.00	$ 111,627.00	$ 19,699.00
Traffic Signals	65,854.00	55,975.00	9,879.00
Total	$ 197,180.00	$ 167,602.00	$ 29,578.00

Group 1	94%
Contract No.	9368
Prefix:	203-1910
Prefix:	303-1031

9368

STATE COPY

TO BE COMPLETED BY FHWA	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	STATE Oregon
11-125		COUNTY Clackamas
	FEDERAL-AID PROJECT AGREEMENT 11-19-81	PROJECT NO. IX-9665(10)

The State, through its Highway Agency, having complied, or hereby agreeing to comply, with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) the Regulations issued pursuant thereto and, (3) the policies and procedures promulgated by the Federal Highway Administrator relative to the above designated project, and the Federal Highway Administration having authorized certain work to proceed as evidenced by the date entered opposite the specific item of work, Federal funds are obligated for the project not to exceed the amount shown herein, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends only to project costs incurred by the State after the Federal Highway Administration authorization to proceed with the project involving such costs.

PROJECT TERMINI

Lake Rd. @ Oatfield Rd./34th Ave. (Milwaukie)

PROJECT CLASSIFICATION OR PHASE OF WORK	EFFECTIVE DATE OF AUTHORIZATION	APPROXIMATE LENGTH *(Miles)*
HIGHWAY PLANNING AND RESEARCH (HP & R)		
PRELIMINARY ENGINEERING		
RIGHTS-OF-WAY		
CONSTRUCTION	9-2-81	0.00

OTHER *(Specify)*

FUNDS PRO RATA 85%

ESTIMATED TOTAL COST OF PROJECT	FEDERAL FUNDS
$ 187,572.00	$ 159,435.00

The State further stipulates that as a condition to payment of the Federal funds obligated, it accepts and will comply with the applicable provisions set forth on the reverse hereof.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By D. Swan

Operation Programming Engineer
(Title)

XXX For: H.S. Coulter

State Highway Engineer
(Title)

By __________

____
(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By __________
(Division Administrator)

For: Dale E. Wilken

Date executed by Division Administrator NOV 19 1981

FORM PR-2 (REV. 10-75) PREVIOUS EDITIONS ARE OBSOLETE

AGREEMENT PROVISIONS

1. RESPONSIBILITY FOR WORK

a. Except for projects constructed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in compliance with the approved plans and specifications or project proposal which, by reference, are made a part hereof.

b. With regard to projects performed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in accordance with the terms of its approved Certification, or exceptions thereto as may have been approved by the Federal Highway Administration.

2. HIGHWAY PLANNING AND RESEARCH (HP&R) PROJECT. The State highway agency will (a) conduct or cause to be conducted, under its direct control, engineering and economic investigations of projects for future construction, together with highway research necessary in connection therewith, pursuant to the work program approved by the Federal Highway Administration and (b) prepare reports suitable for publication of the result of such investigations and research, but no report will be published without the prior approval of the Federal Highway Administration.

3. PROJECT FOR ADVANCE ACQUISITION OF RIGHTS-OF-WAY. In the event that actual construction of a road on this right-of-way is not undertaken by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

4. PRELIMINARY ENGINEERING PROJECT FOR PREPARATION OF RIGHT-OF-WAY PLANS OR FOR PREPARATION OF CONSTRUCTION PLANS, SPECIFICATIONS AND ESTIMATES. In the event that right-of-way acquisition for, or actual construction of the road for which this preliminary engineering is undertaken is not started by the close of the fifth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

5. INTERSTATE SYSTEM PROJECT. (a) The State highway agency will not add or permit to be added, without the prior approval of the Federal Highway Administration any points of access to, or exit from, the project in addition to those approved in the plans and specifications for the project. (b) The State highway agency will not permit automotive service stations, or other commercial establishments for serving motor vehicle users, to be constructed or located on the right-of-way of the interstate system. (c) The State highway agency will not after June 30, 1968, permit the construction of any portion of the Interstate Route on which this project is located, including spurs and loops, as a toll road without the written concurrence of the Secretary of Transportation or his officially designated representative. The term 'toll road' does not include toll bridges or toll tunnels.

6. PROJECT FOR CONSTRUCTION IN ADVANCE OF APPORTIONMENT. (a) This project authorized pursuant to 23 U.S.C. 115 as amended, will be subject to all procedures and requirements, and conform to the standards applicable to projects on the system on which located, financed with the aid of Federal funds. (b) No obligation of previously apportioned Federal funds is created by this agreement, its purpose and intent being to provide that, upon application by the State highway agency, and approval thereof by the Federal Highway Administration, any Federal-aid funds of the class designated by the project number prefix, apportioned to the State under 23 U.S.C. 104 subsequent to the date of this agreement, may be used to reimburse the State for the Federal share of the cost of work done on the project.

7. STAGE CONSTRUCTION. The State highway agency agrees that all stages of construction necessary to provide the initially planned complete facility, within the limits of this project, will conform to at least the minimum values set by approved AASHTO design standards applicable to this class of highways, even though such additional work is financed without Federal-aid participation..

8. BOND ISSUE PROJECT. Construction, inspection and maintenance of the project will be accomplished in the same manner as for regular Federal-aid projects. No present or immediate obligation is created by this Agreement against Federal funds, its purpose and intent being to provide aid to the State, as authorized by 23 U.S.C. 122, for retiring maturities of the principal indebtednesss of the bonds referred to below. When the State requests Federal reimbursement to aid in the retirement of such bonds, the request will be supported by the appropriate certification required by 23 CFR Part 140, Subpart F, and Volume 1, Chapter 4, Section 8 of the Federal-Aid Highway Program Manual or the alternative State procedure set forth in the State's Certificate, and payment of the authorized Federal share will be made from appropriate funds available. If in any year there is no unobligated balance of any apportioned Federal funds available from which payments hereunder may be made, there will be no obligation on the part of the Federal Government on account of bond maturities for that year. Funds available to the highway agency for this project are the proceeds of bonds issued by the governmental unit indicated on the attached tabulation, pursuant to the authority and in the amounts by date of issue and beginning date of maturities set forth therein.

9. SPECIAL HIGHWAY PLANNING AND RESEARCH PROJECT. The State Highway agency hereby authorizes the Federal Highway Administration to charge the State's pro rata share of costs incurred against funds apportioned to the State under 23 U.S.C. 307 (c), as amended. In the event a project is financed with both Federal-aid funds and State matching funds, the State agrees to advance to The Federal Highway Administration the State matching funds for its share of the estimated cost. For a National Pooled Fund study, the State hereby assigns its responsibility for the work to the Federal Highway Administration. For an Intra-Regional Cooperative Study, the State hereby assigns its responsibility for the work to the lead State for the study.

10. PARKING REGULATION AND TRAFFIC CONTROL. The State highway agency will not permit any changes to be made in the provisions for parking regulations and traffic control as contained in the agreement between the State and the local unit of Government referred to in the paragraph on "Additional Provisions," without the prior approval of the Federal Highway Administration, unless the State determines, and the Division Administrator concurs, that the local unit of Government has a functioning traffic engineering unit with the demonstrated ability to apply and maintain sound traffic operations and control.

Gen File

Oregon State Highway Division
Salem, Oregon October 28, 1981

Federal Aid Project
No. IX-9665(10)

Oatfield Road at Lake Road (Milwaukie)
Oatfield Road in Clackamas

PROJECT AGREEMENT ESTIMATE

Type Code Y008
Channelization

Mobilization	50 %	All Required	$ 850.00
Temporary Protection and Direction of Traffic	45 %	All Required	1,926.45
Temporary Signs	221 Sq. Ft.	17.00	3,757.00
Temporary Barricades	16 Each	90.00	1,440.00
Temporary Plastic Safety Markers	7 Each	115.00	805.00
Flagmen	200 Hour	24.68	4,936.00
Clearing and Grubbing		All Required	1,050.00
Removal of Structures and Obstructions	90 %	All Required	3,147.30
General Excavation	931 Cu. Yd.	8.00	7,448.00
Finishing Roadbed and Slopes	90 %	All Required	945.00
1"-0 Aggregate Base	960 Ton	10.65	10,224.00
Class "C" Asphalt Concrete	600 Ton	33.50	20,100.00
12-inch Sewer Pipe	125 Lin. Ft.	26.00	3,250.00
Extra for Pipe Under Pavement	125 Lin. Ft.	6.80	850.00
Concrete Inlets, Type G-2	2 Each	336.00	672.00
Concrete Walks	350 Sq. Yd.	12.00	4,200.00
Concrete Driveways	200 Sq. Yd.	17.00	3,400.00
Concrete Curbs	1,200 Lin. Ft.	4.15	4,980.00
Adjusting Manholes	4 Each	90.50	362.00
Removal of Existing Sign Installations		All Required	487.00
Wood Sign Posts		All Required	455.00
Type "C" & "D" Signs in Place	74 Sq. Ft.	12.00	888.00
Type "U" Signs in Place	18 Sq. Ft.	26.00	468.00
Move & Reinstall Existing Signs		All Required	1,400.00
			$ 78,040.75

Anticipated Items

Permanent Pavement Striping	90 %	All Required	$ 1,800.00
Temporary Pavement Striping		All Required	500.00
			$ 2,300.00
		SUBTOTAL	$ 80,340.75
		Engineering	10,845.23
		TOTAL	$ 91,186.00

Type Code Y031
Traffic Signal

Mobilization	44 %	All Required	$ 748.00
Temporary Protection and Direction of Traffic	40 %	All Required	1,712.40
Traffic Signal Installation, Complete		All Required	52,379.00
			$ 54,839.40

Anticipated Items

State Furnished Software Program	All Required	$ 500.00
Signal Controller Testing	All Required	1,925.00
		$ 2,425.00
	SUBTOTAL	$ 57,264.40
	Engineering	7,730.60
	TOTAL	$ 64,995.00

Length of Project --------- 0.00 mi.

Work Retained in Program Status

Work by City of Milwaukie (Water)	All Required	$ 1,500.00
Work by City of Milwaukie (Sewer)	All Required	500.00
Shrubs and Ground Cover	All Required	750.00
		$ 2,750.00

SUMMARY OF FUNDS (85%)

Description	Total Cost	Federal Funds	City Funds
Channelization	$ 91,186.00	$ 77,508.00	$13,678.00
Traffic Signals	64,995.00	55,245.00	9,750.00
SUBTOTAL	$156,181.00	$132,753.00	$23,428.00
Reserve	31,391.00	26,682.00	4,709.00
TOTAL	$187,572.00	$159,435.00	$28,137.00

Group 1 89%; Group 8 5%
Contract No. 9368
Prefix: 203-1910(10)
Prefix: 303-1031

368

L,

CON

DATE: October 8, 1982

TO: Oregon Transportation Commission

FROM: H. S. Coulter
State Highway Engineer

SUBJECT: Request for Increase in Project Authorization
Lake Rd. @Oatfield Rd./34th Ave.
(Milwaukie)
Oatfiled Rd. (FAU 9665), Clackamas County
Contract No. 9368

This project is essentially complete and it is now apparent that the cost will exceed the project authorization by $34,964 or 20.2%.

It became necessary to change the alignment of Oatfield Road and entering the intersection from the south in order to better fit the existing conditions. This resulted in minor overruns of numerous bid items and in a substantial overrun of the field engineering expenses required to effect the redesign.

There are sufficient funds available in the category of work and all the increase except $6,525 is eligible for federal participation.

I recommend that the authorization be increased by $34,964 to a new total of $208,540.69. This matter will be on the consent calendar for the October 19 meeting.

OBJ:mk st

bc Fred D. Miller
R. W. Gormsen
C. T. Keasey
V. E. Skoog
E. L. Hardt
George Bell

9368

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C. T. Keasey
V. E. Skoog
E. L. Hardt
George Bell

9368

1.

STATE OF OREGON
Highway Construction

378-6318

INTEROFFICE MEMO
FILE: CON 5

TO: W. E. Schwartz, P.E., P.L.S.
Ass't. State Highway Engineer

DATE: October 4, 1982

FROM: O. B. Jackmond, P.E., P.L.S.
Contract Administration Engineer

O. B. Jackmond

SUBJECT: Request for Increase in Project Authorization
Lake Rd. @ Oatfield Rd./34th Ave. (Milwaukie)
Oatfield Rd. (FAU 9665), Clackamas County
Contract No. 9368

This project is essentially complete and it is now apparent that the cost will exceed the project authorization by $34,964 or 20.2%.

It became necessary to change the alignment of Oatfield Road entering the intersection from the south in order to better fit the existing conditions. This resulted in minor overruns of numerous bid items and in a substantial overrun of the field engineering expenses required to effect the redesign.

There are sufficient funds available in the category of work and all the increase except $6,525 is eligible for federal participation. The ineligible amount is engineering charges in excess of 15% of the authorization. PCRB approval is not required.

Attached is a rough draft letter to the Transportation Commission requesting an increase of $34,964. Also attached is a copy of the Expected Overrun of Project Authorization form.

OBJ:HHP:mk

Attach.

cc: E. L. Hardt
Chuck Lobaugh
R. D. Church
D. E. Swan

NOTED
W. E. SCHWARTZ

Contains Recycled Materials

9368 L.

FORM 734-3001

FIELD ENGINEER'S WEEKLY REPORT

OREGON STATE HIGHWAY DIVISION

FOR CONSTRUCTION PROJECTS ONLY
CONSTRUCTION AND BRIDGE SECTION

	SECTION Lake Rd @ Oatfield/34th Ave. (Milwaukie & Oatfield Road)	WEEK ENDING September 3, 1982 SECTION PREFIX 303-1031
	HIGHWAY Lake Road & Oatfield Road	COUNTY Clackamas
NAME OF JOB	KIND OF WORK Grade, Pave Signals	
CONTRACTOR Cascade Construction Co.	CONTRACT NUMBER 9368	FEDERAL AID PROJECT NUMBER IX-9665(10) & (6)
DATE OF CONTRACT October 21, 1981	DATE WORK STARTED March 31, 1982	ESTIMATED COMPLETION DATE July 23, 1982
AVERAGE FORCE ON PROJECT FOR THE WEEK: MEN: 0 SUPERVISION: 0	SPECIFIED WORK DAYS SPECIFIED CALENDAR DAYS 240	WORK DAYS USED CALENDAR DAYS USED 263
PROJECT AUTHORIZATION: $173,577.00	SPECIFIED COMPLETION DATE	PERCENT OF TIME ELAPSED 110
EXCLUSIVE OF ENGINEERING: $159,813.00	ENGINEERING AUTHORIZATION $13,764.00	PERCENT OF CONTRACT COMPLETED BASED ON ESTIMATED COST 110
ESTIMATED COST OF COMPLETED PROJECT, EXCLUSIVE OF ENGINEERING $176,394.00	ENGINEERING COST TO DATE $34,200	PERCENT OF CONTRACT COMPLETED BASED ON TOTAL AUTHORIZATION Inc Eng 118
ESTIMATED PERCENT: OVERRUN UNDERRUN 10	PERCENT OF AUTHORIZATION 248 %	DATE PROJECT WAS COMPLETED: July 23, 1982

Request for Additional Authorization?

ESTIMATED PERCENT COMPLETE (ROADWORK)

CLEARING	DRAINAGE	GRADING	BASE	OIL AND/OR PAVE.	MAT'L. PROD.	Signals	
100	100	100	100	100		100	

	GRADING	SURFACING	MAINTENANCE MATERIALS	OIL & BITUMINOUS MACADAM	PAVING
MILES IN PROJECT					
MILES PARTIALLY COMPLETED					
MILES COMPLETED					
TOTAL ESTIMATED QUANTITIES (CONTRACT)	958 CY	1,020 T			690 T
TOTAL QUANTITIES CORRECTED TO DATE	883	1,748			1,095
ESTIMATED QUANTITIES MOVED OR PLACED TO DATE	883	1,748			1,095
AVERAGE DAILY QUANTITIES					
AVERAGE DAILY QUANTITIES NECESSARY TO COMPLETE PROJECT ON TIME					
NUMBER OF SHIFTS PER DAY					
HOURS PER SHIFT					

EQUIPMENT USED DURING THE WEEK:

ESTIMATED PERCENT COMPLETE (STRUCTURES)

BRIDGE NO.								
PERCENT								

	WEATHER	WORK DAYS CHARGED	HOURS DELAY	CAUSE OF DELAY
SUNDAY 29	Fair	0		
MONDAY 30	Fair	0		
TUESDAY 31	Fair	0		
WEDNESDAY 1	Fair	0		
THURSDAY 2	Fair	0		
FRIDAY 3	Cloudy	0		
SATURDAY 28	Fair	0		

RECEIVED
SEP 7 1982
CONSTRUCTION SECTION
CE K
CAE
FOE
QCS
SCS
SRO
TC
FE
CP

GENERAL DESCRIPTION OF ACTIVITIES FOR THE WEEK

SUNDAY	
MONDAY	
TUESDAY	August 27-September 3 no activity
WEDNESDAY	
THURSDAY	
FRIDAY	
SATURDAY	

REMARKS

Second notification dated July 23, 1982
This will be the last weekly report submitted for this project.

SIGNED ____________ LOCATION ____________

PRIME RESIDENT SUBMIT 2 COPIES WHEN BRIDGES AND GRADING BOTH ARE INVOLVED. SUBMIT 3 COPIES

SP-F216

9368

L.

CON

September 1, 1982

Cascade Construction Co., Inc.
P. O. Box 4267
Portland, OR 97208

Time Extension Request
Lake Road @ Oatfield Raod &
34th Avenue (Milwaukie)
Contract No. 9368
FAP Nos. IX-9665(10) &
IX-9665(6)

Your request for additional contract time in which to complete the above project has been carefully reviewed. Reasonably predictable weather is not a valid reason for additional contract time and since wet weather is reasonably predictable during the winter months, no additional time is granted for this portion of your request.

The extra and additional work performed are valid reasons for additional contract time to the extent that such work delayed project completion. Our review indicates additional contract time is warranted for extra and added work as follows:

1. Two calendar days for added sidewalk work;
2. Two calendar days for removal and replacement of driveway;
3. Four calendar days for added landscape work.

Therefore, a contract time extension of eight calendar days is granted due to the performance of extra and additional work. There remains 15 calendar days of liquidated damages under this contract.

Should you wish to submit additional data, or to review this matter further, please contact Project Manager Chuck Lobaugh.

W. E. Schwartz, P.E.
Assistant State Highway Engineer
for Operations

bc H. S. Coulter
C. T. Keasey
Al Harwood w/att.

FHWA w/att.
Bob Church
Chuck Lobaugh w/att.

STATE OF OREGON

INTEROFFICE MEMO

TO: BRYANT JACKMOND
Contract Administration Engineer

DATE: August 25, 1982

Marion Craft

FROM: MARION CRAFT
Region Construction Engineer

SUBJECT: Lake Road at Oatfield Road and
34th Avenue (Milwaukie)
Contract No. 9368

Attached is a time extension request from Cascade Construction Company for an extension of 23 days extending the contract time from 240 to 263 calendar days. Also included is Chuck Lobaugh's analysis and recommendation to grant eight days for the three reasons listed by the contractor.

The contractor might be able to make a case that the time recommended by Lobaugh is not enough to do the work; however, he has not done so in his request. Chuck's estimate seems reasonable and I recommend we grant the eight days for the reasons listed in Lobaugh's letter.

po

cc: Chuck Lobaugh

Attachments

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AUG 26 1982
CONSTRUCTION
SECTION
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CP

8-27-82

W.E. Schwartz -

I concur with Region and Proj. Mgr. and recommend a time extension of 8 calendar days.

Jackmond

STATE OF OREGON
HIGHWAY DIVISION

INTEROFFICE MEMO

TO: MARION CRAFT

DATE: August 18, 1982

FROM: CHUCK LOBAUGH Chuck Lobaugh

SUBJECT: Lake Road @ Oatfield Road/
34th Avenue (Milwaukie)
Contract No. 9368

OM MRE OE PPM [✓ CE]
TOS RECEIVED ME
US AUG 20 1982 PDM
CSA Metro Region TAM
SO PA EM LM

Attached is a request for extension of time. The mention of extended wet weather is not a consideration for extension. It was not unusually wet, but the three other items may have some validity.

1. There was 240' of 5 foot wide sidewalk added to the east and west side of Oatfield Road. This work was able to be done at the same time as the contract work without delay. We estimate the only additional time to do the work would be 2 days.

2. It was necessary to remove a portion of driveway to change grade across the sidewalk to allow entrance of cars into the driveway without scraping. This work was also done with other contract work without delay. Additional time estimate would be 2 days.

3. Landscaping was an anticipated item on the project authorization, but the contractor was not instructed as to what work was to be done until after contract time had elapsed. We would agree that 4 additional days were needed due to notification of work after contract time elapsed.

The total days claimed by the contractor for extension were 23 days. The only days that we can justify are 8 days.

Attachment

Contains
Recycled
Materials

CONTRACTOR'S REQUEST FOR ADJUSTMENT OF CONTRACT TIME

Oregon Department of Transportation
HIGHWAY DIVISION

Oregon Transportation Commission
Salem, Oregon

Date August 6, 19 82

Gentlemen:

We, the undersigned, respectfully request an adjustment of contract time from 240 calendar days to 263 calendar days, within which to complete Section Lake Road at Oatfield Road/34th Ave. (Milwaukie) and Oatfield Road at S. E. Aldercrest Drive, Contract No. 9368, without the assessment of liquidated damages.

The date(s) during which prosecution of the work was actually prevented and the conditions or causes which actually prevented the prosecution of work are summarized below and detailed on attached sheets.

This project was bid on a calendar day basis and the beginning Date of Time Charge was November 3, 1981. We did not want to start the project during the rainy season due to the problems wet weather would create for the excavation. Unfortunately for us, the wet weather extended longer than we anticipated and we were unable to open the project up. We request that this be considered as a reason for extending the time. In addition we request time extensions as stated in the following detail:

1. A sidewalk was added on the West side of Oatfield Road 7 days
2. As laid out and constructed, one driveway would not allow passage of low-slung vehicles and was redesigned, removed and reconstructed. 12 days.
3. After substantial completion some landscaping was added to the project. 4 days

None of these items were very large, however, the organizing subcontractors and our own forces to construct these items took the time stated above.

Respectfully Submitted,

CASCADE CONSTRUCTION COMPANY, INC.
Contractor

By George R. Morton
George R. Morton, Vice Pres. Eng.

RECEIVED
AUG 9 1982
PROJECT MGR.
CHUCK LOBAUGH

CONSENT OF SURETY

Date August 6, 19 82

We, The Travelers Indemnity Company, as surety on the bond guaranteeing the completion of the above-named contract, hereby join in and consent to said request for and adjustment of contract time, and hereby agree to remain fully bonded as surety in all respects as if the contract time remained as stipulated in the original agreement.

Nancy L. Kreutz
Attorney-in-fact
Nancy L. Kreutz

Resident Agent
Don Reger & Company

ENGINEER'S FINDINGS

Investigation of the above request has been completed and the findings are as follows:

Approved: ....
Assistant State Highway Engineer

FORM 734-3320 (Rev. 4-80)

CONTRACTOR, SUBMIT TWO COPIES TO RESIDENT ENGINEER

9368

60% - 1P
40% - 2P

P

OREGON DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

ORDER FOR EXTRA WORK
TO BE PERFORMED ON FORCE ACCOUNT BASIS

PROJECT NAME (SECTION) Lake Rd. @ Oatfield Rd./34th Ave. (Milwaukie) & Oatfield Rd. @ S.E. Aldercrest Dr.	CONTRACT NO. 9368
HIGHWAY Lake Rd. & Oatfield Rd. — COUNTY Clackamas	PREFIX 303-1031
CONTRACTOR'S NAME AND ADDRESS Cascade Construction Co. P.O. Box 4267 Portland, OR 97208	F.A. PROJECT NO. IX-9665(10) & (6 DATE PREPARED July 16, 1982 EXTRA WORK ORDER NO. 2-supplemental

THE FOLLOWING FORCE ACCOUNT WORK IS TO BE PERFORMED AND PAID FOR IN ACCORDANCE WITH THE CONTRACT TERMS:

DESCRIPTION OF WORK TO BE DONE —

Furnish and place bark mulch, shrubs and ground cover

OM MRE OE PPM CE
TOS RECEIVED ME
US JUL 20 1982 PDM
CSA Metro Region TAM
SO PA EM LM

LOCATION OF WORK (STATION NUMBERS) —

Throughout project

COST ESTIMATE (LABOR, EQUIPMENT AND MATERIALS) —

Original	$1,250
Supplemental	$1,500
Total	$2,750

SPECIFICATIONS AND OTHER PROVISIONS —

Work to be performed as directed by Project Manager

PREPARE A SEPARATE ORDER FOR EACH TYPE OF EXTRA WORK JOB. SUBMIT THE ORIGINAL THROUGH CHANNELS TO THE CONSTRUCTION BRANCH. AFTER APPROVAL, COPIES WILL BE SENT TO THE CONTRACTOR, THE REGION ENGINEER AND THE RESIDENT ENGINEER.

PROJECT AUTHORIZATION	$ 173,577.00
ESTIMATED PROJECT COST INCLUDING WORK UNDER THIS ORDER	$ 208,900.00
ESTIMATED OVERRUN / UNDERRUN 20 %	$ 35,323.00

SUBMITTED BY (RESIDENT ENGINEER)
Chuck Lobaugh

APPROVAL RECOMMENDED (REGION)

APPROVAL RECOMMENDED

DS 7-28-82

APPROVED (CONSTRUCTION) Duane O. Christensen
DATE 7/26/82

9368

(MEMORANDUM)

203-1910

FORM APPROVED BY
COMPTROLLER GENERAL,
.S./MAY 12, 1966

S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

12-23-81

VOUCHER FOR WORK PERFORMED UNDER PROVISIONS OF THE FEDERAL AID AND FEDERAL HIGHWAY ACTS, AS AMENDED

S OUCHER NO.

FHWA VOUCHER NO.

FHWA SCHEDULE NO.

APPROPRIATION

THE UNITED STATES, DR., TO *(Insert official or depositary named in project agreement)*
Treasurer of the State Of Oregon

ADDRESS
Capitol Bldg.
Salem, OR 97310

PAID BY

(For use of Paying Office)

STATE
Oregon

VOUCHER PERIOD
FROM 3/29/79
TO 9/2/81

VOUCHER TYPE *(Check Appropriate Block)*
☐ CURRENT BILLING
☐ OTHER PROGRESS
☒ FINAL VOUCHER (*)

FEDERAL AID PROJECT NO.
IX-9665(5)

(*) Use Form FHWA-1447 for Final Voucher for a project constructed under certification acceptance or secondary road procedures (23 U.S.C. 117).

TOTAL ACTUAL COST	TOTAL PARTICIPATING COST	PRO-RATA OF PARTICIPATING COST CLAIMED FROM U.S.	TOTAL AMOUNT CLAIMED FROM U.S.	LESS PREVIOUS PAYMENTS	NET AMOUNT CLAIMED
$25,474.17	$25,474.17	85.00%	$21,653.04	$21,653.04	$ 0.00

RECEIVED DIVISION OFFICE
BY
DATE

DIVISION OFFICE REVIEW MADE
BY
DATE 12/23/81

PASSED FOR PAYMENT
BY V.L. Skoog, Controller
DATE

REMARKS Oregon

OATFIELD RD AT LAKE RD.

PE

$ 0.00

FORM PR-20A
(Rev. 5-78)

PREVIOUS EDITIONS ARE OBSOLETE

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (Payee must not use this column)
	Oatfield Rd. at Lake Road City Street in Clackamas County					
	Preliminary Engineering Type Code P.E. State	All Required			$25,474.17	
	Total Participating Cost				$25,474.17	
	Prepared based on Participating Costs as shown on Federal Billing as of 12/30/81.					
	AMOUNT CARRIED FORWARD . .					

```
                                                                                     DECEMBER 1981      PAGE  507
TOTAL TO DATE JOB COST SUMMARY                                                          FISCAL          GRAND TOTAL
                                                                                                          TO DATE
DESCRIPTION OF JOB OR DEPARTMENT      PREFIX       FUNCTION   GR  CURRENT MONTH    YEAR TO DATE
                                   203   1909      901     00 P 2                     1,000.00          1,000.00
                                   203   1909      905     00 P 1                        56.24            108.32
                                   203   1909      910     00 P 1                                         149.60
                                   203   1909      911     00 P 1                     5,336.47CR          124.41
                                   203   1909      911     00 P 2                     7,000.00          7,000.00
                                   203   1909      913     00 P 1                                         170.03
                                   203   1909      920     00 P 1                        34.60             48.00
                                   203   1909      921     00 P 1                     1,069.45          1,290.89
                                   203   1909      922     00 P 1                                          19.28
                                   203   1909      923     00 P 1                        29.89             96.70
                                   203   1909      950     00 P 1                                         122.97
                                                   TOT        P1                      5,061.36CR        7,427.72
                                                   TOT        P2                      8,000.00          8,000.00
                                                ** JOB TOTALS **               **     2,938.64   **    15,427.72  **

                                                                                                              STATE
                                   CONT NO      * FA PROJ NOS XI   665005 100
   OATFIELD RD-LAKE RD             203   1910      295     00 N 9                                       1,100.00
                                   203   1910      296     00 N 9                                      15,210.00CR
                                   203   1910      298     00 N 9                                      14,110.00
                                   203   1910      901     00 P 1                       200.38          8,047.77
                                   203   1910      906     00 P 1                       227.90          7,682.69
                                   203   1910      907     00 P 1                                         299.46
                                   203   1910      909     00 P 1                        11.53          1,824.96
                                   203   1910      910     00 P 1                                         369.40
                                   203   1910      911     00 P 1                        71.94          2,941.56
                                   203   1910      913     00 P 1                                         894.02
                                   203   1910      914     00 P 1      181.49CR         383.37            709.92
                                   203   1910      920     00 P 1                        88.05            115.80
                                   203   1910      921     00 P 1       36.30CR       1,633.17          2,071.36
                                   203   1910      922     00 P 1                                          10.01
                                   203   1910      923     00 P 1                        31.31            508.12
                                                   TOT        P1       217.79CR       2,647.65         25,474.17
                                                ** JOB TOTALS **       217.79CR**     2,647.65   **    25,474.17  **

                                                                                                              STATE
                                   CONT NO      * FA PROJ NOS XI   665006 100 X10 6/5006
   OATFIELD RD @ ALDERCREST DR     203   1911      296     00 N 9                       988.12CR        5,988.12CR
                                   203   1911      297     00 N 9                       988.12            988.12
                                   203   1911      298     00 N 9                                       5,000.00
                                   203   1911      901     00 P 1                        14.29          3,551.91
                                   203   1911      905     00 P 1                        50.28          1,362.02
                                   203   1911      909     00 P 1                                         241.36
                                   203   1911      910     00 P 1                                         129.96
                                   203   1911      911     00 P 1                       160.79            454.14
                                   203   1911      912     00 P 1                                          32.90
                                   203   1911      913     00 P 1                                         104.06
                                   203   1911      920     00 P 1                        44.02             57.42
                                   203   1911      921     00 P 1                        93.08             93.08
```

9368

STATE COPY 2.

TO BE COMPLETED BY FHWA	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State Oregon
MONTHLY TRANSACTION NUMBER 1-25+1-26		County Clackamas
PROJECT REPORT NUMBER	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT** 12/21/81	Project Number IX-9665(6)
MODIFICATION NUMBER 1		

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on April 18, 1979, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 7,000.00	$ 24,530.00
Federal funds	$ 5,950.00	2,760.00 (772) $ 18,086.00 (823)
Other revisions		

This modification is made for the following reasons: adding construction phase.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 21st day of December, 1981.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By D H Moberg

Asst. State Hwy. Engineer
(Title)

~~By~~ For: H.S. Coulter

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Oregon State Highway Division
Salem, Oregon December 15, 1981

Federal Aid Project
No. IX-9665(6)

Oatfield Rd. at Aldercrest Drive
Oatfield Road in Clackamas County

PROJECT AGREEMENT ESTIMATE

Type Code P.E.
Preliminary Engineering

Preliminary Engineering		All Required	$10,250.00

Type Code Y008
Channelization

Mobilization	6 %	All Required	102.00
Temporary Protection and Direction of Traffic	15 %	All Required	642.15
Temporary Signs	100 Sq. Ft.	17.00	1,700.00
Temporary Barricades	3 Each	90.00	270.00
Flagmen	100 Hour	24.68	2,468.00
Removal of Structures and Obstructions	10 %	All Required	349.70
General Excavation	27 Cu. Yd.	8.00	216.00
Finishing Roadbed and Slopes	10 %	All Required	105.00
1"-0 Aggregate Base	60 Ton	10.65	639.00
Class "C" Asphalt Concrete	90 Ton	33.50	3,015.00
Concrete Curbs	260 Lin. Ft.	4.15	1,079.00
Extra for Asphalt Approaches	1 Each	120.00	120.00
Extra for Asphalt Walks	175 Sq. Yd.	3.40	595.00
			$11,300.85

Anticipated Items

Permanent Pavement Striping	10 %	All Required	$ 200.00
Temporary Pavement Striping	10 %	All Required	50.00
			$ 250.00
		SUBTOTAL	$11,550.85
		Engineering	1,559.15
		TOTAL	$13,110.00

Length of Project ----------- 0.00 mi.

SUMMARY OF FUNDS (85%)

Description	Appn Code	Total Cost	Federal Funds	County Funds
P.E.	823	$ 7,000.00	$ 5,950.00	$1,050.00
P.E.	772	3,250.00	2,760.00	490.00
Channelization	823	13,110.00	11,143.00	1,967.00
		$23,360.00	$19,853.00	$3,507.00
Reserve	823	1,170.00	993.00	177.00
TOTAL		$24,530.00	$20,846.00	$3,684.00

Group 2 6%
Contract No. 9368
Prefix: 203-1911 (6)
Prefix: 303-1031

8

STATE COPY

OMB No. 04-R2089

TO BE COMPLETED BY FHWA MONTHLY TRANSACTION NO. 4-27	.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION **FEDERAL-AID PROJECT AGREEMENT** 4-18-79	Oregon County Clackamas Project No. IX-9665(6)

The State, through its Highway Agency, having complied, or hereby agreeing to comply, with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) the Regulations issued pursuant thereto and, (3) the policies and procedures promulgated by the Federal Highway Administrator relative to the above designated project, and the Federal Highway Administration having authorized certain work to proceed as evidenced by the date entered opposite the specific item of work, Federal funds are obligated for the project not to exceed the amount shown herein, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends only to project costs incurred by the State after the Federal Highway Administration authorization to proceed with the project involving such costs.

PROJECT TERMINI

Co. Rd., Jct. Aldercrest Dr.

PROJECT CLASSIFICATION OR PHASE OF WORK	EFFECTIVE DATE OF AUTHORIZATION	APPROXIMATE LENGTH *(Miles)*
HIGHWAY PLANNING AND RESEARCH (HP & R)		
PRELIMINARY ENGINEERING	3-29-79	0.12
RIGHTS-OF-WAY		
CONSTRUCTION		

OTHER *(Specify)*

FUNDS Pro Rata 85.0%

ESTIMATED TOTAL COST OF PROJECT $ 7,000.00	FEDERAL FUNDS $ 5,950.00

The State further stipulates that as a condition to payment of the Federal funds obligated, it accepts and will comply with the applicable provisions set forth on the reverse hereof.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By E S Hunter

Asst. State Highway Engineer
(Title)

ByXX For: H. S. Coulter

State Highway Engineer
(Title)

By

(Title)

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: G. L. Green

Date executed by Division Administrator APR 18 1979

Form PR-2 (Rev. 10-75) PREVIOUS EDITIONS ARE OBSOLETE

AGREEMENT PROVISIONS

1. RESPONSIBILITY FOR WORK

a. Except for projects constructed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in compliance with the approved plans and specifications or project proposal which, by reference, are made a part hereof.

b. With regard to projects performed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in accordance with the terms of its approved Certification, or exceptions thereto as may have been approved by the Federal Highway Administration.

2. HIGHWAY PLANNING AND RESEARCH (HP&R) PROJECT. The State highway agency will (a) conduct or cause to be conducted, under its direct control, engineering and economic investigations of projects for future construction, together with highway research necessary in connection therewith, pursuant to the work program approved by the Federal Highway Administration and (b) prepare reports suitable for publication of the result of such investigations and research, but no report will be published without the prior approval of the Federal Highway Administration.

3. PROJECT FOR ADVANCE ACQUISITION OF RIGHTS-OF-WAY. In the event that actual construction of a road on this right-of-way is not undertaken by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

4. PRELIMINARY ENGINEERING PROJECT FOR PREPARATION OF RIGHT-OF-WAY PLANS OR FOR PREPARATION OF CONSTRUCTION PLANS, SPECIFICATIONS AND ESTIMATES. In the event that right-of-way acquisition for, or actual construction of the road for which this preliminary engineering is undertaken is not started by the close of the fifth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

5. INTERSTATE SYSTEM PROJECT. (a) The State highway agency will not add or permit to be added, without the prior approval of the Federal Highway Administration any points of access to, or exit from, the project in addition to those approved in the plans and specifications for the project. (b) The State highway agency will not permit automotive service stations, or other commercial establishments for serving motor vehicle users, to be constructed or located on the right-of-way of the interstate system. (c) The State highway agency will not after June 30, 1968, permit the construction of any portion of the Interstate Route on which this project is located, including spurs and loops, as a toll road without the written concurrence of the Secretary of Transportation or his officially designated representative. The term 'toll road' does not include toll bridges or toll tunnels.

6. PROJECT FOR CONSTRUCTION IN ADVANCE OF APPORTIONMENT. (a) This project authorized pursuant to 23 U.S.C. 115 as amended, will be subject to all procedures and requirements, and conform to the standards applicable to projects on the system on which located, financed with the aid of Federal funds. (b) No obligation of previously apportioned Federal funds is created by this agreement, its purpose and intent being to provide that, upon application by the State highway agency, and approval thereof by the Federal Highway Administration, any Federal-aid funds of the class designated by the project number prefix, apportioned to the State under 23 U.S.C. 104 subsequent to the date of this agreement, may be used to reimburse the State for the Federal share of the cost of work done on the project.

7. STAGE CONSTRUCTION. The State highway agency agrees that all stages of construction necessary to provide the initially planned complete facility, within the limits of this project, will conform to at least the minimum values set by approved AASHTO design standards applicable to this class of highways, even though such additional work is financed without Federal-aid participation..

8. BOND ISSUE PROJECT. Construction, inspection and maintenance of the project will be accomplished in the same manner as for regular Federal-aid projects. No present or immediate obligation is created by this Agreement against Federal funds, its purpose and intent being to provide aid to the State, as authorized by 23 U.S.C. 122, for retiring maturities of the principal indebtednesss of the bonds referred to below. When the State requests Federal reimbursement to aid in the retirement of such bonds, the request will be supported by the appropriate certification required by 23 CFR Part 140, Subpart F, and Volume 1, Chapter 4, Section 8 of the Federal-Aid Highway Program Manual or the alternative State procedure set forth in the State's Certificate, and payment of the authorized Federal share will be made from appropriate funds available. If in any year there is no unobligated balance of any apportioned Federal funds available from which payments hereunder may be made, there will be no obligation on the part of the Federal Government on account of bond maturities for that year. Funds available to the highway agency for this project are the proceeds of bonds issued by the governmental unit indicated on the attached tabulation, pursuant to the authority and in the amounts by date of issue and beginning date of maturities set forth therein.

9. SPECIAL HIGHWAY PLANNING AND RESEARCH PROJECT. The State Highway agency hereby authorizes the Federal Highway Administration to charge the State's pro rata share of costs incurred against funds apportioned to the State under 23 U.S.C. 307 (c), as amended. In the event a project is financed with both Federal-aid funds and State matching funds, the State agrees to advance to The Federal Highway Administration the State matching funds for its share of the estimated cost. For a National Pooled Fund study, the State hereby assigns its responsibility for the work to the Federal Highway Administration. For an Intra-Regional Cooperative Study, the State hereby assigns its responsibility for the work to the lead State for the study.

10. PARKING REGULATION AND TRAFFIC CONTROL. The State highway agency will not permit any changes to be made in the provisions for parking regulations and traffic control as contained in the agreement between the State and the local unit of Government referred to in the paragraph on "Additional Provisions," without the prior approval of the Federal Highway Administration, unless the State determines, and the Division Administrator concurs, that the local unit of Government has a functioning traffic engineering unit with the demonstrated ability to apply and maintain sound traffic operations and control.

Gen. File

Oregon State Highway Division
Salem, OR April 13, 1979

Federal Aid Project
No. IX-9665(6)

Oatfield Rd. @ Aldercrest Dr. Section
Co. Rd. in Clackamas County

Project Agreement Estimate

Type Code PE
Preliminary Engineering

Preliminary Engineering	All Required	$7,000.00
	Total	$7,000.00

Length of Project. . . . . . . 0.12 mi.

SUMMARY OF FUNDS

Federal Funds	$5,950.00
County Funds	1,050.00
Total	$7,000.00

Group 1 - 100%
Prefix 203-1911

9368

10-30-81

L.

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. IX-9665(10)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Clackamas

3. FROM Dale E. Wilken, Division Administrator

4. PROGRAM NO.

5. ITEM NO. 90100

6. TO

Mr. H. S. Coulter, State Highway Engineer
State of Oregon

7. DATE AUTHORIZATION EFFECTIVE 10-30-81

8. FEDERAL ROUTE NUMBER FAU 9665

9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION: LAKE ROAD AT OATFIELD ROAD/34th AVENUE (MILWAUKIE)

11. GENERAL DESCRIPTION OF WORK Utility Adjustment

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* Utility Adjustment

13. REMARKS

As requested in Mr. Swan's letter of October 27, 1981, you are authorized to proceed with the actual adjustments for the City of Milwaukie's water facilities on an actual cost basis estimated to be $1,715 - Federal Funds $1,458.

I approve the agreement with the City of Milwaukie.

Approval and participation for the eligible portion of the work authorized above is subject to the provisions of the Federal-aid Program Manual.

RECEIVED
STATE HWY ENGR
NOV 4 '81
REFER TO Moehrig
FOR
Info | Inves | R/D | D.R | Sign | Act | File

orig 11 3

14. DATE 10-30-81

15. SIGNATURE OF APPROVING OFFICIAL

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

#9368

ROW 18-2

October 27, 1981

TO: D. E. Wilken, Division Administrator
Federal Highway Administration

FROM: D. E. Swan D E Swan
Operations Programming Engineer

NOTED
E. S. HUNTER

SUBJECT: Water Facilities Adjustment
City of Milwaukie
Lake Rd. @ Oatfield Rd./34th Ave. (Milwaukie) Section
FAU 9665 (Oatfield Rd.)
Clackamas County
Project No. IX-9665(10)

Here is a copy of an estimate of cost to adjust the City of Milwaukie's water facilities dated September 10, 1981, and a sketch showing their proposed relocation.

A certification prepared by Ted Inloes as to the City's rights in the land occupied by their facilities is in our files.

The conflict was anticipated. It is the City's responsibility to arrange for the relocation of utilities. The relocation agreement will, therefore, consist of the estimate and sketch submitted herewith and our letter authorizing them to proceed with the work.

Anpermit for the utility's proposed relocation will not be issued because City facilities occupy City street right of way.

The State is not entitled to a credit for expired service life under the provisions of Paragraph 9b (1) (b) of PPM 30-4 as the relocation involves crossings of the project by the facilities.

There will be no betterment derived from the proposed adjustment of the City's facilities and has been provided for in the attached estimated.

Your approval of the actual cost agreement, as evidenced above and authorization to proceed with the work under the provisions of PPM 30-4 is requested. Estimated cost to the State is $1,715.00.

JMC/vlw
Enc.
cc: E. S. Hunter
Jack M. Cartwright

RECEIVED
TECHNICAL SERVICES
OCT 28 '81
REFER TO
FOR
File
Act
Sign
D/R
R/D
Inves
Info

9368

September 25, 1981

ACC

Winston Kurth
Assistance Director
Department of Environmental Services
Clackamas County
902 Abernethy Road
Oregon City, Oregon 97045

Dear Mr. Kurth:

On September 24, 1981 we received a satisfactory bid from Cascade Construction Co., P.O. Box 4267, Portland, Oregon 97208 for the Oatfield Road at S.E. Aldercrest Dr. Intersection improvement.

We anticipate financial sharing of the project costs to be:

Contractor's Bid	$11,300.85
4 1/2% Contingencies	$ 508.54
9% Engineering	1,017.08
ESTIMATED TOTAL COST (CONSTRUCTION)	$12,826.47
ESTIMATED COST PRELIMINARY ENGINEERING	10,250.00
TOTAL ESTIMATED PROJECT COSTS	$23,076.47

COUNTY SHARE: (15% of $23,076.47) = $3,461.47

We will award the contract when we receive your advance deposit of $3,460.00, which should arrive no later than October 16, 1981.

On the attached sheet are instructions for three methods of making your advance deposit. Please use the option of your choice.

10-21-81
Jan P. says Co.
submitted $3460
to LGIP on 10-19.

Very truly yours,

D. E. Swan
Operation Programming Engineer

KEH:pf
Attachment

bcc w/AD # 960: Jon Rose, Region M Federal Aid Engineer
Vern Skoog - Please return completed AD # 960 when advance deposit is received.
F. E. Terpin
D. H. Moehring

9368

September 25, 1981

ACC

Winston Kurth
Assistance Director
Department of Environmental Services
Clackamas County
902 Abernethy Road
Oregon City, Oregon 97045

Dear Mr. Kurth:

On September 24, 1981 we received a satisfactory bid from Cascade Construction Co., P.O. Box 4267, Portland, Oregon 97208 for the Oatfield Road at S.E. Aldercrest Dr. Intersection improvement.

We anticipate financial sharing of the project costs to be:

Contractor's Bid	$11,300.85
4 1/2% Contingencies	$ 508.54
9% Engineering	1,017.08
ESTIMATED TOTAL COST (CONSTRUCTION)	$12,826.47
ESTIMATED COST PRELIMINARY ENGINEERING	10,250.00
TOTAL ESTIMATED PROJECT COSTS	$23,076.47

COUNTY SHARE: (15% of $23,076.47) = $3,461.47

We will award the contract when we receive your advance deposit of $3,460.00, which should arrive no later than October 16, 1981.

On the attached sheet are instructions for three methods of making your advance deposit. Please use the option of your choice.

10-21-81
Jan P. says Co.
submitted $3460
to LGIP. on 10-19.

Very truly yours,

D. E. Swan
Operation Programming Engineer

KEH:pf
Attachment

bcc w/AD # 960: Jon Rose, Region M Federal Aid Engineer
Vern Skoog - Please return completed AD # 960 when advance deposit is received.
P. E. Terpin
D. H. Moehring

9368

September 25, 1981

ACC

City of Milwaukie
10722 S.E. Main Street
Milwaukie, Oregon 97222

Attn: Steven H. Hall
Public Works Director

Gentlemen:

On September 24, 1981 we received a satisfactory bid from Cascade Construction Co., P.O. Box 4267, Portland, Oregon 97208 for Lake Road at Oatfield Road Traffic Signal installation and intersection improvement.

We anticipate the financial sharing of construction costs to be:

Contractor's Bid	$133,455.15
Anticipated Additional Items:	8,175.00
SUBTOTAL	$141,630.15
4 1/2% Contingencies	6,373.36
9% Engineering	12,746.71
ESTIMATED TOTAL COST	$160,750.22

City's Share:
15% of $160,750.22 = $24,112.53

We will award the contract when we receive your advance deposit of $24,100, which should arrive no later than October 16, 1981.

On the attached sheet are instructions for three methods of advance deposit. Please use the option of your choice.

Very truly yours,

D. E. Swan
Operation Programming Engineer

Acctg
Recd check
$24112.53
10-9-81
KEH

KEH:pf
Attachment

bcc w/AD # 959: Jon Rose, Region M Federal Aid Engineer
Vern Skoog - Please return completed AD # 959 when advance deposit is received.

9368

6

Gresham Paving, Inc.
GRADING AND PAVING CONTRACTORS
PHONE 667-1102

4540 S.E. 174 TH AVE.
PORTLAND, OREGON 97236

September 25, 1981

Office of Commission Services
Room 121
State Transporation Building
Salem, Oregon 97310

Re: Highway FAU 9665 Oatfield Road - Section Lake Road at Oatfiled Road
34 Ave. (Milwaukie) & Oatfield Road at S. E. Aldercrest Drive.
County: Clackamas
Class of Work: Grading, Paving and Signals
Proposals to be Received: September 24, 1981

Attention: Mr. Gormsend

Dear Mr. Gormsend,

Gresham Paving, Inc. was in error by not marking the "Woman Owned Goal" at .03% and total M. B. E. goal of .03%. Where as Gresham Paving, Inc. has a contract with Linda Workman D. B. A. Contractors Services (telephone no. 657-7138) for bid item no. 6 Flagging, for the sum of $4,800.00 for this project.

Per Oregon State Highway Division Standard Specification for highway construction 102.18 (red book), the right is reserved to reject any or all proposals, to waive techinalities. I do believe to waive technicalities will be in the State's best interest.

Gresham Paving, Inc. is well qualafied in this field. We have done the same kind of work on Highway 43 in West Linn and are currently doing two more on the same Highway.

Sincerely,

GRESHAM PAVING,INC.

no response nec. as wrote him re above on 9/25/81

Scott Pickens
President

SP:cw

hand delivered
9/28/81

9/28/81
cc
Jack Sollis
Dave Moehring
Kay Turner
Ed Hunter
Ed Hanny
C. T. Keasey
Robert Church
Walt Hart

9368 9-17-81

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. IX-9665(6)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Clackamas

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 90118

6. TO

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE	8. FEDERAL ROUTE NUMBER	9. STATE ROUTE NUMBER
9/17/81	FAU 9665	County Road

10. GENERAL LOCATION:

Oatfield Road at Aldercrest Drive

11. GENERAL DESCRIPTION OF WORK

Program change

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

- ☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
- ☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
- ☐ ACQUISITION OF RIGHT-OF-WAY
- ☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
- ☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
- ☒ OTHER *(Specify)* Program change

13. REMARKS

As requested in Mr. Swan's letter of 9/16/81 I approve the revised Preliminary Engineering Costs to a TEC of $10,250 Federal Funds $8,810.

(Increase TEC $3,250 Federal Funds $2,760 Appn. Code 772 from 81' Supplemental allocation)

RECEIVED
STATE HWY ENGR
SEP 23 '81
REFER TO
Moehring
FOR

Info	Inves	R/C	D/R	Sign	Act	File

14. DATE	15. SIGNATURE OF APPROVING OFFICIAL	16. TITLE
9/17/81	Walack	for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9368

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

September 16, 1981

In Reply Refer to
File No.: PRO 6-2

TO: Dale E. Wilken, Division Administrator
Federal Highway Administration

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Program Change
Item No. 90118
Project No. IX-9665(6)
Oatfield Rd. @ Aldercrest Dr.
Clackamas County

I request approval of a minor program change to adjust the estimated preliminary engineering costs to reflect more accurately the scope of work, based on the attached justification letter from Mr. Spence dated 9/14/81.

Approval of this request will involve an increase of $3,250 in total cost and Federal obligation of $2,760 in Interstate Substitution General Funds (Appn Code 772) with revised financing as follows:

	TEC	FF	%	APPN CODE
Present	$10,250	$8,810	85%	---
Previous	7,000	5,950	85%	823
Difference	$ 3,250	$2,760	85%	772

The funds for this increase in cost is to come from the FY '81 supplemental allocation.

DRH:pf
Attachment

cc: R. N. Bothman, Metro
F. E. Terpin
Judy Smith, Metro
Jon Rose, Metro
E. L. Hardt, Region 1
Gary Zehner, w/attachment
General Files

Form 734-3122

STATE OF OREGON
Department of Transportation
Metropolitan Branch

INTEROFFICE MEMO
Telephone: 238-8226
Date: September 14, 1981

File No: 203-1911

TO: F.E TERPIN
Location Engineer

FROM: T.A. SPENCE T.A. Spence
Plan & Program Manager

SUBJECT: Oatfield Road @ Aldercrest Drive
Clackamas County

I request your approval of the attached Authority for Survey No. 2 for this project. This is an Interstate Transfer project sponsored by Clackamas County.

The field survey (901) function has been reduced from the original authorization. However, it appears that the remaining functions were underestimated on the original authority. Specifications (921) was greatly underestimated.

After considering a more elaborate design of this project, a simplified design was eventually selected. This Authority for Survey for $10,250 is very high when compared to the current construction estimate of $16,800. This is mainly due to the fact that there are basic costs incurred on any project regardless of size. These have run up the preliminary engineering as compared to construction.

The additional federal funds necessary to cover this increased Authority for Survey are to be obligated from the Supplemental FAIX allocation.

TAS:ECM:JS

cc: D.R. Adams
C.H. Duval
E.J. Dunn
J.R. Rose
D.E. Swan
G.E. Zehner
J.L. Gaither
C. Laux
R.C. Brooks

Attachment

9/16/81

THE PRESENT AUTHORIZATION DATES BACK TO 1978. INFLATION, DOWNSCOPING, & UNANTICIPATED R/W NEEDS CONTRIBUTED TO THE P.E. VS. CONST. COST IMBALANCE. THE ORIGINALLY PLANNED IMPROVEMENT AT ALDERCREST WAS ELIMINATED DUE TO FUNDING CONSTRAINTS.

PRELIMINARY ENGINEERING

Major Class 19
(also 07, 08, 09)

	Engineering	AUTHORIZATION APPROVED BY FHWA			TOTAL AUTHORIZATION REQUESTED		
901	Resident Engineer		4	000		3	550
902	Citizens involvement						
903	Payment to local government						
904	Consultant fees						
905	Final Design		2	000		2	000
906	Bridge Design						
907	Preliminary design						
908	Field testing section (construction)						
909	Right of way descriptions						250
910	Soils and geology					1	000
911	Signing (traffic department)						300
912	Landscape department						50
913	Right of way - liaison & relocation						200
914	Utility liaison			500			500
915	Audits by Accounting Section						
916	Photogrammetry						
917	Inventory needs						
918	Reconnaissance and hydrology						
919	Engineering graphics						
920	Project management						200
921	Specifications			500		1	500
922	Administrative Services - engineering						150
923	Environmental Section						550
924	Department of Transportation						
925	Air monitoring						
926	Foundation investigation						
950	Training courses, conferences & seminars						
955	Employee relocation assistance program						
960	Personal leave						
975	Historical sites inventory						
980	Public hearing charges						
985	EEO monitoring expense						
986	"Non-State" employees travel						
		$	7	000	$	10	250

Section: OATFIELD RD @ ALDERCREST DR

Highway: OATFIELD RD

County: CLACKAMAS

Prefix: 203-1911

Form E-~~39~~ (Rev. 9-71)

9368

OREGON STATE HIGHWAY DIVISION

78-115

AUTHORITY FOR SURVEY

Section: Oatfield Rd. at Aldercrest Drive

Highway: Oatfield Road (FAU 9665)

County: Clackamas #3

Date: September 11, 1981

Authorization No.: 2

Survey Prefix: 203-1911 (Assigned by Salem office)

Description of termini, route, length, etc.: The intersection of Aldercrest Drive and Oatfield Rd.

Proposed: Realign Oatfield Rd. within existing right-of-way. Provide a 36-foot roadbed section and construct curbs and sidewalks. Revise storm drainage. Modify Aldercrest Dr. to match the realignment. Provide 32-foot roadbed section with curbs and resurface.

Purpose of survey: State to perform field survey and complete plans, specifications and estimate of cost.

Estimate of cost: $16,800 (construction)
F.A. No. IX-9665(6) 9-17-81
FAIX (Mt. Hood Transfer)
Class II, Categorical Exclusion

Field Survey	(901)	3,550
Citizen Participation	(902)	
City or County	(903)	
Consultant	(904)	
Final Design	(905)	2,000
Bridge Design	(906)	
Preliminary Design	(907)	
R/W Description	(909)	250
Soils & Geology	(910)	1,000
Traffic	(911)	300
Landscape	(912)	50
Liaison R/W	(913)	200
Utility	(914)	500
Photogrammetry	(916)	
Location Studies	(918)	
Engineering Graphics	(919)	
Project Management	(920)	200
Specifications	(921)	1,500
Administrative Services	(922)	150
Environmental	(923)	550
Dept. of Transportation	(924)	
Air Quality Monitoring	(925)	
Foundation Exploration	(926)	
Seminars & Training	(950)	
Hearings	(980)	
Personal Leave Time	(960)	

Total estimated cost of survey	$ 10,250
Previous authorization	7,000
Additional authorization requested	3,250
Additional authorization approved (Salem)	
Total all authorizations approved (Salem)	

INSTRUCTIONS

Submit four copies to Salem. After approval by the Assistant State Highway Engineer, one copy will be sent to the Regional Engineer and one copy to the Resident Engineer.

This form does not constitute authority for making survey until approved and returned.

Submit separate order for each survey.

RECEIVED
OCT 2 1981
LOCATION SECTION

Requests made by: Curtis H Duval
~~Field Engineer~~
CURTIS H. DUVAL, Metro Location Engineer

Recommended for Approval:
~~Regional Engineer~~
D.R. ADAMS, Project Development Engineer

Recommended for Approval: George C.
Location Engineer
field

Approved: J H Wersting for E.S.H.
Assistant State Highway Engineer

SP*23604-734

5068

9-2-81

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. IX-9665(6) & IX-9665(10)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Clackamas

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 90118 & 90100

6. TO

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 9/2/81

8. FEDERAL ROUTE NUMBER FAU 9665

9. STATE ROUTE NUMBER County Road & City Street

10. GENERAL LOCATION:

Oatfield Road at Aldercrest Drive and Oatfield Road at Lake Road

11. GENERAL DESCRIPTION OF WORK

Channelization and signal

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY

☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION

☐ ACQUISITION OF RIGHT-OF-WAY

☒ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS

☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

☒ OTHER *(Specify)*
Permanent Pavement Striping S.F. $2,000
Temporary Pavement Striping S.F. $550
State Furnished Software $500
Signal Controller Testing $1,925

13. REMARKS

RECEIVED
STATE HWY ENGR
SEP 4 '8
REFER TO
Machu
FOR

After concurrence in award you are authorized to proceed with those items listed above as shown in your Estimate.

Mr. Swan's August 31, 1981 request and certifying statements are accepted.

PS&E documents for the subject project have been reviewed and are approved at a total estimated cost of $227,900 Federal Funds $193,715.

A signed copy of the Title Sheet is returned herewith.

(Increase $16,800 Federal Funds $14,280 from 81 Supplemental Allocation for project IX-9665(6), no increase in funds required for IX-9665(10))

14. DATE 9/2/81

15. SIGNATURE OF APPROVING OFFICIAL

16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

4368

STATE OF OREGON
Department of Transportation
Metropolitan Branch

INTEROFFICE MEMO
Telephone: 238-8354
Date: April 17, 1980

File No: 203-1910

TO FRANK TERPIN
Location Engineer -- Salem

FROM for CURT DUVAL
Metro Location Engineer

SUBJECT Location Survey
Lake Road at Oatfield Road
Lake Road
Clackamas County
Prefix: 203-1910

Herewith the following data pertaining to subject:

1	Roll	~~Small scale ownership map~~ ✓ – to R/w Descrip.
1	"	~~Property R/W taking map~~ – to R/w Descrip
1	"	~~x-sections 34th & Oatfield Rd.~~ ✓
1	"	~~x-sections Lake Road~~ ✓
1	"	~~Profiles & Typical sections~~ ✓
1	"	~~Vicinity map 1" = 50' (mylar)~~ ✓
1	"	~~Vicinity map 1" = 20' (mylar)~~ ✓
1	"	~~Construction Detail map 1"~~ = 50' (mylar) ✓ – to R/w Descrip
1	"	✮ ~~Signal construction detail map 1" = 20' (mylar)~~ ✓ – to traff
1	"	✮ ~~Drainage detail map 1" = 50' (mylar)~~ ✓
1	Book	~~Field notes~~ – To R/w Descrip
1	Envelope	~~Property deeds~~ ✓ – ~~to R/w Descrip~~
1	"	✮ ~~Pictures~~ ✓
1	Pad	✮ ~~Computer printout~~ ✓ – To R/w Descrip
1	Pad	PAD { ~~Quantity summary & cost estimate~~ ✓
1		Narrative report ✓
1		~~Locating engineer's statement~~ ✓

to Final Design
5-12-80

On the Oatfield Road portion of the project, please stop the sidewalk construction on the right side @ Station 45 + 65. This will keep the two fir trees and one cedar tree from being removed at this time. The new construction should taper into the existing bikeway. The catch basin shown to right of Sta. 47+95 should be moved to right of Sta. 45+65± and connected to the catch basin left of Sta. 46+80. The stop bar for 34th St. left turn lane should be set back 8 feet from the through lane.

js

[illegible] [illegible] 000
[illegible] 195,432
4-30-80
Zehner says [illegible]

RECEIVED
APR 23 1980
LOCATION SECTION

to City [illegible]
[illegible] 5-1-80

to bikeway [illegible] 5
Pl[illegible] 5 12-80

✮ Do not have in File

9368

Milwaukie

ENVIRONMENTAL REVIEW CHECKLIST

ALL CLEAR 8/13/81 Donald L Trout

September 24 Bid Letting August 12 All Clear Deadline

SECTION Oatfield Road @ Lake Road (Milwaukie)
Highway FAU 9665
County Clackamas Region Metro
Type of Work G,P,Sigs,Illum,Sn Funds FAIX
State ✓ Consultant ___ Plans Avail. ✓ Yes ___ No

Constr. Noise. Specs ✓
Replace plantings SW Corner ✓

ZEXC

	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR
DOCUMENTS:					
EIS	☒	☐	☐	☐	☐
Negative Declaration	☒	☐	☐	☐	☐
Project Assessment	☒	☐	☐	☐	☐
Write-off Letter	☒	☐	☐	☐	☐
PERMITS:					
Division of State Lands	☒	☐	☐	☐	☐
D.O.G.M.I.	☒	☐	☐	☐	☐
Corps of Engineers	☒	☐	☐	☐	☐
Coast Guard	☒	☐	☐	☐	☐
Co. Conditional Use	☒	☐	☐	☐	☐
NPS Air Pollution	☒	☐	☐	☐	☐
NPS Water Pollution	☒	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
CULTURAL:					
Cultural Survey	☒	☐	☐	☐	☐
Cultural Salvage	☒	☐	☐	☐	☐
NOISE:					
Noise Study	☐	☒	☐	☐	☒

9368 Lake Road at Oatfield Rd / 3 ?th Ave.

~~Section~~ (Milwaukie) Oatfield Rd at SE Aldercrest Secs
Programming Estimate $

Highway Lake Rd & Oatfield Rd.

Project Length Lake Rd - 0.18 miles, Oatfield - 0.5 miles

County Clackamas 8-11-81

Completion Time 240 Cal. Day

Kind of Work Grading, Paving and Signals

Est. Comp. Date 6-22-82

Prefix 203-1910 / 203-1911

Letting Date ~~July 23, 1981~~ Sept 24, 1981

Project No. ~~IX-9665 (10)~~ IX-9665 (6)

ESTIMATED CONSTRUCTION AUTHORIZATION

Estimated Contract Amount . . . . $ 189,673.50

Anticipated Additional Items:

Royalty Payment	
Permit Fees	
Slide Correction	
Railroad Protective Costs	
Other Railroad Costs	
Permanent Signing	
Permanent Pavement Striping	2,000
Temporary Pavement Striping	500
Remove Pavement Striping (Exist. & Temp.)	
Temporary Erosion Control	
State Furnished Software Program	500
~~Roadside Seeding & Mulching~~ Bark Mulch	500
Asphalt Cement Adjustment	
On the Job Trainees	
State Responsibility for Damages	
Signal Controller Testing (Engineering)	1,925
Bikeway Signs	
Furnish Mailbox Posts	
Adjust Utilities:	
City of Milwaukie (Water)	1,500
City of Milwaukie (Sewer)	500
Shrubs & Ground Cover	750

LAKE RD	ALDERCREST
177,825.50	11,848.00
186,000.50	11,848.00
8,370.02	533.16
16,740.04	1,066.32
211,110.56	13,447.48

~~195~~

$ ~~7,425.00~~ ~~6,2[illegible]~~ 8,175.00

Subtotal $ 197,848.50

Contingencies (4-1/2%) 8,903.18

Engineering (~~8~~, [✓ 9] ~~10~~%) 17,806.37

Subtotal $ 224,558.05

Credit for ______ . . . . ______

Estimated Net Authorization, Construction . . . . $ 224,558.05

APPROVED

REC'D. 8-11-81 Q

CC: Earl Mershon

(MILWAUKIE & CLACK. Co.)

OK

Road Design Engineer

Rev. 5/79

OREGON STATE HIGHWAY DIVISION

SUMMARY--BID SCHEDULE--COST ESTIMATE

Sheet 1 of 2

Date ~~7/22/81~~ 7/13/81

ion Lake Road at Oatfield Rd/34th Ave (Milwaukie) Oatfield Rd. at S.E. Aldercrest Dr.

County Clackamas

nd Of Work Grading Paving and Signals

Length Lake Rd. 0.18 Oatfield Rd. 0.5

Name B. Bergstedt

~~COST ANALYSIS UNIT~~ 2-5-81 Rev

THIS ENGINEERING ESTIMATE IS PRICED FOR BID LETTING Sept 24 1981

Item	Code	Unit	Quant.	Unit Cost	Total
Mobilization		All	All	(8%)	14,000
Temporary Protection and Direction of Traffic		All	All	—	3,700.00
Temporary Signs		Sq. Ft.	321	6.00	1,926.00
Temporary Barricades		Each	19	125.00	2,375.00
Temporary Plastic Safety Markers		Each	7	80.00	560.00
Flagmen		Hour	300	23.50	7,050.00
Roadwork					
Clearing and Grubbing		All	All	—	9000.00
Removal of Structures and Obstructions		All	All	—	4500.00
General Excavation		Cu. Yd.	958	6.50	6,227
~~Trench Excavation~~		~~Cu. Yd.~~	~~28~~		—
Finishing Roadbed and Slopes			All	—	5500.00
1"-0 Aggregate Base		Ton	1,020	9.50	9,690.00
Class "C" Asphalt Concrete		Ton	690	31.00	21,390.00
12-inch Sewer Pipe		Lin. Ft.	125	24.00	3,000.00
Extra for Pipe under Pavement		Lin. Ft.	125	15.00	1,875.00
Concrete Inlets, Type G-2		Each	2	550.00	1,100.00
Concrete Walks		Sq. Yd.	350	14.00	4,900.00
Concrete Driveways		Sq. Yd.	200	18.00	3,600.00
Concrete Curbs		Lin. Ft.	1,460	5.50	8,030.00

OREGON STATE HIGHWAY DIVISION

SUMMARY--BID SCHEDULE--COST ESTIMAT

Sheet 2 of 2

Date 1/22/77

Lake Road at Oatfield 1/34th Ave (Milwaukie)

ion oatfield Rd. at S.E.

County Clackamas

ind Of Work Grading Paving and Signals

Length

Name B. Bergstedt

Item	Code	Unit	Quant.	Unit Cost	Total
Extra for Asphalt Approaches		Each	1	200^{00}	200^{00}
Extra for Asphalt Walks		Sq. Yd.	175	5^{50}	962^{50}
Adjusting Manholes		Each	4	250^{00}	1000^{00}
Furnishing and Installing Mailbox Posts		Each	5	100^{00}	500
Signing					
Removal of Existing Sign Installations		All	All	—	200^{00}
Wood Sign Posts		All	All	—	900^{00}
Type "C" & "D" Signs in Place		Sq. Ft.	74	11^{00}	814^{00}
Type "U" Signs in Place		Sq. Ft.	18	18^{00}	324^{00}
Move & Reinstall Existing Signs		All	All	—	350^{00}
Traffic Signal					
Traffic Signal Installation, Complete		All	All	—	76,000

Lake Rd + Oatfield

S U M M A R Y

T

ITEM	UNIT	QUANTITY	SEGREGATION OF QUANTITIES IX-9665 (10)	IX-9665" (6)
Mobilization	All	All	94%	6%
Temporary Protection and Direction of Traffic	All	All	85%	15%
Temporary Signs	Sq. Ft.	321	221	100
Temporary Barricades	Each	19	16	3
Temporary Plastic Safety Markers	Each	7	7	
Flagmen	Hour	300	200	100
Roadwork				
Clearing and Grubbing	All	All	100%	
Removal of Structures and Obstructions	All	All	90%	10%
General Excavation	Cu. Yd.	958	931	27
Finishing Roadbed and Slopes	All	All	90%	10%
1"-0 Aggregate Base	Ton	1,020	960	60
Class "C" Asphalt Concrete	Ton	690	600	90
12-inch Sewer Pipe	Lin. Ft.	125	125	
Extra for Pipe under Pavement	Lin. Ft.	125	125	
Concrete Inlets, Type G-2	Each	2	2	
Concrete Walks	Sq. Yd.	350	350	
Concrete Driveways	Sq. Yd.	200	200	
Concrete Curbs	Lin. Ft.	1,460	1,200	260
Extra for Asphalt Approaches	Each	1		1
Extra for Asphalt Walks	Sq. Yd.	175		175
Adjusting Manholes	Each	4	4	
Setting Mail Box Posts	Each	5	5	
Signing				
Removal of Existing Sign Installations	All	All	100%	
Wood Sign Posts	All	All	100%	
Type "C" & "D" Signs in Place	Sq. Ft.	74	74	
Type "U" Signs in Place	Sq. Ft.	18	18	
Move & Reinstall Existing Signs	All	All	100%	
Traffic Signals				
Traffic Signal Installation, Complete	All	All	100%	

Stoudenmeyer Sacre Butts

Oatfield @

EGON STATE HIGHWAY DIVISION
SUMMARY--BID SCHEDULE--COST ESTIMATE

Sheet 1 of 1
Date 8-11-81
Section Aldercrest 1X-9665(6)
County Clack.
Kind Of Work Grading + Paving
Length
Name Bergstedt

No	Item	Code	Unit	Quant.	Unit Cost	Total
	Mobilization	6%		All	—	840^{00}
	Temporary Protection & Direction of Traffic	15%	All	All	—	555^{00}
	Temporary Signs		Sq. Ft.	100	6^{00}	600^{00}
	Temporary Barricade		Each	3	125	375^{00}
	~~Temporary Plastic Safety Markers~~		~~Each~~			
	Flagmen		Hour	100	23^{50}	$2,350^{00}$
	Roadwork					
	Removal of Structures + Obstructions	10%	4,500	All	—	450^{00}
	General Excavation		Cu. Yd.	27	6^{50}	175^{50}
	Finishing Roadbed and Slopes	10%	All	All	—	550^{00}
	1"-0 Aggregate Base		Ton	60	9^{50}	570^{00}
	Class "C" Asphalt Concrete		Ton	90	31^{00}	$2,790^{00}$
	Concrete Curbs		Lin. Ft.	260	5^{50}	$1,430^{00}$
	Extra for Asphalt Approaches		Each	1	200	200^{00}
	Extra for Asphalt Walks		Sq. Yd.	175	5^{50}	962^{50}
						\$11,848 ~~11,851.00~~
					app 6%	Aldercrest

FORM 734-1736 (1-79)

9368

OREGON STATE HIGHWAY DIVISION
INTER-DEPARTMENT CORRESPONDENCE
Milwaukie, Oregon 97222

DATE August 10, 1981

TO J.B. Boyd
Right of Way Manager
DOT - Salem

ATTENTION: Frank Lowe

FROM Kenneth Rolfe
Kenneth Rolfe
Regional R/W Supervisor
Milwaukie

SUBJECT Oatfield Road @ Lake Road
(Milwaukie)
Clackamas County

F

Attached is a right of way certification for Oatfield Road @ Lake Road. The State, on contract, is doing the right of way acquisition on this project for the City of Milwaukie.

The project is clear except for File 51246-George. The 20-day waiting period for the letter of offer is up August 18th. Riveness is planning on filing a complaint, depositing money into court and give the 30-day notice on August 19th. Therefore, the right of way will be entirely cleared by September 24th, the present bid date.

KR:kf

enc.

E Rf

117 DOT Building
Salem, Oregon 97310

Highway 703
Prefix 203-1910

Attention: Right-of-Way Section

Subject: Federal Aid Project No.
Project Name Oatfield Road at Lake Road (Milwaukie) City Streets

Regarding the above referred to federal aid project, we hereby certify that to the best of our knowledge and belief:

A. Existing Right-of-Way

☐ 1. All construction can be accomplished completely within the existing right-of-way. This existing right-of-way was acquired prior to January 2, 1971.

B. New Right-of-Way

☒ 1. This project required additional right-of-way purchased after January 2, 1971. Right-of-way, easements, or rights-of-entry required for this project have been secured in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, and all incidental charges related to the transfer of property will be paid by the city in accordance with said Act.

☒ a. There has been no displacement of persons from residences, farms or businesses.

OR

☐ b. There has been displacement of persons from either residences, farms or businesses and in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, displaced persons, businesses, or farm operations have been provide relocation payments, if eligible, and relocation assistance. Displaced individuals or families have been relocated to decent, safe and sanitary housing or have been offered decent, safe, sanitary an fair housing immediately available on the open market.

C. Utilities

☒ 1. The occupancy and/or adjustment of existing utilities within the right-of-way of the above referred to federal aid project have been authorized by permit, franchise, or other approved procedure.

Signed at ______________, Oregon, this _____ day of __________, 19__

City of ______________________

Certified By:

Kenneth Rolfe
Regional Right-of-Way Supervisor
Date Aug 10, 1981

SEE ATTACHED LETTER

____
Mayor

____
City Recorder

Instructions: Complete A or B and C.
R/W File No. _________
Rev. 1/76

9368

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6-2

July 24, 1981

TO: Dale E. Wilken
Division Administrator
Federal Highway Administration

FROM: D.E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 90100
Project No. IX-9665(10)
Lake Rd. @ Oatfield Road (FAU 9665)
Clackamas County

Attached support data consists of PR-1 forms and project maps which are the necessary documents for my request of February 18, 1981.

This request is based on the October 27, 1978 letter to you from the Governor of Oregon.

A copy of the State Clearinghouse A-95 review conclusions was forwarded previously.

JLG:
Attachments

cc: R.N. Bothman (Metro)
Judy Smith (Metro)
Jon Rose (Metro)
Ed Hardt (Region 1)
Gary Zehner w/att
General Files

Budget Bureau No. 41-R2067

U.S.

FORM PR-1 (REV. 4-61)

FEDERAL-AID PROGRAM DATA

(PPM 21-1)

MONTHLY TRANSACTION NO.

DATE SUBMITTED TO W.O. July 24, 1981

CARD 2	REPORT NUMBER (19) (20)	PROJECT LOCATION (45 typewriter spaces) 21 Co. Rd., Oatfield Rd. @ Lake Rd. (Milwaukie) 65	ADT	PRESENT 9,400 (66)	FUTURE ---- (70)	YEAR --- (71) (72)	REGION 10	STATE NAME Oregon

CARD 3	CHARACTER OF PROPOSED WORK (35 typewriter spaces) 28 Channelization & Traf. Signal 62	NATL. FOREST (63) (65)	FH ROUTE NO.	SUPV AGCY	DA CLASSIF.	DA AREA (71)	EMERG. YR. (72) (73)	PL. AUTH YR (74) (75)	PROJECT NUMBER	PREFIX LETTER(S) 14 IX- 23	NUMBER 7 9665

CARD	CLASS OF FEDERAL FUNDS Interstate Substitutions General Funded	COUNTY NAME Clackamas				C 0 (14
	NAME OF URBAN AREA 17-31 Portland	ROUTE NO. U	FEDERAL-AID 9665 (32)	STATE Co. Rd.* (36)	U.S. (37) ---	

ESTIMATED PROJECT COST BY PHASES

CARD 5	LINE NO.	CHANGE CODE	PROJECT CODE	CLASS	WORK TYPE	WORK STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS 85%	STATE FUNDS	OTHER FUNDS (City)
1	(14-15)	(16)	41	42	43 46	53		(54) (58)	(59) (66)	(67) (76)		
5					PE							
5					ROW							
5					CONST (CODE) TOPICS Y008 Y031		"Lake Rd. @ Oatfield Rd./34th Ave. (Milwaukie) Sec."	0.0	211,100	(I-80N) 179,435	----	31,665
							PROJECT TOTALS	0.0	211,100	179,435	----	31,665
								(16)	(23)	(24) (33)		

CARD 1	CODE 1	PREPARED BY JLG
1	14	PROGRAM APPROVAL DATES 10-18-78 10-04-79 10-01-80

REMARKS Additional Data: Item Nos. IX-9665(5) & (8).

*SE Oatfield Road

2031910

ZEANER

Budget Bureau No. 41-R2067; Approval Expires February 28, 1966

FORM PR-1
(REV. 4-61)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

FEDERAL-AID PROGRAM DATA

(PPM 21-1)

July 24, 1981

LOCATION (45 typewriter spaces) ., Oatfield Rd. @ Lake Rd. (Milwaukie)	ADT	PRESENT 9,400	FUTURE ----	YEAR ---	REGION 10	STATE NAME Oregon	STATE CODE 41	APPN CODE 772	ITEM NO. 90100

K (35 typewriter af. Signal	NATL. FOREST	FH ROUTE NO.	SUPV AGCY	DA CLASSIF.	DA AREA	EMERG. YR.	PL. AUTH YR	PROJECT NUMBER PREFIX LETTER(S) IX-	NUMBER 9665	SEQ. NO. (10)	I. Projects Only POST MI.	DESIG.

Interstate Substitutions General Funded

COUNTY NAME: Clackamas CODE 005

Portland

ROUTE NO. U | FEDERAL-AID 9665 | STATE Co. Rd.* | U.S. ---

PROGRAM STAGE ☐ 1 OR ☐ 2

ESTIMATED PROJECT COST BY PHASES

K YPE	STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS 85%	STATE FUNDS	OTHER FUNDS (City)	CHARACTER OF PROPOSED WORK (Full description)
W								
ST ICS 8 1		"Lake Rd. @ Oatfield Rd./34th Ave. (Milwaukie) Sec."	0.0	211,100	(I-80N) 179,435	----	31,665	ROW-50' min.; Access Control-none; Parking Restrictions partial.
JLG		PROJECT TOTALS	0.0	211,100	179,435	----	31,665	

AL DATES
10-18-78
10-04-79
10-01-80

*SE Oatfield Road

REMARKS Additional Data: Item Nos. 90100; Project Nos. IX-9665(5) & (8).

-over-

USCOMM DUSCOMM-DC 48908-P61

LAKE RD. @ OATFIELD RD./34TH AVE. (MILWAUKIE) SEC.
PROJECT NO. IX-9665(10)

REMARKS - continued

Project Data: The work consists of 1) intersection improvement and channelization requiring grade, drain and high-type pavement; 2) installation of a multiphase traffic signal and 3) incidental work common to this type of project.

Data for PR-37:

Type Code Y008	(Channelization)	$136,100
Type Code Y031	(Traffic Signal)	$ 75,000

Note: 1) This project is in Congressional District No. 3.
2) Included in FY '81 AP in MSD FY '80 AE/TIP on page 92 as No. 92.

9368

[illegible]
117 DOT Building
Salem, Oregon 97310

~~[illegible]~~ #29 rec'd 6-18-81

Highway# 703
Prefix 203-1911

Attention: Right-of-Way Section

Subject: Federal Aid Project No. ________
Project Name Oatfield Rd. at Aldercrest Drive
Oatfield Road

Regarding the above referred to federal aid project, we hereby certify that to the best of our knowledge and belief:

A. Existing Right-of-Way

☒ 1. All construction can be accomplished completely within the existing right-of-way. This existing right-of-way was acquired prior to January 2, 1971.

B. New Right-of-Way

☐ 1. This project required additional right-of-way purchased after January 2, 1971. Right-of-way, easements, or rights-of-entry required for this project have been secured in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, and all incidental charges related to the transfer of property will be paid by the county in accordance with said Act.

☐ a. There has been no displacement of persons from residences, farms or businesses.

OR

☐ b. There has been displacement of persons from either residences, farms or businesses and in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, displaced persons, businesses, or farm operations have been provided relocation payments, if eligible, and relocation assistance. Displaced individuals or families have been relocated to decent, safe and sanitary housing or have been offered decent, safe, sanitary and fair housing immediately available on the open market.

RIGHT OF WAY ADMINISTRATION
RECEIVED
JUN 25 1981
M AM ADM RBR CA RS
PMS AS CE OS TA RUE
0 1 2 3 F

C. Utilities

☒ 1. The occupancy and/or adjustment of existing utilities within the right-of-way of the above referred to federal aid project have been authorized by permit, franchise, or other approved procedure.

Signed at Oregon City, Oregon, this 18th day of June, 1981

County of CLACKAMAS

Ralph Groener
CXXXXXXXXXge/Chairman

____
Commissioner

Stan Skoko
Commissioner

Certified By:

____
Regional Right-of-Way Supervisor
Date 6/24/81

Instructions: Complete A or B and C.
R/W File No. ________
Rev. 1/76

9368

L.

STATE OF OREGON

INTEROFFICE MEMO

DATE: May 18, 1981

TO: Ken Rolfe
Region 1 R/W Supervisor

FROM: Adele L. Egan
Right of Way Office Unit Supv.

SUBJECT: AGR 160
Amendment to
Oatfield Road @ Lake Road
(Milwaukie)
Clackamas County

MISC. CONTRACTS and
AGREEMENTS No. 6875

Attached are two copies of the Amendment to Agreement 160 with the City of Milwaukie, providing for the State handling of condemnation.

We have kept the one original.

AE
mp
Attach.

cc: Ed Hardt, w/c
Local Gov't. Programs, w/c
Title, w/c
Condemnation, w/c
Finance, w/c
Commission Services, w/orig.

[illegible]

9368

STATE OF OREGON

Highway - Traffic

INTEROFFICE MEMO

TRA 7-5

TO: D. N. Stoudenmeyer
Acting Final Design Supervisor

DATE: May 11, 1981

FROM: L. E. George
Traffic Engineer

SUBJECT: Approved Sign Study Plans
Lake Road at Oatfield Road/34th Avenue (Milwaukie) Section
FAU 9659 and 9665
[redacted]

Attached are two prints of the approved sign study plans for the above project.

This work should be included in the contract scheduled for letting on July 23, 1981.

L. E. George
Traffic Engineer

ELS:ds
Attachments

cc: R. N. Bothman
E. L. Hardt
M. D. Payne
F. T. Lacey

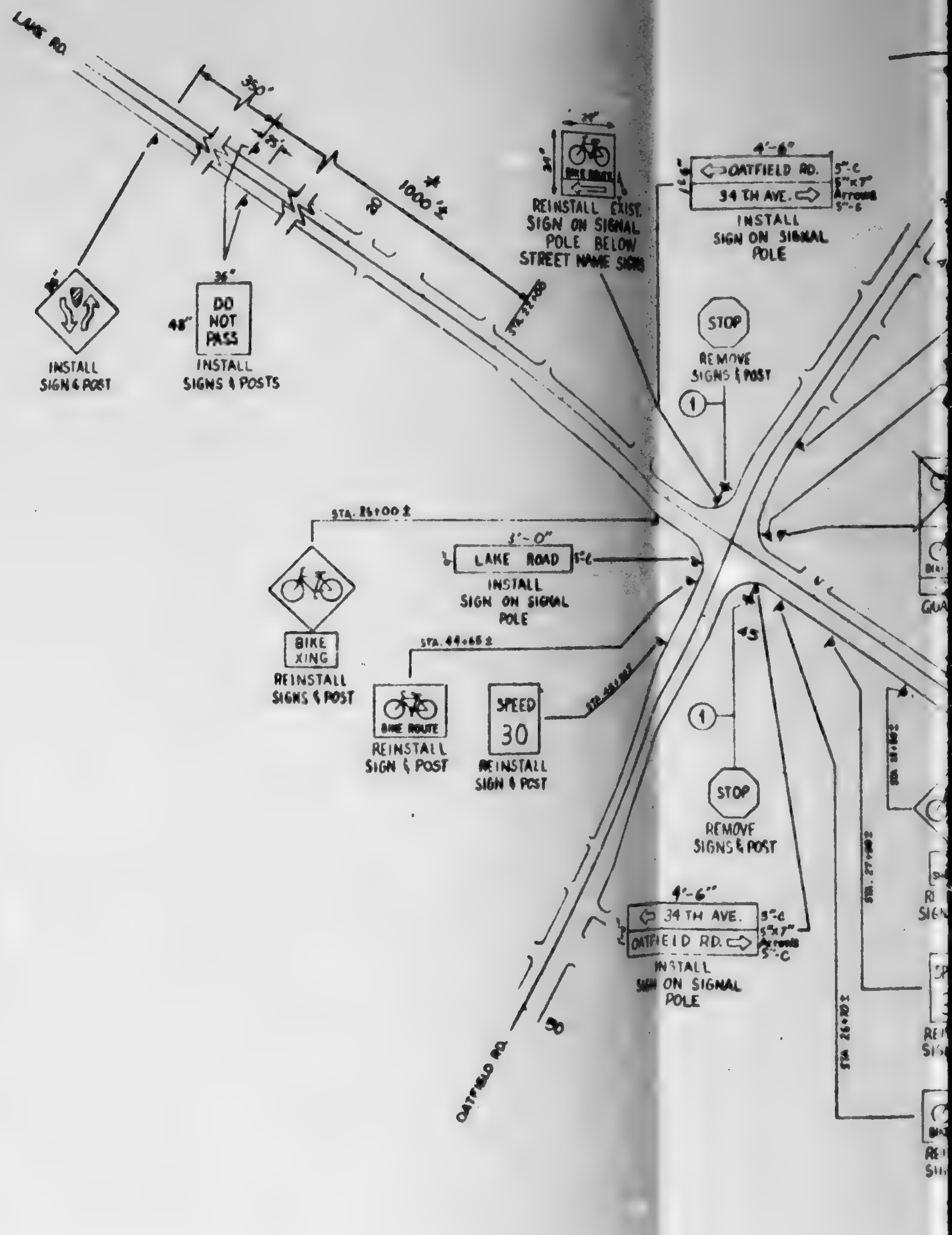
Versteeg
Anderson
Christensen W
Olson
Sullivan
Terpin
Trout
Wakerlig

RECEIVED
MAY 18 1981
ROAD DESIGN SECTION

Do Not File ☐
Return To
Bring Up /
Action

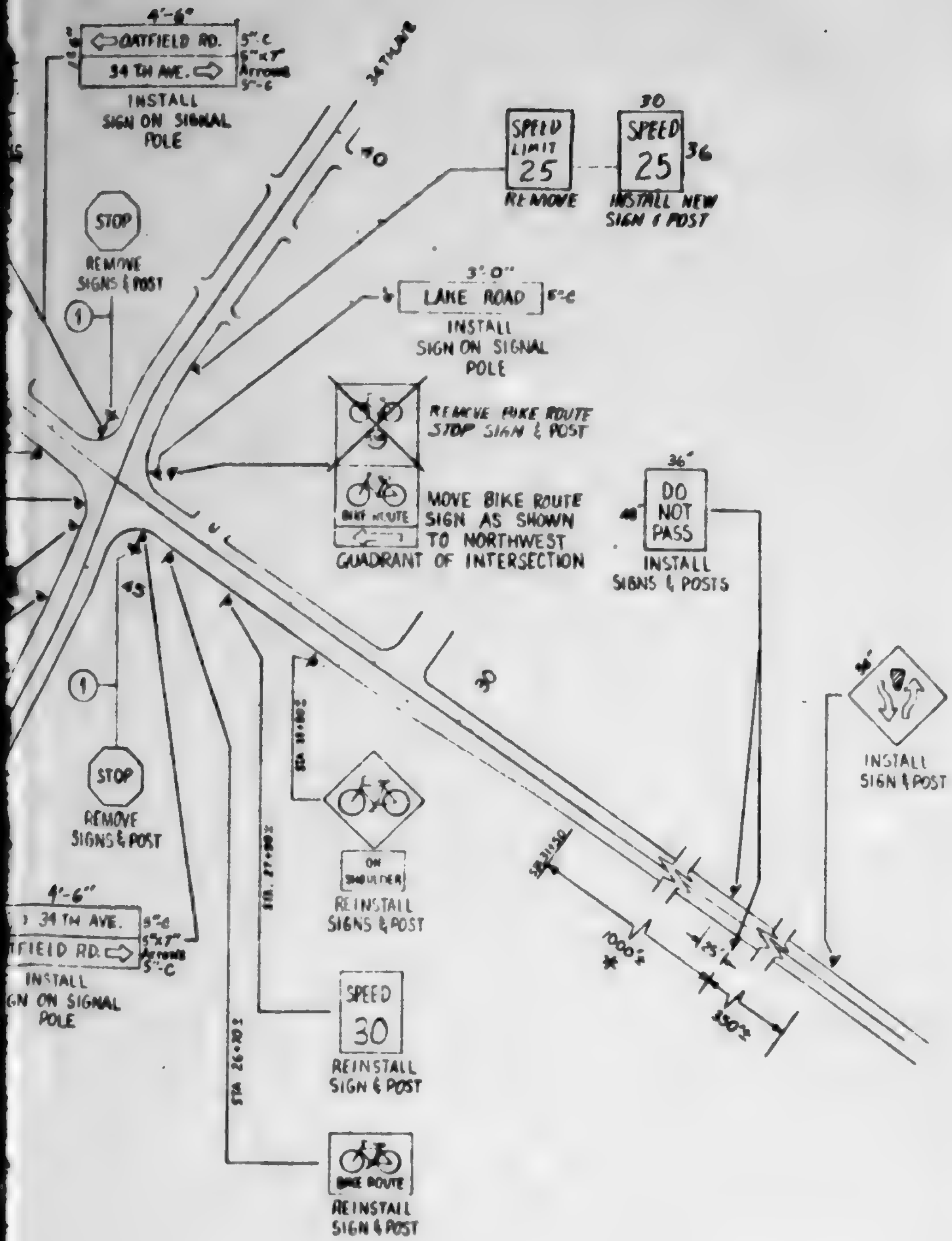
NOTED
W. G. BEARD

* Distance should be adjusted to coinci
with painted no passing zone.



LAKE RD.
350'
25'
* 1000'±
20
STA. 32+00
INSTALL SIGN & POST
36"
48"
DO NOT PASS
INSTALL SIGNS & POSTS
24"
BIKE ROUTE
REINSTALL EXIST. SIGN ON SIGNAL POLE BELOW STREET NAME SIGNS
4'-6"
OATFIELD RD.
34 TH AVE.
5"-C
5"x7" Arrows
5"-C
INSTALL SIGN ON SIGNAL POLE
STOP
REMOVE SIGNS & POST
①
STA. 26+00 ±
3'-0"
LAKE ROAD
5"-C
INSTALL SIGN ON SIGNAL POLE
BIKE XING
REINSTALL SIGNS & POST
STA. 44+65 ±
BIKE ROUTE
REINSTALL SIGN & POST
SPEED 30
REINSTALL SIGN & POST
45
①
STOP
REMOVE SIGNS & POST
4'-6"
34 TH AVE.
OATFIELD RD.
5"-C
5"x7" Arrows
5"-C
INSTALL SIGN ON SIGNAL POLE
50
OATFIELD RD.
STA. 27+00 ±
STA. 26+20 ±
GUA

should be adjusted to coincide
inted no passing zone.



4'-6"
OATFIELD RD.
34 TH AVE.
5" C
5" x 7" Arrows
5"-C
INSTALL SIGN ON SIGNAL POLE
34 TH AVE
40
SPEED LIMIT 25
REMOVE
30
SPEED 25
36
INSTALL NEW SIGN & POST
STOP
REMOVE SIGNS & POST
①
3'-0"
LAKE ROAD
5"-C
INSTALL SIGN ON SIGNAL POLE
REMOVE BIKE ROUTE STOP SIGN & POST
BIKE ROUTE
MOVE BIKE ROUTE SIGN AS SHOWN TO NORTHWEST GUADRANT OF INTERSECTION
36"
DO NOT PASS
INSTALL SIGNS & POSTS
45
30
STA 28+50±
①
STOP
REMOVE SIGNS & POST
ON SHOULDER
REINSTALL SIGNS & POST
STA 27+80±
4'-6"
34 TH AVE.
TFIELD RD.
5"-C
5" x 7" Arrows
5"-C
INSTALL
GN ON SIGNAL POLE
SPEED 30
REINSTALL SIGN & POST
STA 26+10±
BIKE ROUTE
REINSTALL SIGN & POST
1000±
475±
350±
INSTALL SIGN & POST

N

NOTE: Signs not shown to remain in place.

① REMOVE existing street name signs.

Steven M Hall
CITY ...
4 24 81
DATE

SIGNING PROJECT

LAKE RD. AT OATFIELD RD./34 TH AVE. (MILWAUKIE)
FAU 4657 & FAU 9665
CLACKAMAS COUNTY

Action	Date		Title
Submitted	3-23-81		Traffic Control Eng'r
Approved	4-6-81	J. J. Lacey	Region Engineer
"	4/13/81		Traffic Engineer
"			Bike Route Eng'r
Accepted	5/8/81		FHWA

9368

CITY OF MILWAUKIE

PUBLIC WORKS DEPARTMENT
in the City Hall • phone 659-5171

April ~~27~~ 29, 1981

MA PDM PDE FFM SPC
ODOT-METRO

APR 29 1981

BM PAR PPC FILE T/A

Department of Transportation
Metropolitan Branch
5821 N.E. Glisan
Portland, Oregon 97213

Attn: Jon Rose
Federal Aid Specialist

Re: Your File #203-1910
Lake Road at Oatfield/34th - signing
Preliminary Plan approval

Dear Jon:

Attached is one copy of the approved plans for signing the Lake Road/Oatfield Road/34th Ave. intersection.

If you need further information or have any questions please do not hesitate to contact this office.

Sincerely yours,

Steven M. Hall
Public Works Director

SMH:js

Enclosure: Plans

From Metro JON ROSE | Date 4/29/81

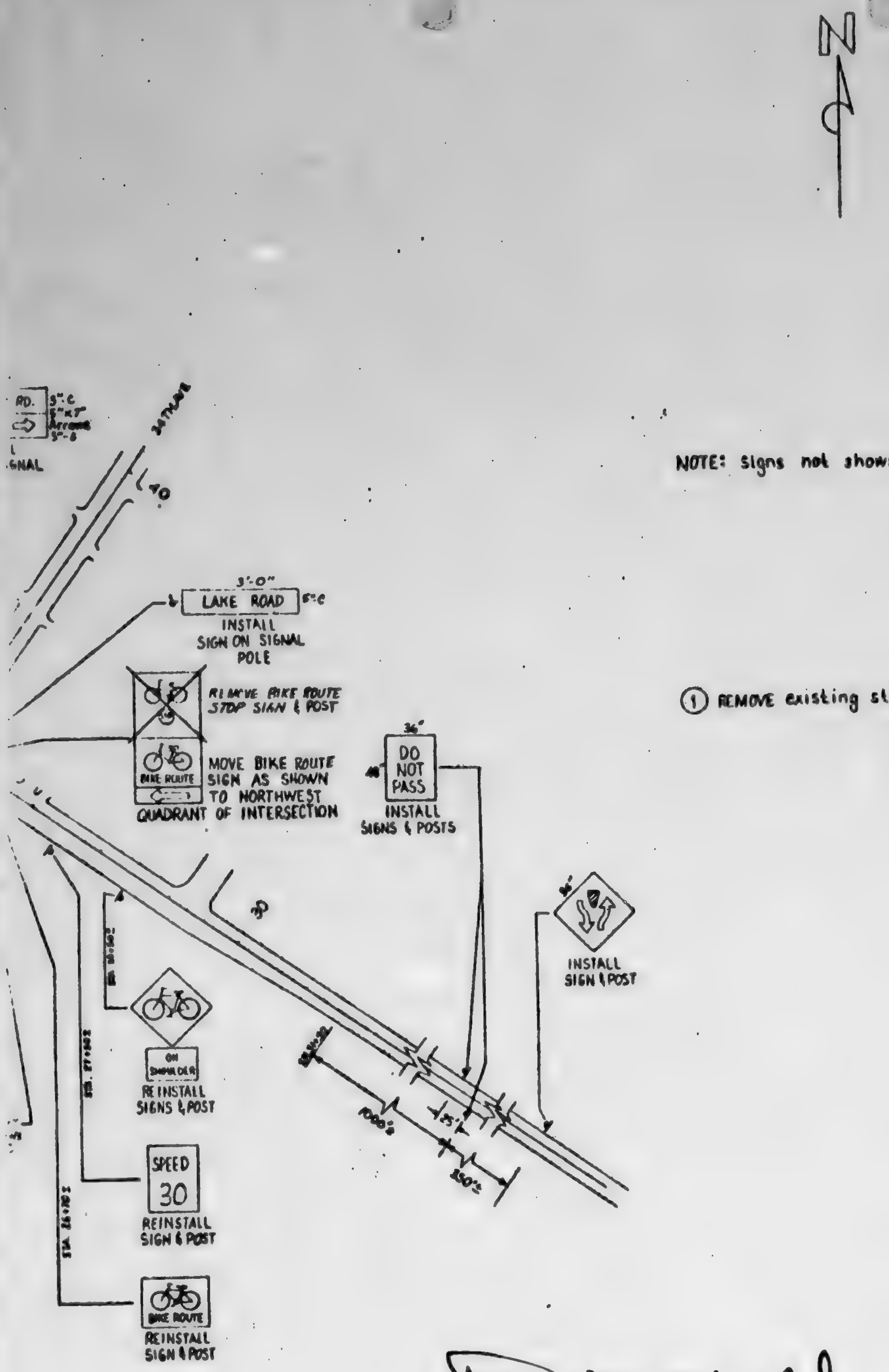
To BUZ SWAN

[✓ Program Mgmt.] Traffic Region 1

Comments: The City of Milwaukie has approved without comment the attached plans. Please note and advise the Traffic section.

Jon Rose

CITY HALL • 10722 S.E. MAIN STREET • MILWAUKIE, OREGON 97222 • TELEPHONE (503) 659-5171


N
RD.
5" C
5" KT
Arrows
3"-0
SIGNAL
34TH AVE
40
3'-0"
LAKE ROAD
5" C
INSTALL
SIGN ON SIGNAL
POLE
REMOVE BIKE ROUTE
STOP SIGN & POST
BIKE ROUTE
MOVE BIKE ROUTE
SIGN AS SHOWN
TO NORTHWEST
QUADRANT OF INTERSECTION
36"
48"
DO
NOT
PASS
INSTALL
SIGNS & POSTS
36"
INSTALL
SIGN & POST
30
ON
SHOULDER
REINSTALL
SIGNS & POST
SPEED
30
REINSTALL
SIGN & POST
BIKE ROUTE
REINSTALL
SIGN & POST
STA. 27+50±
STA. 26+20±
1000'±
25'
350'±

NOTE: Signs not shown to remain in place.

① REMOVE existing street name signs.

Glen M. Hall

CITY APPROVAL

April 12th 1981

DATE

CITY OF MILWAUKIE

SIGNING PROJECT

LAKE RD. AT OATFIELD RD./34 TH AVE. (MILWAUKIE)
FAU 9659 & FAU 9665
CLACKAMAS COUNTY

Action	Date	Signature	Title
Submitted	3-23-81	[illegible]	Tr. Sig. Contr. & Engr.
Approved	4-6-81	S. J. Casey	Reg. Engineer
•			Traffic Engineer
•	3-[illegible]-81	[illegible]	Bike Route Engr.
Accepted			

9368

2-18-81

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. IX-9665(10)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Clackamas

3. FROM
E. J. Valach, Acting Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 90100

6. TO

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 2/18/81

8. FEDERAL ROUTE NUMBER FAU 9665

9. STATE ROUTE NUMBER City Street

10. GENERAL LOCATION:

Oatfield Road at Lake Road (Milwaukie) Section

11. GENERAL DESCRIPTION OF WORK

Channelization

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* See below

13. REMARKS

As requested in Mr. Swan's letter of 2/18/81 you are now authorized to proceed with actions necessary to advance the physical construction provided for by the above project at a total estimated cost of $211,100 Federal Funds $179,435.

RECEIVED
STATE HWY ENGR
JUL 29 '81
REFER TO Moeking
FOR
Info	Invest.	R/D	D/R	Sign	Act.	File

orig to

4/29

14. DATE 2/18/81

15. SIGNATURE OF APPROVING OFFICIAL G. K. Hossner

16. TITLE for Acting Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9368

L.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

February 18, 1981

In Reply Refer to
File No.: PRO 6-2

TO: E. J. Valach, Acting Division Administrator
Federal Highway Administration

Original Signed By
D. E. Swan

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Obligation of FY '81 Interstate Transfer Program Allocation to Portland Urbanized Area

I request authorization to proceed with actions necessary to advance the various phases of work provided for by the projects listed below at an estimated total cost with obligation of Federal funds as shown:

ITEM NO.	PROJECT NO.	SECTION	WORK	TOTAL COST	FEDERAL FUNDS
10115	IX-000C(21)	East Side Signal Replacements	P.E.	$ 34,650	$ 29,450
90049	IX-000C(22)	Coliseum Area Signals (9 Loc.)	Y031	291,765	248,000
00086	IX-9956(11)	N. Col. Blvd. @ N. Portland Rd. Ramps	Y008	223,530	190,000
10117	IX-9704(5)	Sellwood Neighborhood Traffic Div.	P.E.	22,355	19,000
80360	IX-9891(3)	S.E. Division-S.E. Powell	R/W	352,950	300,000
71444	IX-9867(4)	Farris Rd.-Powell Blvd.(Gresham)	R/W	758,825	645,000
80148	IX-9718(5)	S.E. 97th Ave.-S.E. 122nd Ave.	R/W	160,000	136,000
90183	IX-9659(7)	Clack. Hwy.-Gladstone NCL	R/W	10,000	8,500
90183	IX-9659(8)	Clack. Hwy.-Gladstone NCL	Y008	365,000	310,250
90050	IX-9659(9)	Gladstone NCL-S.E. Oatfield Rd.	R/W	9,400	7,990
90050	IX-9659(10)	Gladstone NCL-S.E. Oatfield Rd.	Y008	254,500	216,325
90283	IX-9702(5)	Harmony Rd. @ Price Fuller Rd.	R/W	2,400	2,040
90100	IX-9665(10)	Oatfield Rd. @ Lake Rd.(Milwaukie)	Y008	211,100	179,435
10118	IX-9473(3)	S.W. Madrona-Jean Rd.(Lake Oswego)	R/W	516,000	438,600
90048	IX-9714(6)	Clack. Hwy.-32nd Ave.(Milwaukie)	Y008	250,120	212,600
90150	IX-9091(9)	Allen Blvd.-S.W. Scholls Ferry Rd.	R/W	52,950	45,000
90150	IX-9091(10)	Allen Blvd.-S.W. Scholls Ferry Rd.	Y008	334,710	284,500
10119	IX-9088(3)	Murray Blvd.-Alice Lane (Beaverton)	R/W	445,000	378,250

JLG:pf

cc: Gary Zehner
General Files

Form 734-3122

9368

CITY OF MILWAUKIE

PUBLIC WORKS DEPARTMENT
In the City Hall • phone 659-5171

February 6, 1981

MA PDM PDE FFM SPC
ODOT - METRO

FEB 12 1981

BM PAR PPC FILE T/A

Oregon Department of Transportation
Metropolitan Branch
5821 NE. Glisan
Portland, Oregon 97213

Attn: Mr. Jon Rose
Federal Aid Specialist

Re: Your file 203-1910/1911
Preliminary Plan review
Lake Road at Oatfield/34th Ave.

The City of Milwaukie has reviewed the subject plans and attached is the approved copy for your reference.

In conjunction with utility adjustments, the City furnishes the following estimates and items:

1. Raise water valves	8 each	$75.00 ea.	$600.00
2. Relocate water meters	4 each	100.00 ea.	400.00
3. Adjust manholes	5 each	50.00 ea.	250.00
TOTAL ESTIMATE			$1250.00

It is to be noted that this approval is for the Milwaukie portion only and does not include the County project at Oatfield Road and S.E. Aldercrest Road.

Sincerely yours,

Steven M. Hall, P.E.
Public Works Director

Enclosure:

cc: Mr. Bernie Straight
Clackamas County

SMH:js

CITY HALL • 10722 S.E. MAIN STREET • MILWAUKIE, OREGON 97222 • TELEPHONE (503) 659-5171

STATE OF OR[illegible]N
ROAD DESIGN

IN[illegible]ROFFICE MEMO

TO: R. N. Bothman
Region Engineer

DATE: January 22, 1981

FROM: Jack Sullivan Jack
Specifications Engineer

SUBJECT: Proposed Special Provisions for
Lake Rd. @ Oatfield Rd./34th Ave.(Milwaukie)
& Oatfield Rd. @ S.E. Aldercrest Dr. Sec.
FAU 9659 & 9665(Lake Road & Oatfield Rd.)
Clackamas County

Following is a list of items that may be included in the final specifications for the subject project. This listing is provided to inform you of proposed special provisions and questions that may need answers. Any comments, recommendations or answers to questions should be transmitted to the Specifications Unit. You will still have the same opportunity as in the past to review the final specifications.

1. Excess excavation material will be property of contractor at point of excavation and shall be disposed of by him in a manner satisfactory to the engineer. yes
2. Use commercial mix asphalt concrete with no separate payment for asphalt cement in the mixture. yes
3. No separate payment for tack coat. Make bid item
4. No separate payment for watering. make bid item
5. Should bark mulch be a bid item or anticipated item? yes
6. Should there be an anticipated item for seeding? yes. (Lawn grass or sod)
7. Should there be a restriction of when contractor can close a lane or lanes? If so, what time should contractor be allowed to work? yes. see Counties letter
8. Curve at Aldercrest is sharp and on steep grade; you may want contractors activities restricted in some manner. same as 7
9. Aggregate base to be 1"-0 material. yes
10. Concrete to be 6 sack structural concrete. yes
11. Sidewalk ramps to be measured and paid for as concrete walks (sq. yd.). yes

WCB:cl

cc: C. T. Keasey
Ed L. Hardt
Bill Hoffman

Contains
Recycled
Materials
81-125-1387

SP*75083-1

9368

MA PDM PDE FFM SPC
ODOT - METRO

FEB 6 1981

BMTPAR PPC FILE T/A

DEPARTMENT OF ENVIRONMENTAL SERVICES
COUNTY OF CLACKAMAS
STATE OF OREGON

902 ABERNETHY ROAD
OREGON CITY, OREGON 97045
(503) 655-8521

JOHN C. McINTYRE
Director

WINSTON W. KURTH
Assistant Director
DON D. BROADSWORD
Operations Director
DAVID J. ABRAHAM
Utilities Director
DAVID R. SEIGNEUR
Planning Director
RICHARD L. DOPP
Development Services Administrator

February ~~4~~ 6, 1981

Mr. R. N. Bothman
Department of Transportation
Metropolitan Branch
5821 N. E. Glisan
Portland, OR 97213

ATTN: Mr. Jon Rose

Enclosed are the County approved preliminary plans for the Oatfield Road at Aldercrest Drive project. We note a design revision making the project shorter and would expect this change was made to eliminate the need for additional right-of-way. We recommend that the contractor be restricted to daily work hours of 9:00 A.M. to 4:00 P.M. to avoid traffic conflicts during peak hour periods. Also, we request addition of a contract item for seeding and mulching on the distrubed slope on the inside of the curve.

We support the combination of our small project with the City of Milwaukie's proposed improvement at Oatfield Road and Lake Road.

Bernard L. Straight
BERNARD L. STRAIGHT - Traffic Eng
Operations Division

/mb

Encl.

CC: D.O. Christensen
J. Sullivan

From Metro Jon Rose Date 2/6/81

To [redacted]

[redacted] Traffic Region 1

Comments: Clackamas County has reviewed and signed the plans for Oatfield Road @ Aldercrest Drive, subject to these noted recommendations. Please distribute as appropriate.

Jon Rose

7368

2-4-81

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	*Title Sheet*
2	*Typical Sections*
2A	*Typical Sections & Summary*
2B	*Stage Construction, Temporary Protection And Direction Of Traffic*
3	*Plan, Oatfield Rd. At Lake Rd.*
3A	*Profile, Oatfield Rd. At Lake Rd.*
4	*Plan & Profile, Oatfield Rd. At S.E. Aldercrest*

STATE OF O

DEPARTMENT OF TR

STATE HIGHWA

PLANS FOR PROPOSE

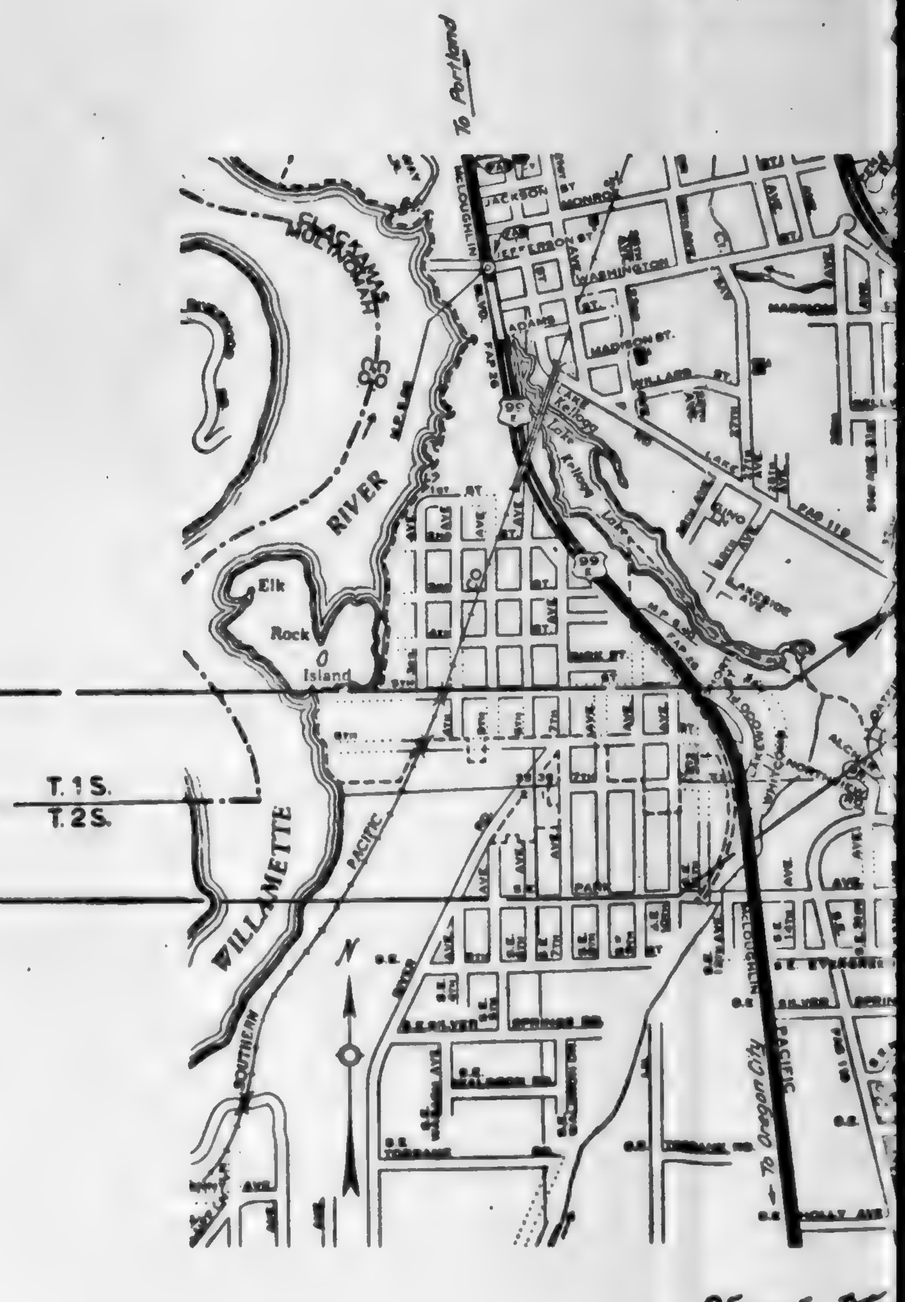
LAKE ROAD AT OATFIELD RD.
OATFIELD RD. AT S.E. AL

FAU 9659 & FAU 9665 (LAKE

CLACKAMAS C

BEGINNING OF PROJECT
Sta. 22+00

END OF PROJECT
Sta. 31+50


To Portland
CLACKAMAS
MULTNOMAH
RIVER
Elk
Rock
Island
T.1S.
T.2S.
WILLAMETTE
SOUTHERN
PACIFIC
N
To Oregon City
JACKSON
MONROE
JEFFERSON
WASHINGTON
ADAMS
MADISON ST.
LAKE
Kellogg
LAKESIDE
PACIFIC

Sketch Ma
Scale 0 800

OF OREGON

OF TRANSPORTATION

GHWAY DIVISION

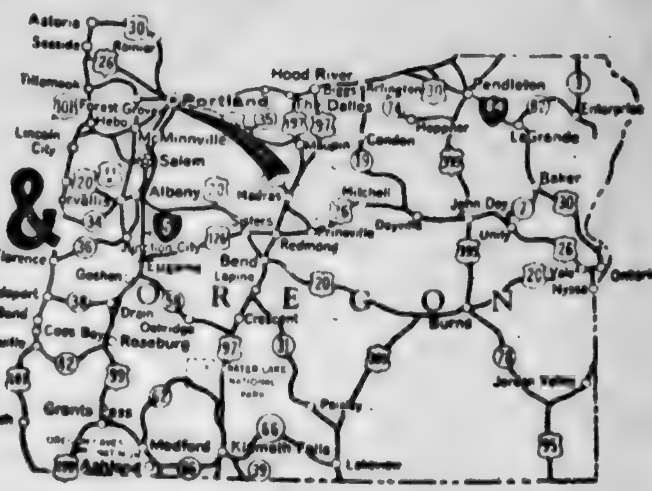
PROPOSED PROJECT

PRELIMINARY COPY
JAN 22 1981
SUBJECT TO CHANGE
FINAL DESIGN UNIT

LAKE ROAD AT OATFIELD RD. /34TH AVE. (MILWAUKIE) & OATFIELD RD. AT S.E. ALDERCREST DR. SECS. FAU 9659 & FAU 9665 (LAKE ROAD & OATFIELD RD.) CLACKAMAS COUNTY					SHEET No. 1
FED ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR		TOTAL SHEETS
10	OREGON				See Index

FAI-X

RD. / 34TH AVE. (MILWAUKIE) &
E. ALDERCREST DR. SECS.
(LAKE ROAD & OATFIELD RD.)
KAMAS COUNTY


Astoria
Seaside
Tillamook
Forest Grove
Hebo
Portland
Hood River
The Dalles
Pendleton
Enterprise
La Grande
Baker
McMinnville
Salem
Lincoln City
Albany
Condon
Madras
Mitchell
John Day
Unity
Sisters
Prineville
Redmond
Bend
Florence
Reedsport
North Bend
Coos Bay
Roseburg
Burns
Vale
Nyssa
Ontario
Crescent
Grants Pass
Gold Beach
Medford
Klamath Falls
Lakeview
Jordan Valley
OREGON

APPROVED AS NOTED

Oatfield at Aldercrest only

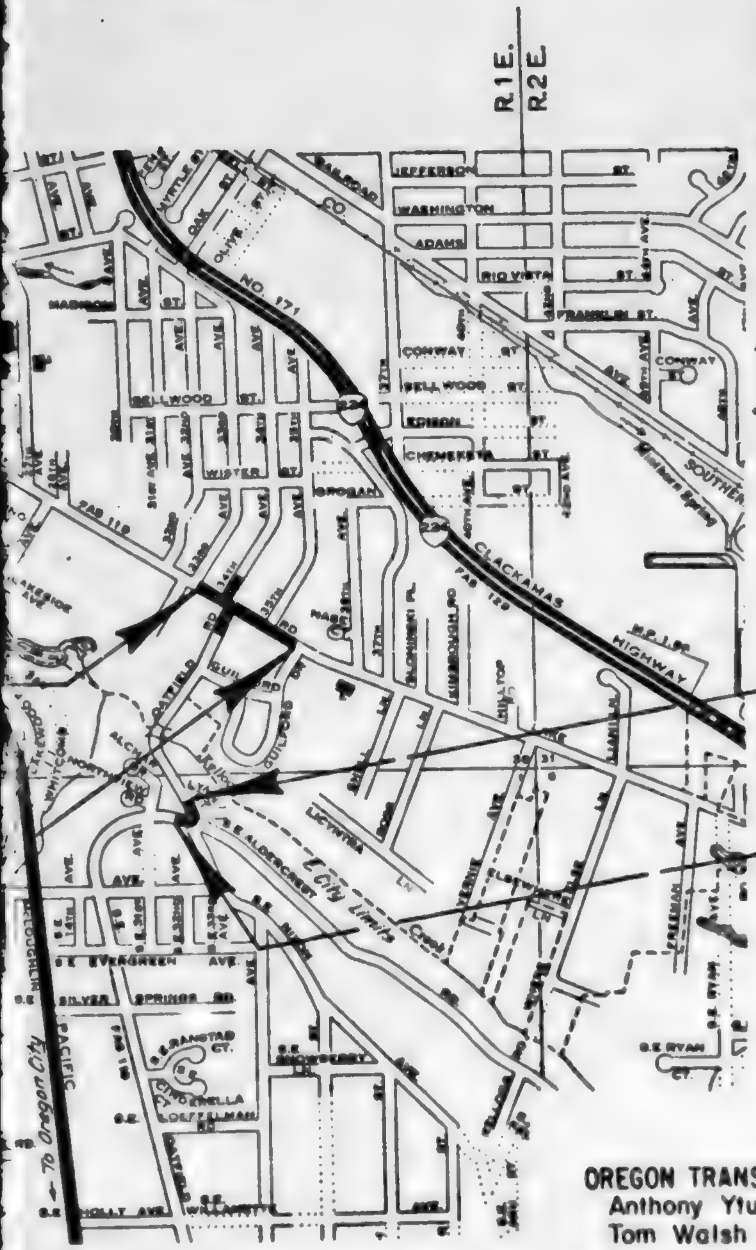
Bernard L. Straight by DE

For CLACKAMAS COUNTY

Date 2/4/81

PRELIMINARY COPY
SUBJECT TO CHANGE

Milwaukie


R.1E.
R.2E.
JEFFERSON
WASHINGTON
ADAMS
RIO VISTA
FRANKLIN ST.
MADISON
CONWAY
BELLWOOD
EDISON
CHEMEKETA
WISTER
NO. 171
CLACKAMAS HIGHWAY
To I-205
OATFIELD
LAKE
GUILFORD
S.E. ALDERCREST
City Limits
S.E. EVERGREEN AVE.
SILVER SPRINGS RD.
S.E. RYAN CT.
S.E. HOLLY AVE.
To Oregon City
PACIFIC
Sketch Map
800
1600
Feet

BEGINNING OF PROJECT
Sta. 9+00

END OF PROJECT
Sta 11+60

H. S. COULTER

EDGAR S. HUNTER

H. S. Coulter — STATE HIGHWAY ENGINEER

E. S. Hunter — ASSISTANT STATE HIGHWAY ENGINEER

OREGON TRANSPORTATION COMMISSION

Anthony Yturri	CHAIRMAN
Tom Walsh	VICE CHAIRMAN
Gordon Coleman	COMMISSIONER
Peter J. Brix	COMMISSIONER
Michael P. Hollern	COMMISSIONER
Fred B. Klaboe	DIRECTOR OF TRANSPORTATION

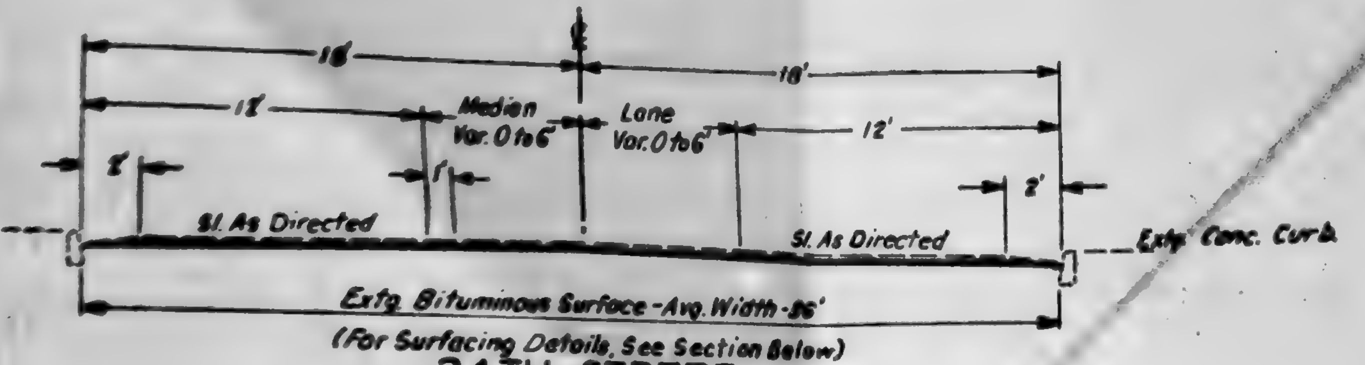
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

FIELD OPERATIONS ENGINEER — DATE

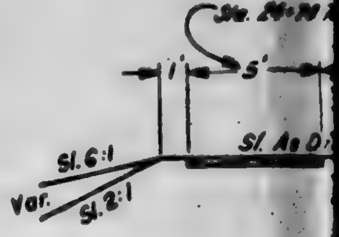
TYPICAL SECT

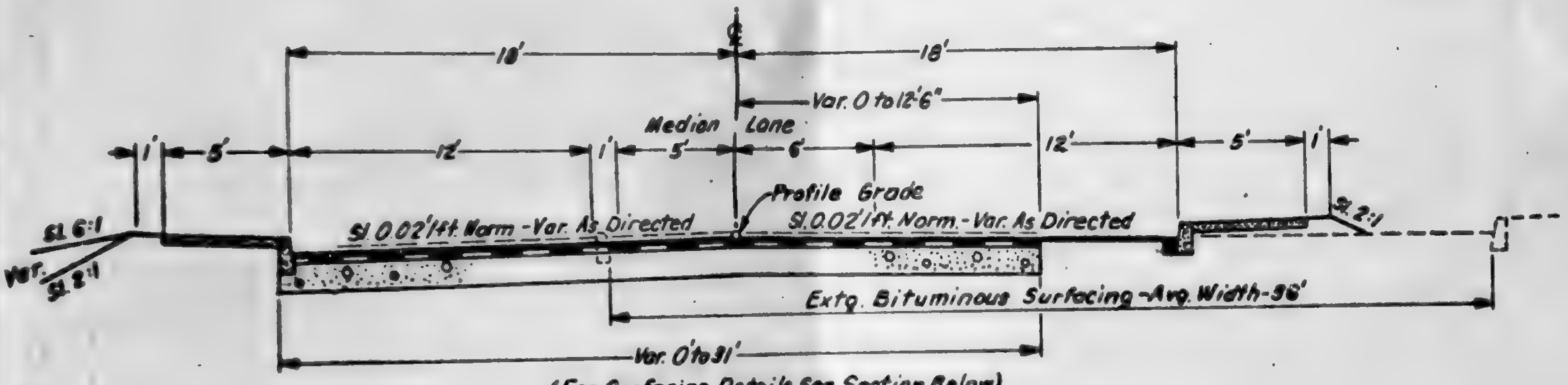
R/W Map No. 1R-4-733


18'
18'
12'
Median Var. 0 to 6'
Lane Var. 0 to 6'
12'
2'
1'
2'
Sl. As Directed
Sl. As Directed
Extg. Conc. Curb
Extg. Bituminous Surface - Avg. Width - 36'
(For Surfacing Details, See Section Below)

34TH. STREET

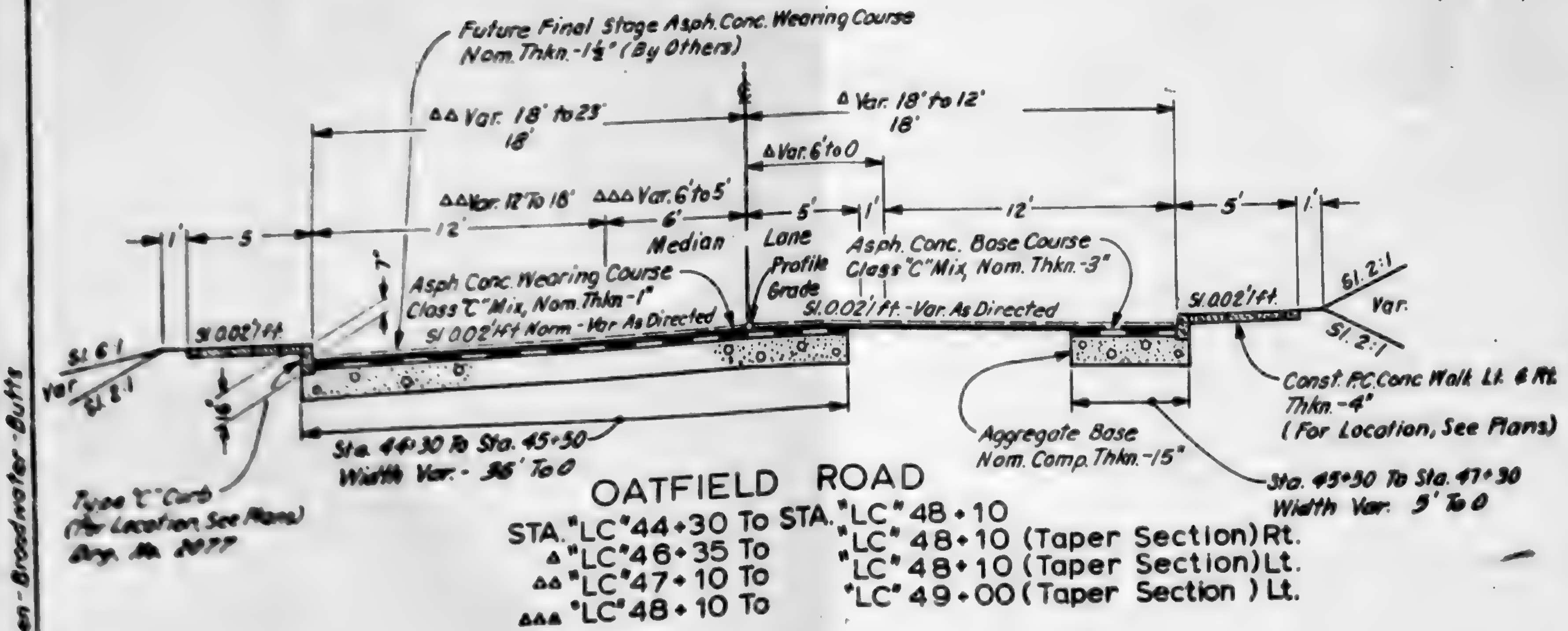
STA. "LC" 40+00 To STA. "LC" 42+60 (Taper Section)


Sta. 26+39
1'
5'
Sl. 6:1
Var.
Sl. 2:1
Sl. As D


18'
18'
Var. 0 to 12'-6"
Median
Lane
1'
5'
12'
1'
5'
6'
12'
5'
1'
Profile Grade
Sl. 6:1
Var.
Sl. 2:1
Sl. 0.02'/ft. Norm. - Var. As Directed
Sl. 0.02'/ft. Norm. - Var. As Directed
Sl. 2:1
Extg. Bituminous Surfacing - Avg. Width - 36'
Var. 0' to 31'
(For Surfacing Details, See Section Below)

34TH. STREET

STA. "LC" 42+60 To STA. "LC" 43+95


Future Final Stage Asph. Conc. Wearing Course Nom. Thkn. - 1½" (By Others)
ΔΔ Var. 18' to 23'
18'
Δ Var. 18' to 12'
18'
Δ Var. 6' to 0
ΔΔ Var. 12' To 18'
ΔΔΔ Var. 6' to 5'
1'
5
12'
6'
Median
5'
Lane
1'
12'
5'
1'
Asph. Conc. Wearing Course Class "C" Mix, Nom. Thkn. - 1"
Profile Grade
Asph. Conc. Base Course Class "C" Mix, Nom. Thkn. - 3"
7"
Sl. 0.02'/ft.
Sl. 0.02'/ft. Norm. - Var. As Directed
Sl. 0.02'/ft. - Var. As Directed
Sl. 0.02'/ft.
Sl. 6:1
Var.
Sl. 2:1
Sl. 2:1
Var.
Sl. 2:1
16"
Const. P.C. Conc. Walk Lt. & Rt. Thkn. - 4" (For Location, See Plans)
Aggregate Base Nom. Comp. Thkn. - 15"
Sta. 44+30 To Sta. 45+50 Width Var. - 36' To 0
Sta. 45+50 To Sta. 47+30 Width Var. 5' To 0
Type "C" Curb (For Location, See Plans) Dwg. No. 2077

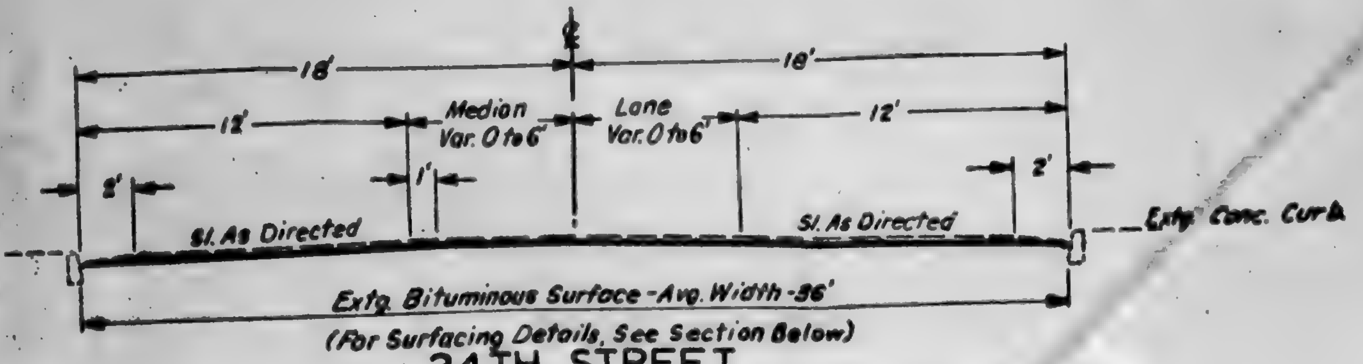
OATFIELD ROAD

STA. "LC" 44+30 To STA. "LC" 48+10
Δ "LC" 46+35 To "LC" 48+10 (Taper Section) Rt.
ΔΔ "LC" 47+10 To "LC" 48+10 (Taper Section) Lt.
ΔΔΔ "LC" 48+10 To "LC" 49+00 (Taper Section) Lt.

Eriksen-Broadwater-Butts

T Y P I C A L   S E C T

R/W Map No. 1R-4-733

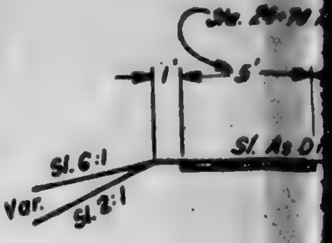


℄
18'
18'
12'
Median
Var. 0 to 6"
Lane
Var. 0 to 6"
12'
2'
1'
2'
Sl. As Directed
Sl. As Directed
Extg. Conc. Curb
Extg. Bituminous Surface - Avg. Width - 36'

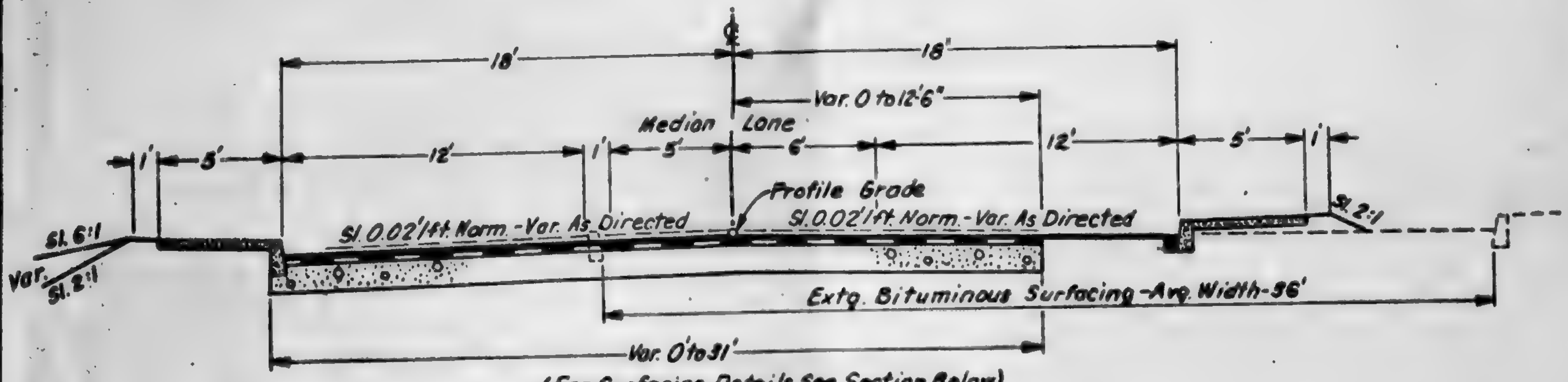
(For Surfacing Details, See Section Below)

34TH. STREET

STA. "LC"40+00 To STA. "LC"42+60 (Taper Section)



Sta. 24+70
1'
5'
Sl. As D
Sl. 6:1
Var.
Sl. 2:1

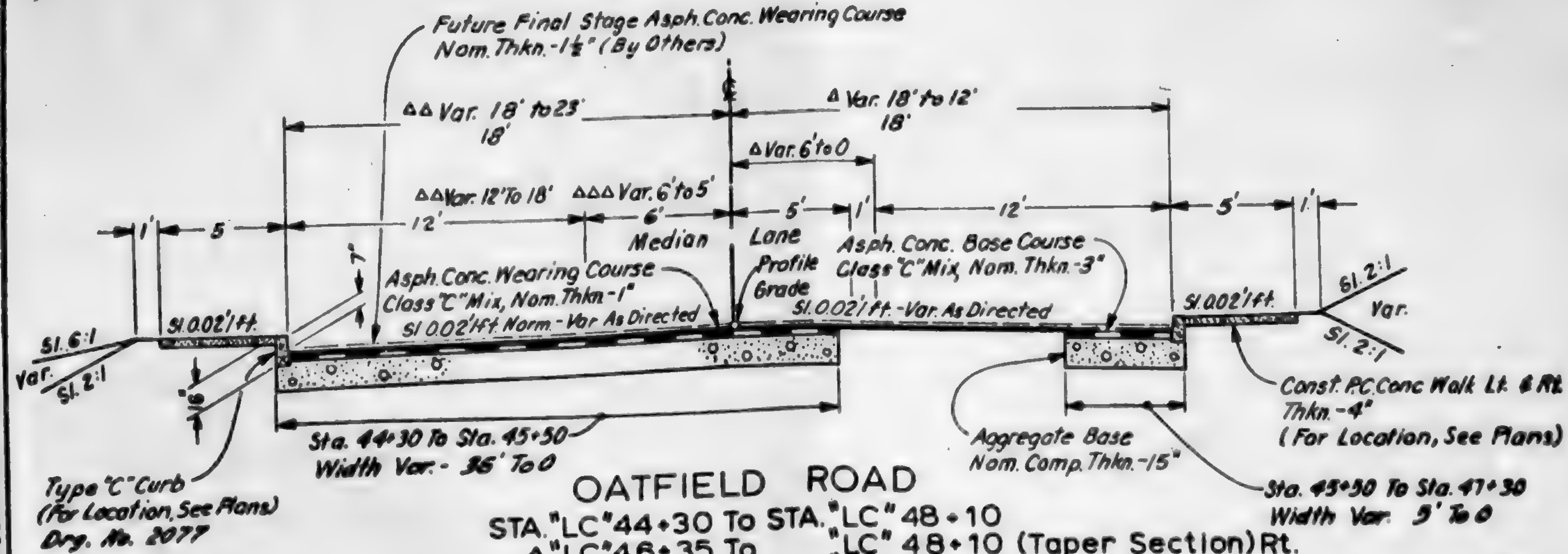


℄
18'
18'
Var. 0 to 12'6"
Median
Lane
1'
5'
12'
1'
5'
6'
12'
5'
1'
Profile Grade
Sl. 0.02'/ft. Norm. - Var. As Directed
Sl. 0.02'/ft. Norm. - Var. As Directed
Sl. 6:1
Var.
Sl. 2:1
Sl. 2:1
Extg. Bituminous Surfacing - Avg. Width - 36'
Var. 0' to 31'

(For Surfacing Details, See Section Below)

34TH. STREET

STA. "LC"42+60 To STA. "LC"43+95



Future Final Stage Asph. Conc. Wearing Course Nom. Thkn. - 1½" (By Others)
℄
ΔΔ Var. 18' to 23'
18'
Δ Var. 18' to 12'
18'
Δ Var. 6' to 0
ΔΔ Var. 12' To 18'
ΔΔΔ Var. 6' to 5'
1'
5
12'
6'
5'
1'
12'
5'
1'
Median
Lane
Profile Grade
7"
16"
Asph. Conc. Wearing Course Class "C" Mix, Nom. Thkn. - 1"
Asph. Conc. Base Course Class "C" Mix, Nom. Thkn. - 3"
Sl. 0.02'/ft.
Sl. 0.02'/ft. Norm. - Var. As Directed
Sl. 0.02'/ft. - Var. As Directed
Sl. 0.02'/ft.
Sl. 6:1
Var.
Sl. 2:1
Sl. 2:1
Var.
Sl. 2:1
Sta. 44+30 To Sta. 45+50 Width Var. - 36' To 0
Type "C" Curb (For Location, See Plans) Drg. No. 2077
Aggregate Base Nom. Comp. Thkn. - 15"
Const. P.C. Conc Walk Lt. & Rt. Thkn. - 4" (For Location, See Plans)
Sta. 45+50 To Sta. 47+30 Width Var. 5' To 0

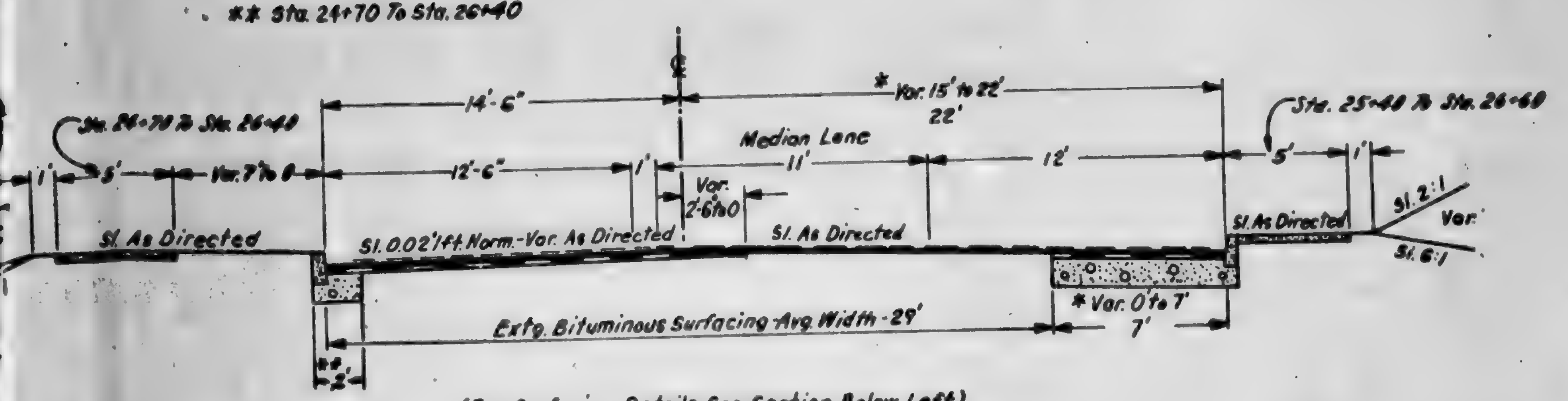
OATFIELD ROAD

STA. "LC"44+30 To STA. "LC"48+10
Δ "LC"46+35 To "LC"48+10 (Taper Section) Rt.
ΔΔ "LC"47+10 To "LC"48+10 (Taper Section) Lt.
ΔΔΔ "LC"48+10 To "LC"49+00 (Taper Section) Lt.

Eriksen-Broadwater-Butts

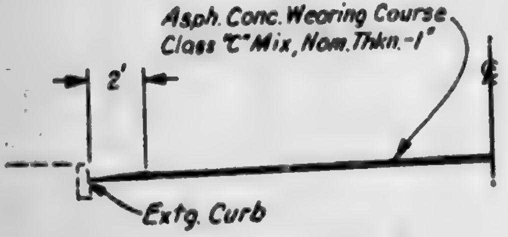
CTIONS

LAKE ROAD AT OATFIELD RD./34TH AVE (MILWAUKIE) & OATFIELD RD. AT S.E. ALDERCREST DR. SECS. FAU 9659 & FAU 9665 (LAKE ROAD & OATFIELD RD.) CLACKAMAS COUNTY				SHEET No. 2
FED. ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
10	OREGON			See Index

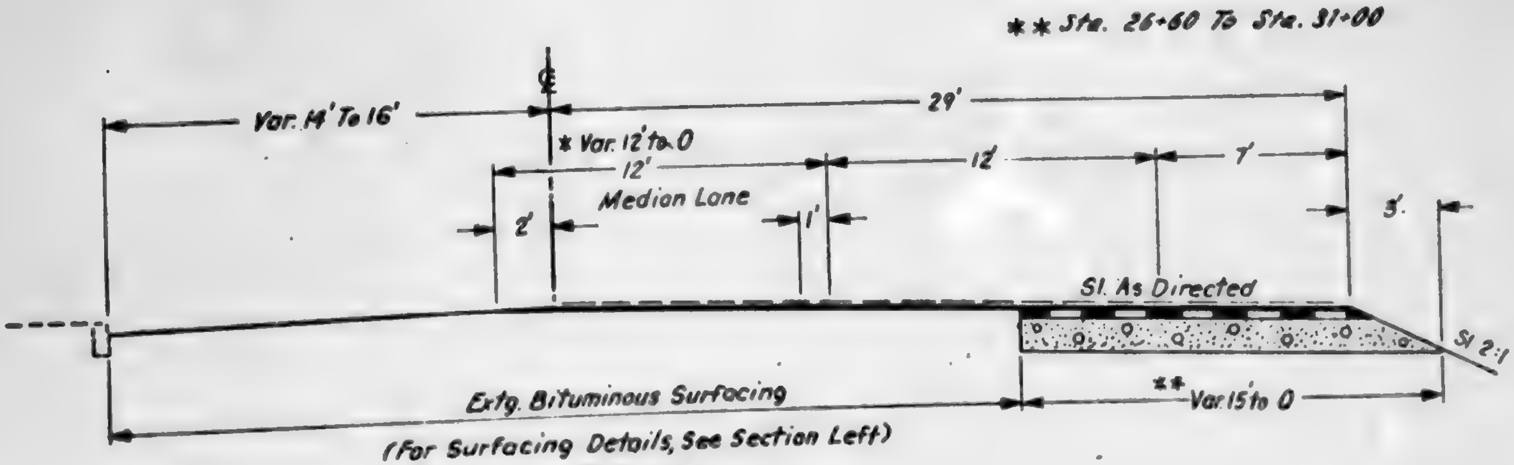

** Sta. 24+70 To Sta. 26+40
℄
14'-6"
* Var. 15' to 22'
22'
Sta. 24+70 To Sta. 26+40
Sta. 25+40 To Sta. 26+60
Median Lane
1'
5'
Var. 7' to 0
12'-6"
1'
11'
12'
5'
1'
Var. 2'-6" to 0
Sl. As Directed
Sl. 0.02'/ft. Norm.-Var. As Directed
Sl. As Directed
Sl. As Directed
Sl. 2:1
Var.
Sl. 6:1
* Var. 0' to 7'
Extg. Bituminous Surfacing Avg. Width - 29'
7'
** 2'

(For Surfacing Details, See Section Below Left)

LAKE ROAD
*STA. 22+00 To STA. 23+00 (Taper Section)
23+00 To 26+60


Asph. Conc. Wearing Course Class "C" Mix, Nom. Thkn. - 1"
2'
℄
Extg. Curb

LAKE ROAD
STA. 22+00 To STA. 24+70


** Sta. 26+60 To Sta. 31+00
℄
Var. 14' To 16'
29'
* Var. 12' to 0
12'
12'
7'
2'
Median Lane
1'
5'
Sl. As Directed
Sl. 2:1
Extg. Bituminous Surfacing
** Var. 15' to 0

(For Surfacing Details, See Section Left)

LAKE ROAD
* STA. 26+60 To STA. 29+50
29+50 To 31+50 (Taper Section)

9368

2-3-81

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	*Title Sheet*
2	*Typical Sections*
2A	*Typical Sections & Summary*
2B	*Stage Construction, Temporary Protection And Direction Of Traffic*
3	*Plan, Oatfield Rd. At Lake Rd.*
3A	*Profile, Oatfield Rd. At Lake Rd.*
4	*Plan & Profile, Oatfield Rd. At S.E. Aldercrest*

STATE OF O

DEPARTMENT OF TR

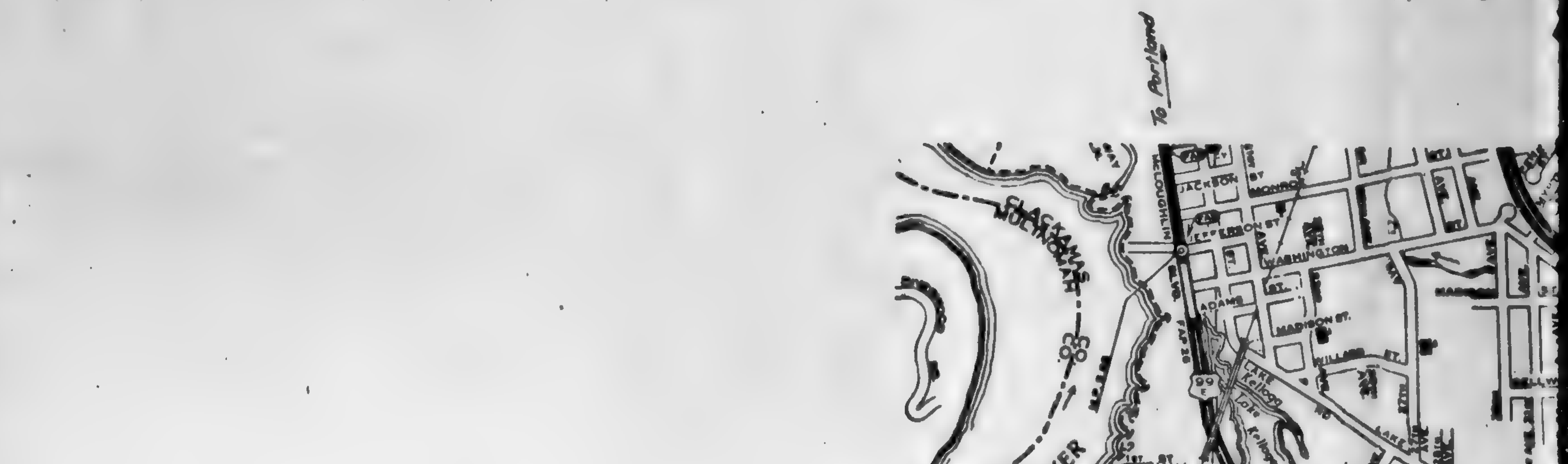
STATE HIGHWA

PLANS FOR PROPOS

LAKE ROAD AT OATFIELD RD.
OATFIELD RD. AT S.E. AL

FAU 9659 & FAU 9665 (LAKE

CLACKAMAS C


BEGINNING OF PROJECT
Sta. 22+00
END OF PROJECT
Sta. 31+50
T.1S.
T.2S.
To Portland
JACKSON ST.
MONROE
JEFFERSON ST.
WASHINGTON
ADAMS
MADISON ST.
WILLARD ST.
CLACKAMAS
MULTNOMAH
RIVER
LAKE
Kellogg Lake
LAKESIDE
99
Elk Rock Island
WILLAMETTE
SOUTHERN PACIFIC
N
To Oregon City
Sketch Ma
Scale 0 800

LAKE ROAD AT OATFIELD RD. / 34TH AVE. (MILWAUKIE) & OATFIELD RD. AT S.E. ALDERCREST DR. SECS. FAU 9659 & FAU 9665 (LAKE ROAD & OATFIELD RD.) CLACKAMAS COUNTY				SHEET No. 1
FED ROAD Div No.	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS See Index
10	OREGON			

FA I - X

PRELIMINARY COPY
JAN 22 1981
SUBJECT TO CHANGE
FINAL DESIGN UNIT

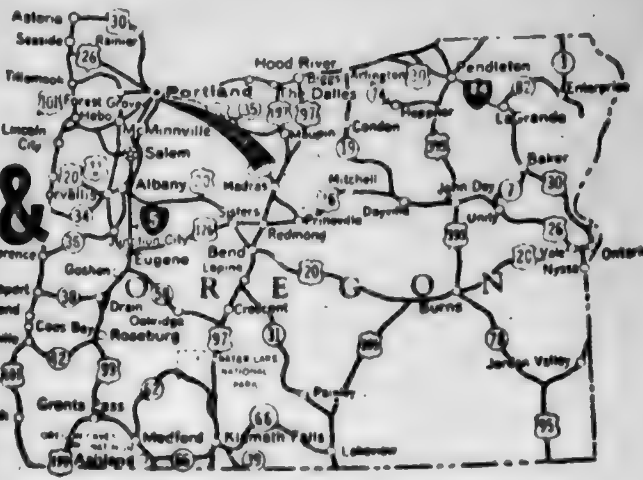
E OF OREGON

OF TRANSPORTATION

IGHWAY DIVISION

FOR PROPOSED PROJECT

LD RD. / 34TH AVE. (MILWAUKIE) &
S.E. ALDERCREST DR. SECS.
65 (LAKE ROAD & OATFIELD RD.)
LACKAMAS COUNTY

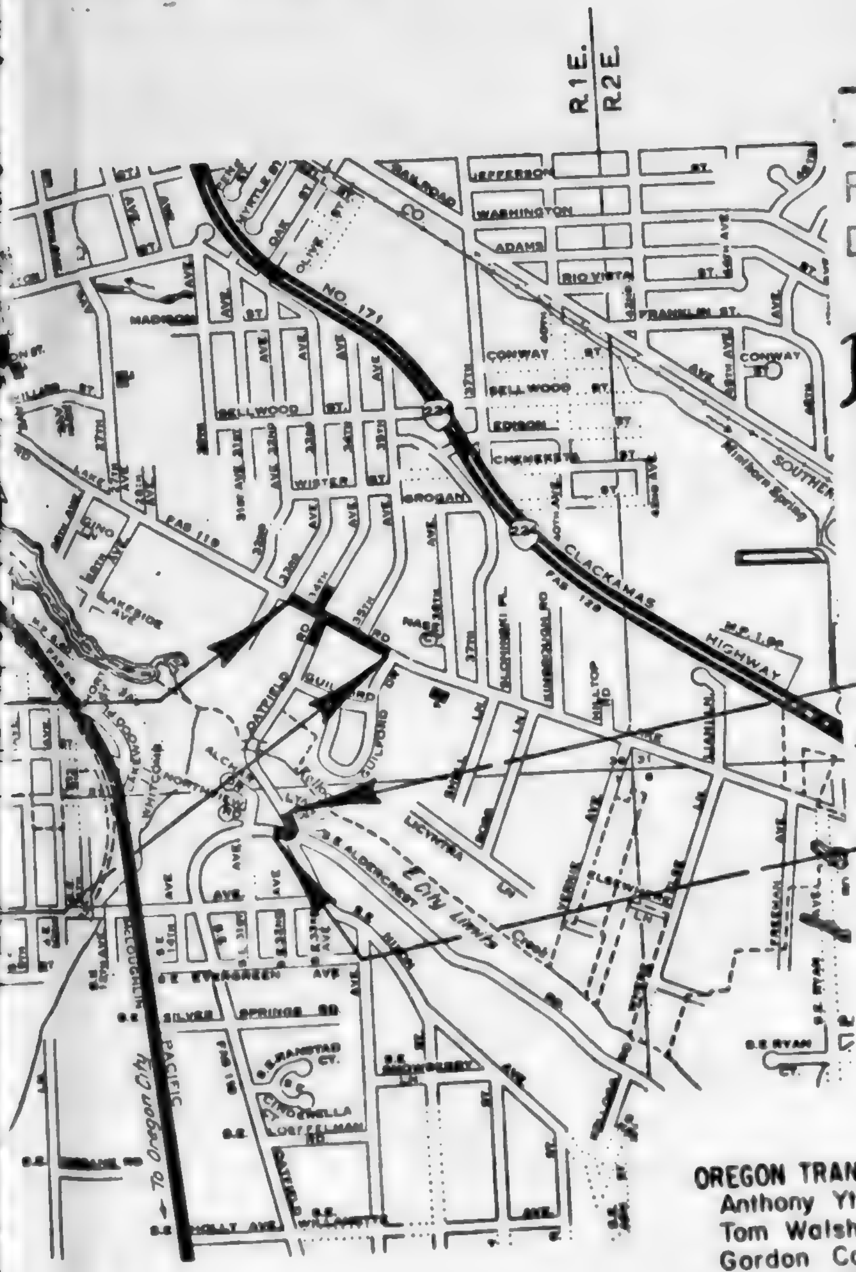

Astoria
Seaside
Rainier
Tillamook
Forest Grove
Hebo
Portland
Hood River
Biggs
Arlington
The Dalles
Pendleton
Enterprise
La Grande
Lincoln City
McMinnville
Salem
Heppner
Condon
Albany
Madras
Corvallis
Mitchell
Sisters
Prineville
Dayville
John Day
Baker
Unity
Florence
Eugene
Bend
Redmond
Vale
Nyssa
Ontario
Reedsport
North Bend
Coos Bay
Goshen
Drain
Roseburg
Crescent
Burns
OREGON
Jordan Valley
Grants Pass
Medford
Klamath Falls
Lakeview
Ashland
Gold Beach

APPROVED AS NOTED *

Ellis M. Hall
PUBLIC WORKS DIRECTOR
For City of Milwaukie
Date 3 FEBRUARY 1981
* DOES NOT INCLUDE COUNTY PROJECT @ OATFIELD & ALDERCREST.

PRELIMINARY COPY
SUBJECT TO CHANGE

Milwaukie


R.1E.
R.2E.
JEFFERSON
WASHINGTON
ADAMS
RIO VISTA
FRANKLIN ST.
MADISON
CONWAY
BELLWOOD
EDISON
WISTER
GROGAN
NO. 171
CLACKAMAS HIGHWAY
SOUTHERN
LAKE
LAKESIDE
OATFIELD
ALDERCREST
City Limits
EVERGREEN AVE
SILVER SPRINGS RD
To Oregon City
PACIFIC
To I-205

BEGINNING OF PROJECT
Sta. 9+00

END OF PROJECT
Sta 11+60

Sketch Map
Scale 0 800 1600 Feet

H.S. Coulter STATE HIGHWAY ENGINEER

E.S. Hunter ASSISTANT STATE HIGHWAY ENGINEER

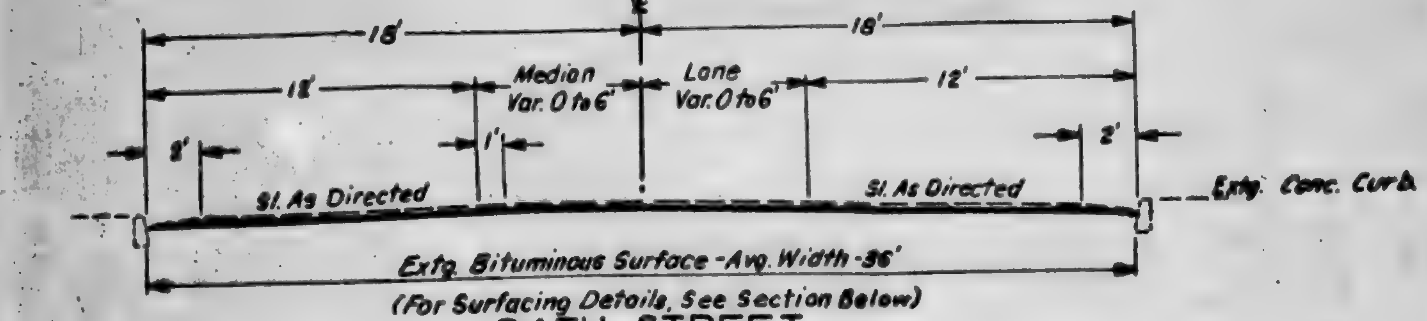
OREGON TRANSPORTATION COMMISSION

Anthony Yturri	CHAIRMAN
Tom Walsh	VICE CHAIRMAN
Gordon Coleman	COMMISSIONER
Peter J. Brix	COMMISSIONER
Michael P. Hollern	COMMISSIONER
Fred B. Klaboe	DIRECTOR OF TRANSPORTATION

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED:
FIELD OPERATIONS ENGINEER DATE

R/W Map No. 1R-4-73?

TYPICAL SECT

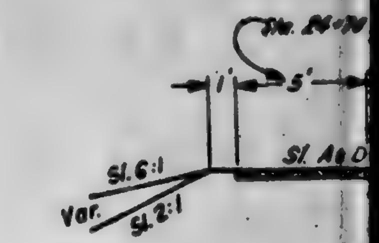


℄
18'
18'
12'
Median
Var. 0 to 6'
Lane
Var. 0 to 6'
12'
2'
1'
2'
Sl. As Directed
Sl. As Directed
Extg. Conc. Curb
Extg. Bituminous Surface - Avg. Width - 36'

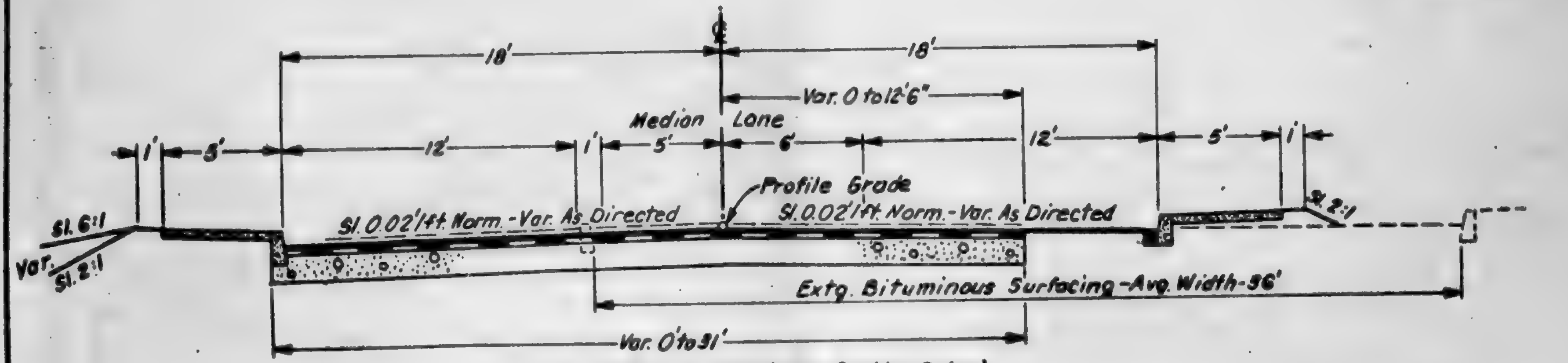
(For Surfacing Details, See Section Below)

34TH. STREET

STA. "LC" 40+00 To STA. "LC" 42+60 (Taper Section)



Sta. 26+70
1'
5'
Sl. As D
Sl. 6:1
Var.
Sl. 2:1

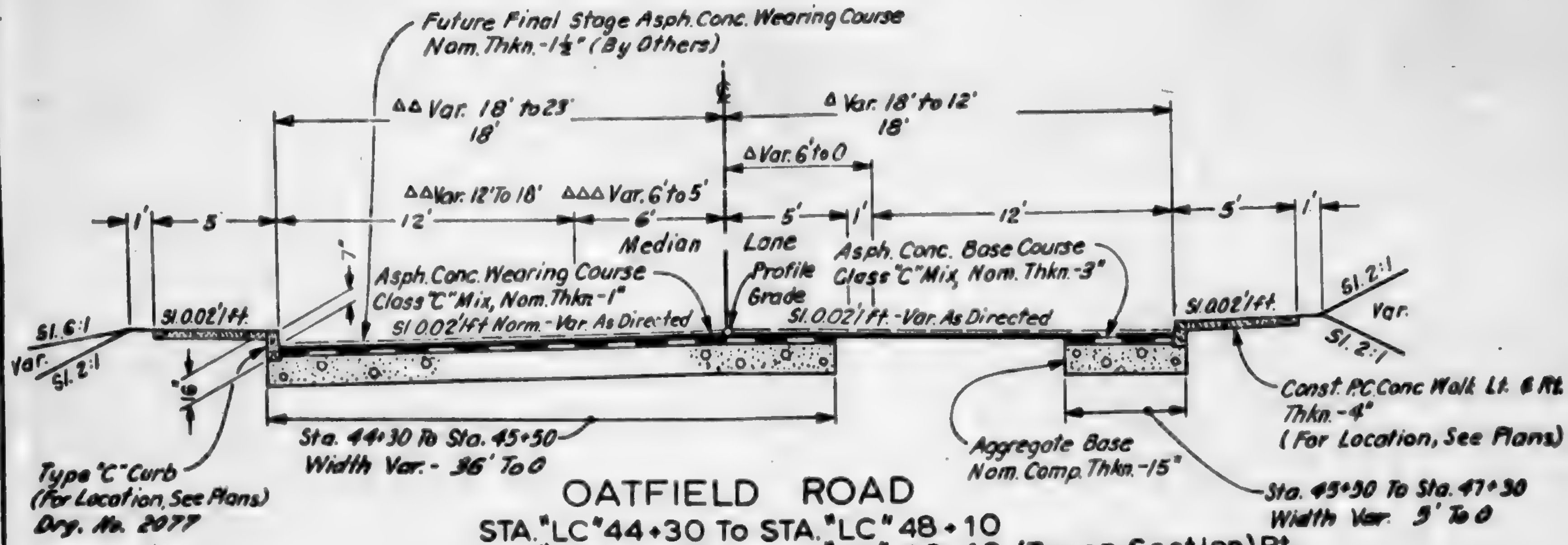


℄
18'
18'
Var. 0 to 12'6"
Median
Lane
1'
5'
12'
1'
5'
6'
12'
5'
1'
Profile Grade
Sl. 6:1
Var.
Sl. 2:1
Sl. 0.02'/ft. Norm. - Var. As Directed
Sl. 0.02'/ft. Norm. - Var. As Directed
Sl. 2:1
Extg. Bituminous Surfacing - Avg. Width - 36'
Var. 0' to 31'

(For Surfacing Details, See Section Below)

34TH. STREET

STA. "LC" 42+60 To STA. "LC" 43+95



Future Final Stage Asph. Conc. Wearing Course
Nom. Thkn. - 1½" (By Others)
℄
ΔΔ Var. 18' to 23'
18'
Δ Var. 18' to 12'
18'
Δ Var. 6' to 0
ΔΔ Var. 12' To 18'
ΔΔΔ Var. 6' to 5'
1'
5
12'
6'
Median
5'
Lane
1'
12'
5'
1'
7"
Asph. Conc. Wearing Course
Class "C" Mix, Nom. Thkn. - 1"
Profile Grade
Asph. Conc. Base Course
Class "C" Mix, Nom. Thkn. - 3"
Sl. 0.02'/ft.
Sl. 0.02'/ft. Norm. - Var. As Directed
Sl. 0.02'/ft. - Var. As Directed
Sl. 0.02'/ft.
Sl. 6:1
Var.
Sl. 2:1
16"
Sl. 2:1
Var.
Sl. 2:1
Sta. 44+30 To Sta. 45+50
Width Var. - 36' To 0
Type "C" Curb
(For Location, See Plans)
Dwg. No. 2077
Aggregate Base
Nom. Comp. Thkn. - 15"
Const. P.C. Conc. Walk Lt. & Rt.
Thkn. - 4"
(For Location, See Plans)
Sta. 45+30 To Sta. 47+30
Width Var. 5' To 0

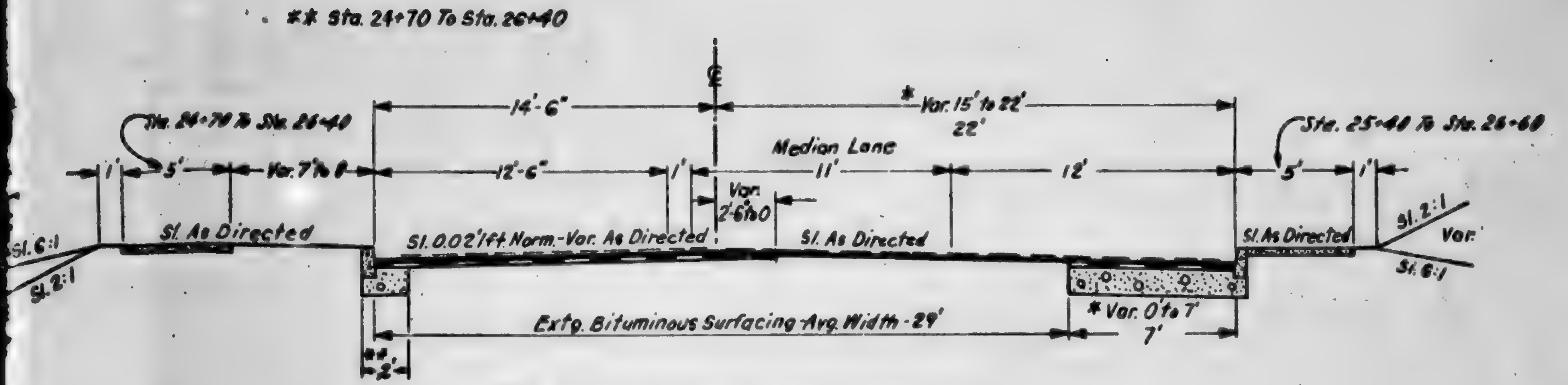
OATFIELD ROAD

STA. "LC" 44+30 To STA. "LC" 48+10
Δ "LC" 46+35 To "LC" 48+10 (Taper Section) Rt.
ΔΔ "LC" 47+10 To "LC" 48+10 (Taper Section) Lt.
ΔΔΔ "LC" 48+10 To "LC" 49+00 (Taper Section) Lt.

Eriksen - Broadwater - Butts

CTIONS

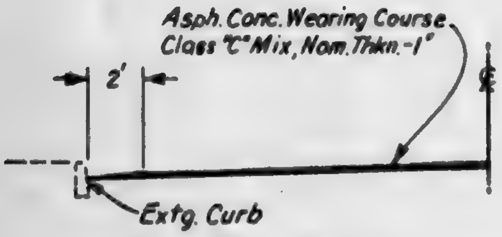
LAKE ROAD AT OATFIELD RD./34TH AVE (MILWAUKIE) & OATFIELD RD. AT S.E. ALDERCREST DR. SECS. FAU 9659 & FAU 9665 (LAKE ROAD & OATFIELD RD.) CLACKAMAS COUNTY				SHEET No. 2
FED. ROAD Div. No.	STATE	PROJECT NUMBER	FISCAL YEAR	TOTAL SHEETS
10	OREGON			See Index


** Sta. 24+70 To Sta. 26+40
Sta. 24+70 To Sta. 26+40
Sta. 25+40 To Sta. 26+60
14'-6"
* Var. 15' to 22'
22'
Median Lane
1'
5'
Var. 7' to 8'
12'-6"
1'
11'
12'
5'
1'
Var. 2'-6" to 0
Sl. 6:1
Sl. 2:1
Sl. As Directed
Sl. 0.02'/ft. Norm.-Var. As Directed
Sl. As Directed
Sl. As Directed
Sl. 2:1
Var.
Sl. 6:1
Extg. Bituminous Surfacing Avg. Width - 29'
* Var. 0' to 7'
7'
**
2'

(For Surfacing Details, See Section Below Left)

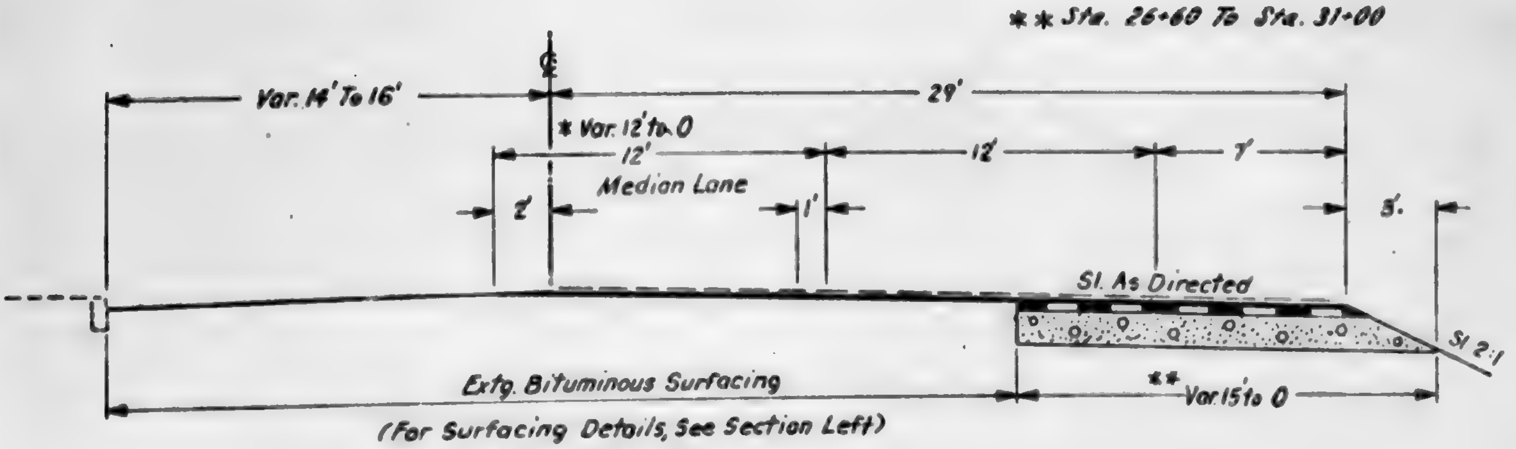
LAKE ROAD

*STA. 22+00 To STA. 23+00 (Taper Section)
23+00 To 26+60


Asph. Conc. Wearing Course Class "C" Mix, Nom. Thkn.-1"
2'
Extg. Curb

LAKE ROAD

STA. 22+00 To STA. 24+70


** Sta. 26+60 To Sta. 31+00
Var. 14' To 16'
29'
* Var. 12' to 0
12'
Median Lane
12'
7'
2'
1'
5'
Sl. As Directed
Sl. 2:1
Extg. Bituminous Surfacing
** Var 15' to 0

(For Surfacing Details, See Section Left)

LAKE ROAD

* STA. 26+60 To STA. 29+50
29+50 To 31+50 (Taper Section)

Lt. & Rt.

Plans)

+30

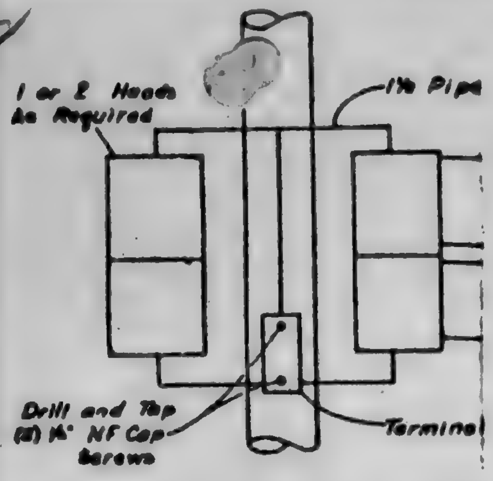
0

9368

SIGNAL PLAN
OATFIELD RD AT LAKE RD (MILWAUKIE) SEC.

SCALE 0 10 20 30 40 50 FEET

1-22-81



MODIFIED PEDESTIAN SIGNA
SIDE POLE MOUNTING

L E G E N D

EX/I	Existing power pole (power source)
C	Install Model 170 controller in type 332 cabinet
MS	Install 120-volt meter base
S4	Install service cabinet with one 40-amp and one 15-amp SPST breakers
MP/T	Install type (T) signal mast arm pole
MPL/T	Install type (T) signal mast arm pole with luminaire extension
MA/L	Install (L) foot signal mast arm
LA/L	Install (L) foot luminaire arm
MV	Install 400-watt mercury vapor lamp in a 400-watt medium, semi-cutoff, Type III luminaire unit with photoelectric relay; mounting height 30 feet
TC	Install terminal cabinet
S	Install (S) inch electrical conduit
CS	Install two-inch electrical conduit stub; cap both ends
N	Install (N) number 14 type THWN wires
N/G	Install (N) number (G) type TW wires
C	Install one number 6 type THWN wire (signal system common)
V/Ph	Install phase (Ph) vehicle signal
PV/Ph	Install phase (Ph) programmed vehicle signal
P/T	Install type (T) modified pedestrian signal
PB/Ph	Install phase (Ph) pedestrian pushbutton with instruction sign
OS/RL	Install interior-illuminated "LEFT TURN SIGNAL" sign

Ph	Phase shown	425	12"R, 8"Y, 8"G
N	Number shown	466	12"R, 12"Y, 12"GLTA
G	AWG wire size	A	Standard plumbizer
T	Type shown	E	Elevator plumbizer
S	Size shown		

Glen M. Hall
CITY APPROVAL

1 /22/81
DATE

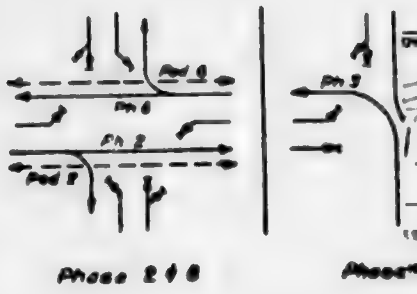
NOTED

JAUKIE

PRELIMINARY COPY

JAN 15 1981

SUBJECT TO MUTUAL REVIEW



Phase 2 & 6

Phase

OVED
1/14/81
SIGNED BY
CHECKED BY

OREGON STATE HIGHWAY DIVISION

TRAFFIC SIGNAL INSTALLATION
OATFIELD RD AT LAKE RD (MILWAUKIE) SEC.
FAU 9665 (OATFIELD RD)
CLACKAMAS COUNTY

December, 1980
Accompanied By Drgs 1470, 1471, 1472, 1473, 1488, 1489, 35008, 35010, 4977.

DWG NO. 4976

9368

July 28, 1980

ACC 4-6

City of Milwaukie
926 Main Street
Milwaukie, Oregon 97222

Attn: Kenneth Whorton
City Manager

Gentlemen:

We have submitted a program to the Federal Highway Administration for right-of-way acquisition on the Oatfield Road at Lake Road Section. Financial sharing of the right-of-way acquisition is:

Total R/W Cost	$20,000
Federal Funds	17,000
BALANCE	$ 3,000

City Share: = $3,000

The attached sheet defines the three options for making your advance deposit. Please select the option you desire and submit your advance deposit in accordance with the instructions.

Very truly yours,

D. E. Swan
Operation Programming Engineer

GEZ:pf

bcc w/AD # 800: Jon Rose, Region M Federal Aid Engineer
Vern Skoog - Please return completed AD # 800
when advance deposit is received.

Rec'd. 8-13-80
Notified Jon Rose

9368

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6

July 24, 1980

TO: G. L. Green, Division Administrator
Federal Highway Administration

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 90100
Project No. IX-9665(8)
Oatfield Road @ Lake Road (Milwaukie) Section
Clackamas County

Enclosed is data for the subject project.

I request the following:

1) Transfer of Interstate Substitution General Funds for the right of way on the project at an estimated total cost of $20,000 with subsitution funds in the amount of $17,000.

2) Authorization to proceed with the actual acquisition of right of way all phases at an estimated total cost of $20,000 with an obligation of $17,000 in federal funds. The right of way to be acquired is as outlined in red on the enclosed copy of right of way map 1R-4-733. No relocation assistance is involved.

This request is based on the October 27, 1978 letter to you from the Governor of Oregon in which he approved the project concept.

A copy of the State Clearinghouse A-95 review comments has been previously forwarded.

CL:bke
Enc.
cc: R. Bothman (Metro)
M. Klotz
J. Rose
J. Boyd
G. Zehner
F. Lowe

7-28-80
AD 800 to Type

Form 734-3122

Budget Bureau No. 41-R20

MONTHLY TRANSACTION NO.

DATE SUBMITTED TO W.O.

FORM PR-1 (REV. 4-61)

July 24, 1980

FEDERAL - AID PROGRAM DATA

(PPM 21-1)

CARD	REPORT NUMBER	PROJECT LOCATION (45 typewriter spaces)	ADT	PRESENT	FUTURE	YEAR	REGION	STATE NAME
2	(19) (20)	City St., Oatfield Rd. @ Lake Rd. (Milwaukie) 21 65		9,400	--- (66) (70)	-- (71) (72)	10	Oregon

CARD	CHARACTER OF PROPOSED WORK (35 typewriter spaces)	NATL. FOREST	FH ROUTE NO.	SUPV AGCY	DA CLASSIF.	DA AREA	EMERG. YR.	PL. AUTH YR	PROJECT NUMBER PREFIX LETTER(S)	PROJECT NUMBER NUMBER
3	Right of Way Acquisition 28 62	(63) (65)	(66) (68)	(69)	(70)	(71)	(72) (73)	(74) (75)	IX- 14 23	9665 7

CARD		
	CLASS OF FEDERAL FUNDS Interstate Subsitution General Funded	COUNTY NAME Clackamas
	NAME OF URBAN AREA 17-31 Portland	ROUTE NO. U · FEDERAL-AID 9665 · STATE (32) City St. (36) · U.S. (37) ---

CARD	LINE NO.	CHANGE CODE	PROJECT CODE	WORK CLASS	WORK TYPE	STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS 85%	STATE FUNDS	OTHER FUNDS City
1	(14-15)	(16	41	42	43 46	53		(54) (58)	(59) (66)	(67) (76)		
5					PE							
5					ROW			0.0	20,000	(I-80N) 17,000	---	3,000
5					CONST (CODE)		"Oatfield Road @ Lake Road (Milwaukie) Section."					

CARD	CODE	PREPARED BY		MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS	STATE FUNDS	OTHER FUNDS
1	1	C.L.	PROJECT TOTALS	0.0	20,000	17,000	---	3,000
1	14	PROGRAM APPROVAL DATES 10-18-78 10-04-79			(18) (23)	(24) (33)		

REMARKS
Additional Data see item No.
Project No. IX-9665(

2031910

Budget Bureau No. 41-R2067; Approval Expires February 28, 1966

FORM PR-1 (REV. 4-61)

FEDERAL-AID PROGRAM DATA

(PPM 21-1)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

July 24, 1980

ECT LOCATION (45 typewriter spaces)	ADT	PRESENT	FUTURE	YEAR	REGION	STATE NAME	STATE CODE	APPN CODE	ITEM NO.
St., Oatfield Rd. @ Lake Rd. (Milwaukie)		9,400	---	--	10	Oregon -	41	823	90100

ORK (35 typewriter	NATL. FOREST	FH ROUTE NO.	SUPV AGCY	DA CLASSIF.	DA AREA	EMERG. YR.	PL. AUTH YR	PROJECT NUMBER PREFIX LETTER(S)	NUMBER	SEQ. NO.	I Projects Only POST MI.	DESIG.
isition								IX-	9665	(8)		

Interstate Subsitution General Funded

Portland

COUNTY NAME: Clackamas
CODE: 005

PROGRAM STAGE: ☐ 1 OR ☐ 2

ROUTE NO. U
FEDERAL-AID: 9665
STATE: City St.
U.S.: ---

ESTIMATED PROJECT COST BY PHASES

ORK TYPE	STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS 85%	STATE FUNDS	OTHER FUNDS City	CHARACTER OF PROPOSED WORK (Full description)
E		"Oatfield Road @ Lake Road (Milwaukie) Section."						ROW-60' normal; Access Control-none; Parking Restrictions-Partial.
OW			0.0	20,000	(I-80N) 17,000	---	3,000	
ONST (ODE)								
		C.L. PROJECT TOTALS	0.0	20,000	17,000	---	3,000	

ROVAL DATES
10-18-78
10-04-79

REMARKS
Additional Data see item No. 90100;
Project No. IX-9665(5).

-over-

USCOMM DUSCOMM-DC 48903-P61

Oatfield Road @ Lake Road (Milwaukie) Section

Project No. IX-9665(8)

Project Data: Work under this project consists of right of way acquisition all phases required for the future construction necessary to realign and widen the intersection of 34th and Oatfield Road at Lake Road Intersection, channelization and installation of multi phase traffic signals.

Note: 1) This project is in Congressional District No. 3.
2) No relocation assistance involved.
3) Included in MSD FY '80' TIP/AE on Page 144 item No. 265.

9368

L

STATE OF OREGON

INTEROFFICE MEMO

TO: Ken Rolfe
Region 1 R/W Supervisor

DATE: June 25, 1980

FROM: Adele L. Egan
Right of Way Office Unit Supv.

MISC. CONTRACTS and
AGREEMENTS No. 6875

SUBJECT: AGR 160
Oatfield Rd. @ Lake Rd.
City of Milwaukie
Clackamas County

Attached is an original for the City and a copy for your files of the Agreement for Right of Way Services on Oatfield Rd. @ Lake Rd., City of Milwaukie.

The project will be programmed.

AE
mp
Attach.

cc: Ed Hardt, w/c
Finance, w/c
Comm. Services, w/orig.
Local Gov't Programs, w/c
Title, w/c
Property Management, w/c
Description, w/c

/ 9368

4-30-80

Oatfield Road @ Lake Road
Clackamas County

NARRATIVE REPORT

Purpose: This survey is to provide for the signalization, realignment, and channelization of this intersection. Oatfield Road, Lake Road and 34th Street are all heavily traveled. A multiphase signal would control each direction and channelization would include left turn storage for each direction.

Major Features: Oatfield Road and 34th Street would be realigned for ease of passing through the intersection. Curb and sidewalk would be installed on 34th Street for approximately 100' each side and tying into existing sidewalk. Curb and sidewalk would be installed on Oatfield Road for a distance of 360' on the west side and 240' on the east side. Curb and sidewalk would be installed on Lake Road on the south side only a distance of 25' east of the intersection, due to lack of suitable outfall location for drainage from Lake Road. Curb only will be added west of the intersection for a distance of 300'. Curb and sidewalk on north side of Lake Road, east and west of the intersection, would be retained. The southwest corner of the intersection would have 2 sidewalk ramps and the remaining corners would have 1 each. Where sidewalks end a 12 : 1 ramp would be constructed.

Surfacing: Surfacing would be 15 inches of aggregate plus 3" base course and 1" AC wearing course with 1" overlay on existing pavement.

Anticipated Construction Problems: Calculations indicate the present drainage system further south on Oatfield Road has sufficient capacity to handle the drainage at this intersection. Inlets would be installed at the ends of the sidewalks on Oatfield Road and connected to the above system VIA 12" concrete pipe. The driveway located on the south side of Lake Road at 'L' STA 23 + 90 would be raised 3" at the back of the sidewalk rather than the standard 4". This would be done to obtain a 12° grade break. A survey of the immediate area drainage indicated that this would create no problems.

Care is advised in the construction of the curb and gutter on the northwest corner of the intersection to insure drainage of the corner.

Utilities: The telephone company vault at the northeast corner of the intersection is far enough below grade that it would cause no construction problems. The telephone company states that the roof is 9 1/2" thick and and designed to carry traffic loads.

The power company will be required to relocate 3 power poles and provide underground service at 1 to the controller.

REC'D 4-30-80
Z

FUNDS OK INCLUDED
IN GLADS.-MILW. TSM
POT. Z

H

Oatfield Road @ Lake Road
Clackamas County
NARRATIVE REPORT cont'.

Safety: While traffic in the construction area can be handled safely by flagmen during construction, the prohibition of vertical edge construction when flagmen are not present is recommended.

Scheduling: This project could be linked to the Oatfield Road and Aldercrest Drive project and be awarded as a single contract.

Cameron

GEO. SANFORD — 6386 9-25-79
BRUCE TAYL ~~[illegible]~~ — 6537 9-28-79
" 3881 9-[illegible]
CHECK CH. ~~BILLS [illegible]~~ 6064 9-23-79

SECTION OATFIELD RD. AT LAKE RD.
HIGHWAY OATFIELD RD.
COUNTY CLACKAMAS PREFIX 203-1910

QUANTITY SUMMARY & COST ESTIMATE Date:

ec.	Item	Unit	Quantity	Unit Price	Amount
10	MOBILIZATION	LUMP SUM	ALL	9%	13236
11	TEMP. PROTECTION & DIRECTION OF TRAFFIC	LUMP SUM	ALL	3%	4290
11	TEMP. SIGNS	SQ. FT.	192	6.00	1150
11	FLAGMEN	HR.	76	22.00	2110
201	CLEARING & GRUBBING	LUMP SUM	ALL	7500	7500
03	GENERAL EXC.	CU. YD.	633	10.00	6330
06	TRENCH EXC.	CU. YD.	53	20.00	1060
22	FINISHING ROADBED & SLOPES	LUMP SUM	ALL	5000	5000
35	WATERING	M-GAL	16	20.00	320
24	AGGREGATE BASE	CU. YD.	651	15.00	9762
03	CLASS "B" AC	TON	417	35.00	14,595
07	TACK COAT	TON	0.548	500	274
23	12" CONC. PIPE	LIN. FT.	160	30.00	4800
04	INLET G-2	EA.	2	600	1200
8	SIDEWALK	SQ. YD.	503	20.00	10060
28	DRIVEWAY	SQ. YD.	75	27.00	2025
9	TYPE "C" CURB	LIN. FT.	905	5.50	4978
28	ADJUST MANHOLES	EA.	6	200	1200
28	ADJUST BOXES	EA.	17	250	4250
28	R. & R. MAIL BOXES	EA.	5	75	380
15	TYPE 'DD' SIGNS IN PLACE	SQ. FT.	25	10	250
	(SIGN POSTS (80 BD. FT.)	BD. FT.	80	4.50	360
61	8 PHASE SIGNAL	EA	1	60,000	65000
81	BARK MULCH	UNIT	4	100	400
					166 556
	ANTICIPATED ADDITIONAL ITEMS				
	PERM. STRIPING				2310
					168 8[illegible]

PAGE 2

SECTION OATFIELD RD @ LAKE RD.
HIGHWAY OATFIELD RD.
PREFIX 203-1910
COUNTY CLACKAMAS

Date:

QUANTITY SUMMARY & COST ESTIMATE

c.	Item	Unit	Quantity	Unit Price	Amount
					162 860
	ENG. & CONT. 20%				32 572
					195 432
	R/W				8,000
			TOTAL		203,432
	PROJECT REQ = $116,000 LESS PE - $9,000 =				$107,000
	ST. REP. 65 INCLUDED IN GLADSTONE-MILWAUKIE SUBAREA				

936 ✓

U. S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

4-22-80

FEDERAL AID PROJECT NO. IX-9665(5)

STATE PROJECT NO. See below

COUNTY NAME Clackamas

PROGRAM STAGE (Check) ☐ 1. ☐ 2.

PROGRAM NO.

ITEM NO. 90100

FROM:
G. L. Green, Division Administrator
FHWA - Oregon Division

TO:
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

4/25
Orig

RECEIVED
STATE HWY ENGR
APR 25 '80
REFER TO
Moehring
FOR
Info | File

DATE PS&E APPROVED

DATE AUTHORIZATION EFFECTIVE 4/15/80

FEDERAL ROUTE NUMBER FAU 9665

STATE ROUTE NUMBER City Street

GENERAL LOCATION:

Oatfield Road at Lake Road (Milwaukie) Section

GENERAL DESCRIPTION OF WORK:

Program Change

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

PRELIMINARY ENGINEERING TO DETERMINE
☐ LOCATION ONLY
PRELIMINARY ENGINEERING FOR SURVEY AND PLAN
☐ PREPARATION
☒ OTHER (*Specify*) Program Change
See below

☐ ACQUISITION OF RIGHT-OF-WAY
CONSTRUCTION - ADVERTISE FOR RECEIPT
☐ OF BIDS
☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of 2/22/80 I approve the revised Preliminary Engineering costs of a TEC of $16,600 with Federal participation limited to $14,110

(Increase TEC $7,600 - F.F. $6,460 advice dated 4/15/80)

DATE 4/22/80

SIGNATURE OF APPROVING OFFICIAL

TITLE for Division Administrator

FORM PR-1240
(REV. 5-70)
EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U. S. GOVERNMENT PRINTING OFFICE: 1975-631-088

U. S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

9368

LETTER OF APPROVAL AND/OR AUTHORIZATION

4-15-80

FEDERAL AID PROJECT NO.
[illegible]-9665(6)

STATE PROJECT NO.
See below

PROGRAM NO.

COUNTY NAME
Clackamas

FROM:
G. L. Green, Division Administrator
FHWA - Oregon Division

ITEM NO.
90118

PROGRAM STAGE (Check)
☐ 1. ☐ 2.

TO:

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

4/25
Orig

RECEIVED
STATE HWY ENG
APR 25 '80
REFER TO
Moehring
FOR
Info | Inves | R/D | D/S | Sign | Act | File

DATE PS&E APPROVED
4/15/80

DATE AUTHORIZATION EFFECTIVE
4/15/80

FEDERAL ROUTE NUMBER
FAU 9665

STATE ROUTE NUMBER
County Road

GENERAL LOCATION:
Oatfield Road at Aldercrest Drive Section

GENERAL DESCRIPTION OF WORK:
Channelization

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY

☐ PRELIMINARY ENGINEERING FOR SURVEY AND PLAN PREPARATION

☒ OTHER (*Specify*) See Below

☐ ACQUISITION OF RIGHT-OF-WAY

☐ CONSTRUCTION - ADVERTISE FOR RECEIPT OF BIDS

☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of 3/6/80 you are authorized to proceed with actions necessary to advance the physical construction of the subject project at a TEC of $16,800 with Federal participation limited to $14,280.

(Advice dated 4/15/80)

DATE
4/15/80

SIGNATURE OF APPROVING OFFICIAL
G K Hosmer

TITLE
for Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U. S. GOVERNMENT PRINTING OFFICE: 1975-631-455

U. S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

9368

LETTER OF APPROVAL AND/OR AUTHORIZATION

3 - 11 - 80

FEDERAL AID PROJECT NO. X-9665(6)

STATE PROJECT NO. See below

PROGRAM NO.

COUNTY NAME Clackamas

ITEM NO. 90118

PROGRAM STAGE (Check) ☐ 1. ☐ 2.

FROM:
G. L. Green, Division Administrator
FHWA - Oregon Division

TO:
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

4/25

Orig

RECEIVED
STATE HWY ENGR
APR 25 '80
REFER TO
Moehring
FOR

Info	Invs	R/O	D/R	Sgn	Act	File

DATE PS&E APPROVED

DATE AUTHORIZATION EFFECTIVE 3/11/80

FEDERAL ROUTE NUMBER FAU 9665

STATE ROUTE NUMBER County Road

GENERAL LOCATION:
Oatfield Road at Aldercrest Drive Section

GENERAL DESCRIPTION OF WORK:
Program Change

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY

☐ PRELIMINARY ENGINEERING FOR SURVEY AND PLAN PREPARATION

☒ OTHER *(Specify)* Program change

☐ ACQUISITION OF RIGHT-OF-WAY

☐ CONSTRUCTION - ADVERTISE FOR RECEIPT OF BIDS

☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of 3/6/80 I approve the program change as follows:

1) Character of Proposed Work: Add "Construction-Channelization."
2) Work-Type-Const.: Add "TOPICS & Y008."
3) Miles: Change PE to read 0.0 and add CONST. 0.0
4) Estimated Project Cost By Phases: Change to read ---.

	TYPE CODE	TEC	FF	STATE	OF
	PE	$ 7,000	$ 5,950	---	$1,050
Const.	Y008	16,800	14,280	---	2,520
		$23,800	$20,230	---	$3,570

DATE 3/11/80

SIGNATURE OF APPROVING OFFICIAL G. K.

TITLE for Division Administrator

FORM PR-1240 (REV. 6-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U.S. GOVERNMENT PRINTING OFFICE: 1976-631-655

9368

9665 c

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6

March 6, 1980

TO: G. L. Green, Division Administrator
Federal Highway Administration

Original Signed By
D. E. Swan

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Project Change & IX-9665(6)
Item No. 90118
Project No. IX-9665(6)
Oatfield Rd. @ Aldercrest Dr. Sec.
Clackamas County

I request your approval of a project change to add the construction phase requiring changes to the PR-1 form as follows:

1) Character of Proposed Work: Add "Channelization".

2) Work-Type-Const.: Add "TOPICS & Y008".

3) Miles: Change PE to read 0.0 and add CONST. 0.0.

4) Estimated Project Cost By Phases: Change to read ---

TYPE CODE	TEC	FF	STATE	OF
PE	$ 7,000	$ 5,950	---	$1,050
Y008	16,800	14,280	---	2,520
	$23,800	$20,230	---	$3,570

5) Project Data: Change to read, "The work consists of the following:

   1) Preliminary engineering all phases including utility preparatory work.

H

2) Channelize Oatfield Rd. and modify Aldercrest Dr. approach requiring grade, drain and high-type pave as required and incidental work common to this type of project."

I also request transfer of Interstate Substitution General Funds for construction, as we intend to request PS&E authorization upon availability of funds. This action will involve an estimated total cost of $16,800 with Federal Funds in the amount of $14,280.

These requests are based on the February 16, 1979 letter to you from Mr. F.B. Klaboe, Director of Transportation.

The project is included in MSD FY '80 AE/TIP on page 144 as number 265.

JLG:bke
Enclosures

cc: R. N. Bothman (Metro)
Max Klotz (Metro)
Jon Rose (Metro)
E. L. Hardt (Region 1)
Gary Zehner

9368

OREGON DEPARTMENT OF TRANSPORTATION

NOISE STUDY REPORT

Project Oatfield Road at Lake Road
Preparer Doug Iverson
Highway
Date 1/21/80
County Clackamas
City Milwaukie

Project Description: The proposed project consists of:

1) Realigning Oatfield Road and 34th Ave.
2) Signalizing the intersection
3) Providing a safety overlay 250 feet in all directions from the intersection
4) Widening all four legs of the intersection to provide channelization (see map)

Existing Land Use Activities: Existing land use consists of single family residential unit

---

Traffic Data: (See Table 1)

	No-Build		Build	
	19 (year)	(year)	19 (year)	(year)
Design Hourly Volume				
Autos				
Speed				
Peak Truck Hour				
M. Trucks				
H. Trucks				
Speed				

Original report is in
the ODOT, Metro office

Traffic Noise Levels: (S[illegible] Table 2)

Measured Leq Noise Level			Volume			
Measured	Model Prediction	Distance from Center Line	Autos	Med. Truck	Heavy Truck	Speed
______	______	______	______	______	______	______

	No-Build		Build	
	19 (year)	(year)	19 (year)	(year)
Leq Level Along R/W Line (____ feet from ℄)	______	______	______	______
Leq 67 dBA Contour Location (Distance from centerline)	______	______	______	______

Traffic Noise Impacts: The federal design noise levels (exterior) for residential areas is an L_{eq} 67 dBA. The predicted result in noise at all receptors adjacent to the project falls below this level (Table 2). Therefore, no traffic noise impacts are predicted.

Traffic Noise Mitigation: Since no noise impacts are predicted, mitigation is not recommended.

Construction Noise - Impacts and Mitigation: There will be temporary high noise levels due to construction. To minimize these higher noise levels of the construction equipment, construction operations shall be restricted within 1,000 feet of any occupied dwelling unit on Sundays, legal holidays and between the hours of 10 p.m. and 6 p.m. on other days, without the approval of the resident engineer.

Local Coordination:

A copy of this report will be sent to:

Steve Hall
Director of Public Works
City of Milwaukie
10722 SE Main Street
Milwaukie, OR 97222

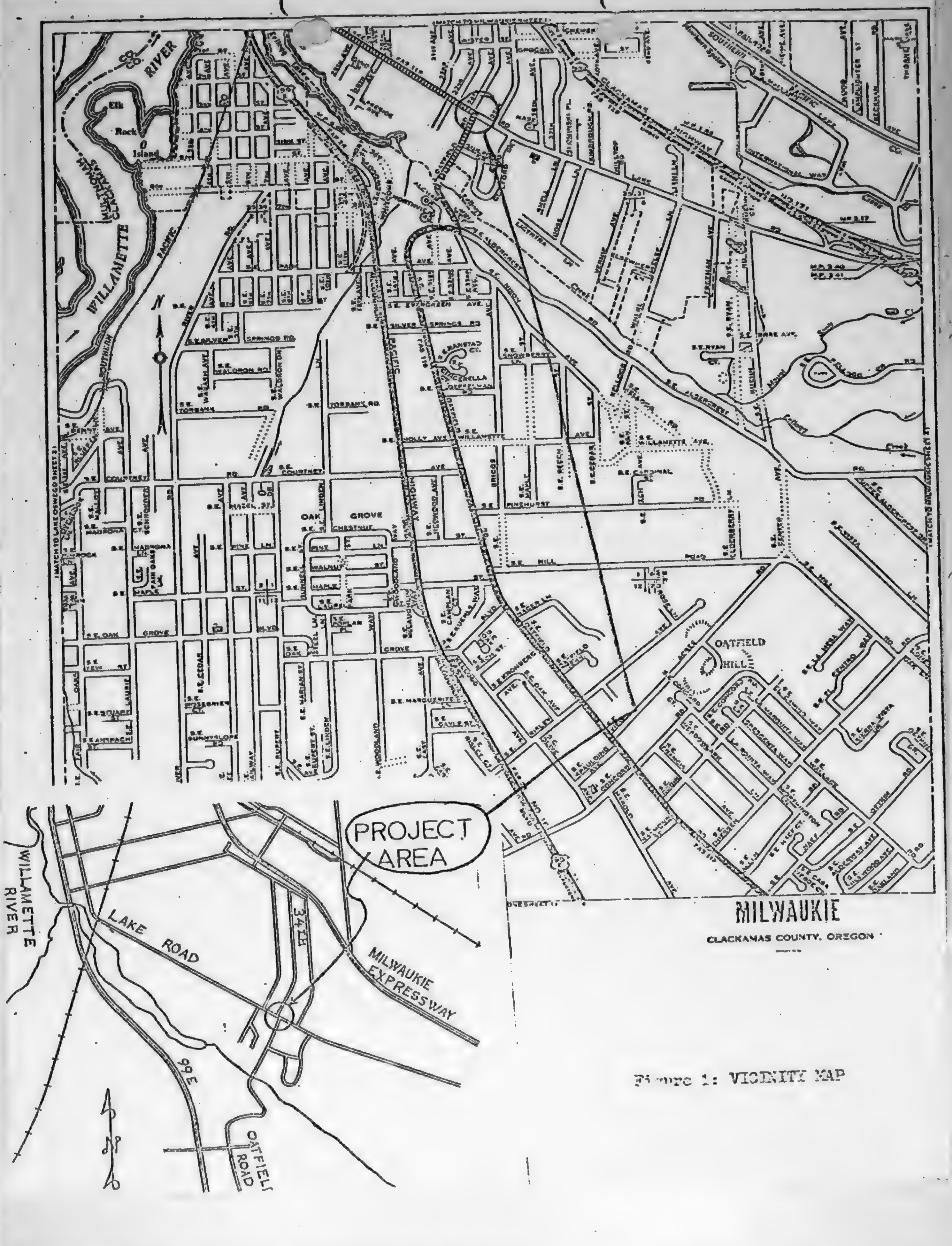

WILLAMETTE RIVER
Elk Rock Island
OAK GROVE
OATFIELD HILL
MILWAUKIE
CLACKAMAS COUNTY, OREGON
PROJECT AREA
WILLAMETTE RIVER
LAKE ROAD
34th
MILWAUKIE EXPRESSWAY
99E
OATFIELD ROAD

Figure 1: VICINITY MAP

Figure 2 : PROJECT LOCATION

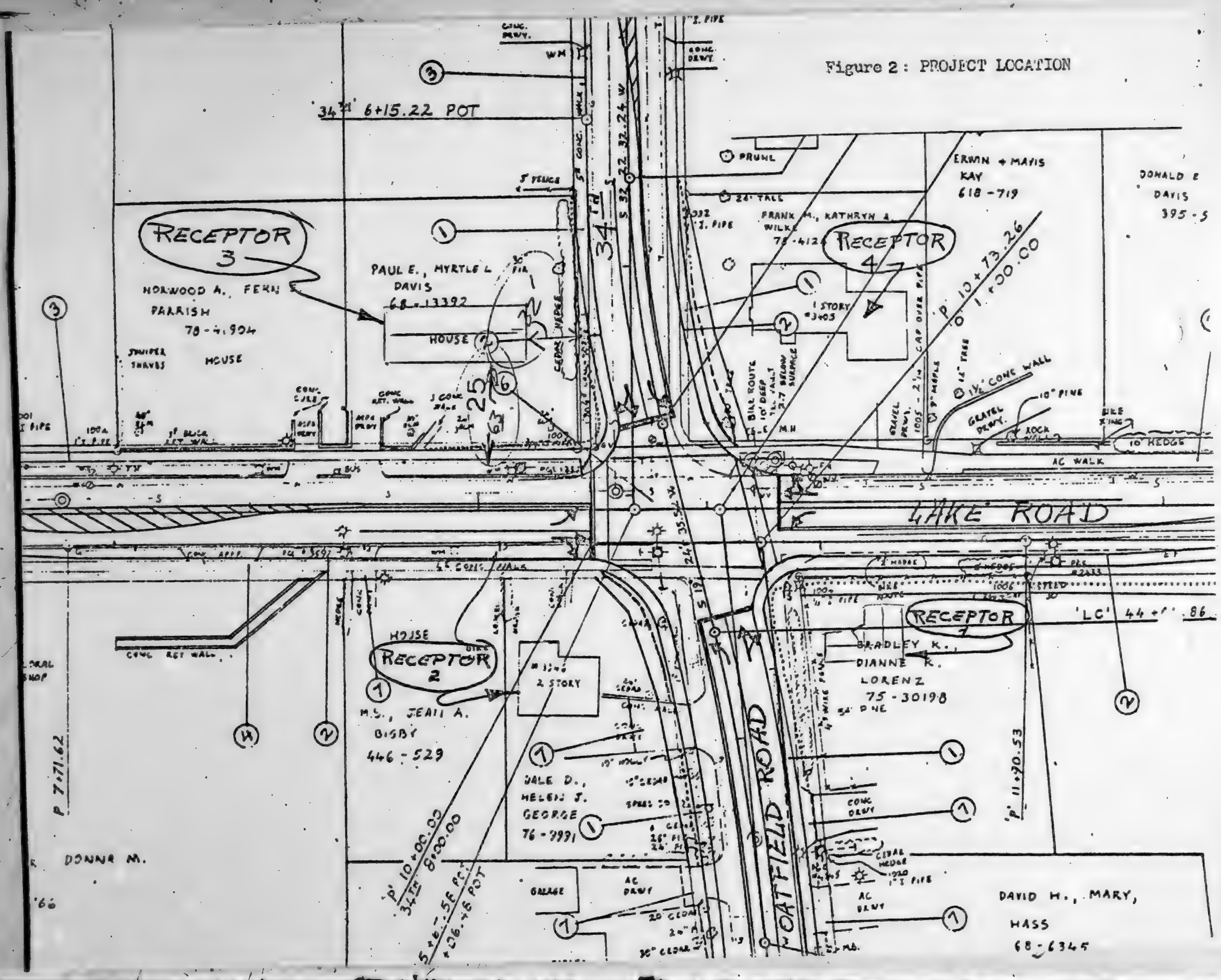

RECEPTOR 1
RECEPTOR 2
RECEPTOR 3
RECEPTOR 4
LAKE ROAD
OATFIELD ROAD
34TH
S 32 22 32.24 W
S 19 24' 35.52 W
34TH 6+15.22 POT
P 7+71.62
'P' 10+00.00
34TH 8+00.00
5+67.5E PC
+06.46 POT
P 10+73.26
1+00.00
'P' 11+90.53
'LC' 44+.86
PAUL E., MYRTLE L DAVIS 68-13392
HOUSE
NORWOOD A., FERN E PARRISH 78-41904
HOUSE
M.S., JEAN A. BISBY 446-529
HOUSE
2 STORY
DALE D., HELEN J. GEORGE 76-9991
BRADLEY K., DIANNE K. LORENZ 75-30198
FRANK M., KATHRYN A. WILKE 75-4126
1 STORY
ERWIN + MAVIS KAY 618-719
DONALD E DAVIS 395-5
DAVID H., MARY, HASS 68-6345
DONNA M.
25
63
BIKE ROUTE
10' DEEP TEL VAULT 2.7 BELOW SURFACE
CONC RET WALL
AC WALK
10' HEDGE
CEDAR HEDGE
GARAGE
AC DRWY
CONC DRWY
GRAVEL DRWY
1½' CONC WALL
10" PINE
12" TREE
5' FENCE
WM
M.H
PRUNE
24" FALL

Table 1: Traffic Data

*Note: B = Build Alternative; N.B. = No-Build Alternative

Section	Year	Design Hourly Volume Auto	Peak Truck Hour MT	HT	Speed
Oatfield S. of Lake	1978	910	30	2	20
	1995 B.	1220	40	3	25
	1995 N.B.	1220	40	3	15
34th Street N. of Lake	1978	180	4	0	20
	1995 B.	265	6	0	25
	1995 N.B.	265	6	0	15
Lake Road E. of Oatfield	1978	960	30	2	30
	1995 B.	1360	43	2	30
	1995 N.B.	1360	43	2	30
Lake Road W. of Oatfield	1978	850	16	0	30
	1995 B.	1350	23	0	30
	1995 N.B.	1350	23	0	30

Table 2: Traffic Noise Predictions (dBA)

Receptor*	Year	L_{eq} (Total)
1	1978	64
	1995 B.	66
	1995 N.B.	65
2	1978	62
	1995 B.	65
	1995 N.B.	64
3	1978	61
	1995 B.	63
	1995 N.B.	62
4	1978	63
	1995 B.	65
	1995 N.B.	64

* Receptor locations can be seen on Figure 2

9368

FA1-X

7-16-79

~~June 14, 1979~~

R. R. Cameron
Resident Engineer

Oatfield Road At Aldercrest Drive
Clackamas County

Prefix 203-1911

NARRATIVE REPORT

This is a location survey for the widening of Oatfield Road in the area of Aldercrest Drive. Because of the high degree of curve and narrow lanes, city busses have difficulty negotiating the curve. By leaving the centerline in the same approximate location, and by widening on the inside of the curve, sufficient room can be had for the busses. This can be accomplished by widening to a twenty foot southbound lane and matching existing at each end of the curve. Compound curves would be used as opposed to spirals. type "c" curb would be installed on the west side of Oatfield along with a six foot AC combination bike path, pedestrian walk. Only a very small portion of R/W will be required.

A field base design is proposed as follows: 12 inch base aggr. and 4 inch AC and a 1 inch overlay over existing roadway. Four inch of AC is proposed for the bike path. The bike path would match all existing driveways.

Traffic is quite heavy in this area and sight distance is not adequate. Proper signing and a flagman at each end of the project will be required.

Material source will be commercial.

No additional drainage items are required.

No signs of underground utilities were found in the area to be widened.

REC'D 7-13-79

County has OK'd this design. County will acquire R/W, State will prepare R/W descriptions, Says R R Cameron.

7-16-79
Max Says this Job will be included in a contract with Several other projects in this area. Acquire R/W and prepare detail sheet.

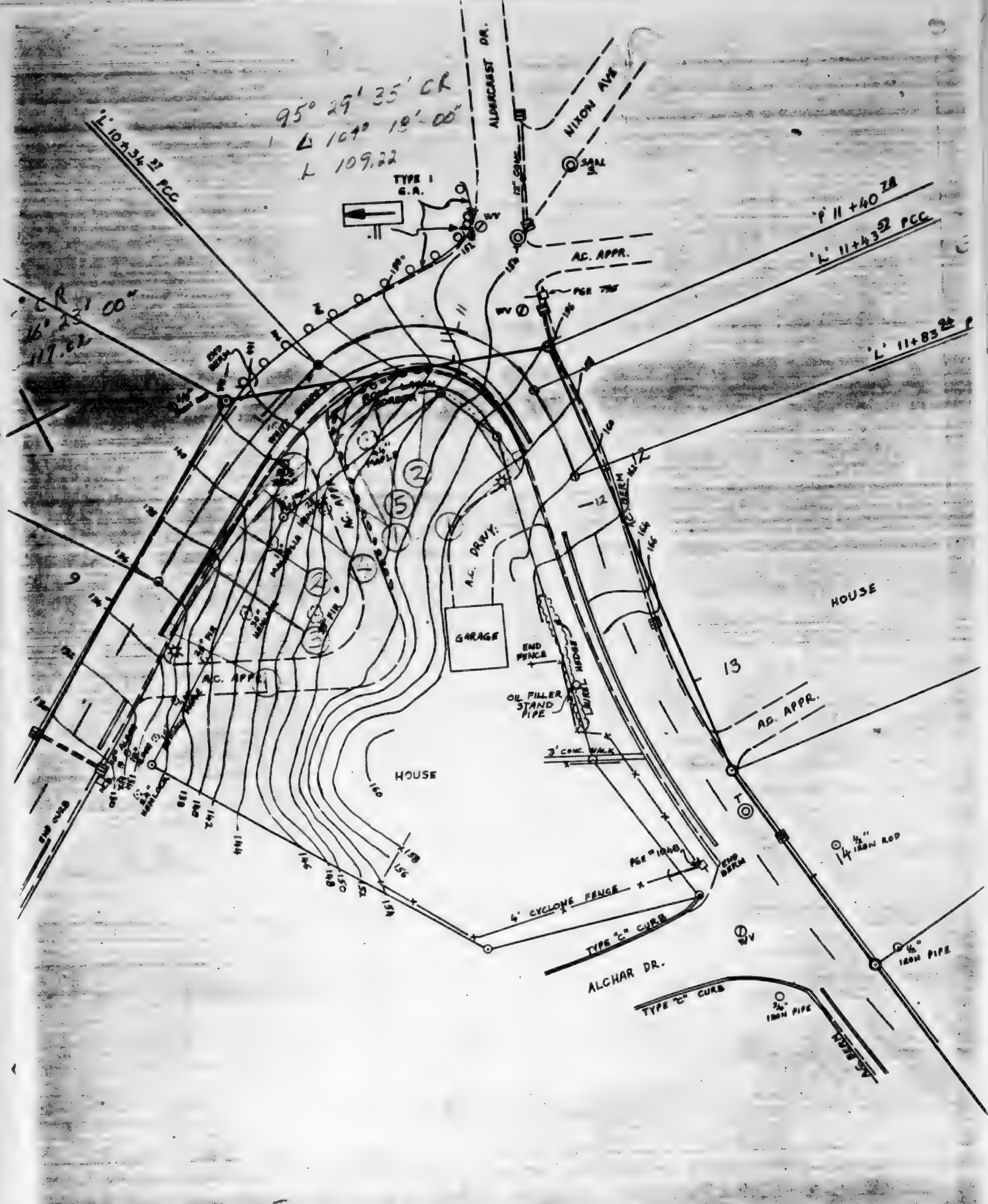
GEO. SANFORD 378-6386
6-11-79
6-21-79

SECTION OATFIELD RD. @ ALDERCREST
HIGHWAY OATFIELD RD.
COUNTY CLACKAMAS
PREFIX 203-1911

QUANTITY SUMMARY & COST ESTIMATE

Date: 6-79

C.	Item	Unit	Quantity	Unit Price	Amount
10	MOBILIZATION	ALL	LUMP SUM		750
11	TEMP. PRO. + DIR. OF TRAFFIC	ALL	LUMP SUM		373
11	TEMP. SIGNS	SQ. FT.	150	6.00	900
	FLAGMAN	HR	80	19.00	1520
20	REMOVAL OF EXT. CURB	LIN. FT.	102	2.00	204
20	GENERAL EXC.	CU. YDS.	28	20.00	560
30	AGG. BASE	TON	25	10.00	250
40	CLASS "B" ASPHALT CONCRETE	TON	82.5	45.00	3713
609	CONCRETE CURBS	LIN. FT.	203	10.00	2030
681	BARK MULCH	UNIT	1	200	200
	SUB-TOTAL				10,500
	ADDITIONAL ANTICIPATED ITEMS				
	STRIPING				400
	SUB-TOTAL				10,900
	ENG. + CONT.				2200
	SUB-TOTAL				13,100
	R/W ESTIMATE				100
	TOTAL				13,200


95° 29' 35" CR
Δ 104° 19'-00"
L 109.22
'L' 10+34 27 PCC
C R 1'00"
26° 23'
117.62
ALDERCREST DR.
NIXON AVE
SAN.
12" CONC.
TYPE I G.R.
WV
AC. APPR.
PGE 795
'P' 11+40 28
'L' 11+43 52 PCC
'L' 11+83 24 P
END BERM
AC. APPR.
A.C. DRWY.
GARAGE
END FENCE
LAUREL HEDGE
OIL FILLER STAND PIPE
3' CONC. WALK
HOUSE
HOUSE
9
12
13
14
AC. BERM
AD. APPR.
T
½" IRON ROD
PGE 1040
END BERM
4' CYCLONE FENCE
TYPE "C" CURB
WV
ALCHAR DR.
TYPE "C" CURB
¾" IRON PIPE
½" IRON PIPE
AC. BERM
END CURB
FIR
MAPLE
160
158
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146
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142
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138

9368

April 11, 1979

Clackamas County
Public Works Department
902 Abernethy Road
Oregon City, OR 97045

MISC. CONTRACTS and
AGREEMENTS No. 6963

Gentlemen:

Attached for your records is one fully executed copy each of agreements which concern the following:

1) The King Road-Harmony Road Section of S.E. Price-Fuller Road (FAU 9721)

2) The Aldercrest Drive Intersection of Oatfield Road (FAU 9665)

3) The Bull Run River Bridge Section of Bull Run Road

We have retained one fully executed copy of each agreement for the Transportation Commission's files.

Sincerely,

C. W. Head
COMMISSION SERVICES

dda
Attachments

bc Gerald Wimer (Agreements attached)

9368

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL A[illegible]OR AUTHORIZATION

3-29-79

FEDERAL AID PROJECT NO. IX-9665(6)

STAT[illegible]ECT NO. See below

COUNTY NAME Clackamas

PROGRAM STAGE (Check) ☐ 1.

FROM:
G. L. Green, Division Administrator
Salem, Oregon

PROGRAM NO.

ITEM NO. 90118

RECEIVED
STATE HWY ENGR
APR 5'79
REFER TO
Moehring
FOR

Info	Inves	R/D	D/R	Sign	Act	File

TO:

Mr. H. S. Coulter
State Highway Engineer, ODOT
Salem, Oregon

DATE PS & E APPROVED

DATE AUTHORIZATION EFFECTIVE 3-29-79

FEDERAL ROUTE NUMBER FAU 9665

STATE ROUTE NUMBER County Road

GENERAL LOCATION:

Oatfield Rd. at Aldercrest Dr. Section

GENERAL DESCRIPTION OF WORK:

Preliminary Engineering

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

PRELIMINARY ENGINEERING TO DETERMINE
☐ LOCATION ONLY
PRELIMINARY ENGINEERING FOR SURVEY AND PLAN
☒ PREPARATION including utility preparatory work
☐ OTHER (Specify)

☐ ACQUISITION OF RIGHT-OF-WAY
CONTRUCTION - ADVERTISE FOR RECEIPT
☐ OF BIDS
☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of February 22, 1979 you are now authorized to proceed with the above work at a TEC of $7,000 - Federal Funds limited to $5,950.

DATE 3-29-79

SIGNATURE OF APPROVING OFFICIAL G. K.

TITLE for Division Administrator

FORM PR-1240 (REV. 8-70)

EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U.S. GOVERNMENT PRINTING OFFICE: 1976—628-787

9368

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL A /OR AUTHORIZATION

3-29-7

FEDERAL AID PROJECT NO. IX-9665(5)

STAT IECT NO. See below

COUNTY NAME Clackamas

PROGRAM STAGE (Check) ☐ 1 ☐

RECEIVED
STATE HWY ENGR
APR 5 '79
REFER TO
Moehring
FOR
Info | Inves | R/D | D/R | Sign | Act | File

FROM:
G. L. Green, Division Administrator
Salem, Oregon

PROGRAM NO.

ITEM NO. 90100

TO:

Mr. H. S. Coulter
State Highway Engineer, ODOT
Salem, Oregon

DATE PS & E APPROVED

DATE AUTHORIZATION EFFECTIVE 3-29-79

FEDERAL ROUTE NUMBER FAU 9665

STATE ROUTE NUMBER City Street

GENERAL LOCATION:

Oatfield Road at Lake Road (Milwaukie) Section

GENERAL DESCRIPTION OF WORK:

Preliminary Engineering

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

PRELIMINARY ENGINEERING TO DETERMINE
☐ LOCATION ONLY
PRELIMINARY ENGINEERING FOR SURVEY AND PLAN
☒ PREPARATION including utility preparatory work
☐ OTHER (Specify)

☐ ACQUISITION OF RIGHT-OF-WAY
CONSTRUCTION - ADVERTISE FOR RECEIPT
☐ OF BIDS
☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's February 2, 1979 letter, you are now authorized to proceed with the above work for a TEC of $9,000 with Federal Funds limited to $7,650.

DATE 3-29-79

SIGNATURE OF APPROVING OFFICIAL

TITLE for Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR 1240 (REV. 6-65) WILL BE USED

☆ U.S. GOVERNMENT PRINTING OFFICE: 1976—626-787

92-8

March 5, 1979

cy: Kulien
Bothman
3/7

The Honorable Victor Atiyeh
Governor
207 State Capitol
Salem, Oregon

Dear Governor:

Re: Substitute Transportation Projects Using
Withdrawn Interstate Funds

Your letter of February 2 requested I keep you informed as to the projects considered to use withdrawn Interstate funds.

No projects were submitted to the Federal Highway Administration (FHWA) in the month of January. The following projects in the Portland Urbanized Area were submitted to FHWA in the month of February.

	Funds		
Project	Federal	State	Local
1) Portland Ave. @ Abernathy Lane (Gladstone) Section	$ 17,000	--	$ 3,000
2) Aldercrest Dr. Intersection	$ 66,000	--	$ 11,700
3) "B" Ave.-North Shore Rd. (Lake Oswego)	$651,300	--	$116,700
4) SE King Rd.-SE Harmony Rd.	$110,500	--	$ 19,500

The criteria used to select these projects is the Region's Transportation planning process which embodies a continuing cooperative, comprehensive approach. The projects are included in the Region's Transportation Improvement Program.

There were no projects submitted for the Salem urbanized area for the months of January or February.

Sincerely,

F. B. Klaboe
Director of Transportation

bc: H. S. Coulter
D. H. Moehring

9368

ROBERT W. STRAUB
GOVERNOR

Department of Transportation

TRANSPORTATION BUILDING, SALEM, OREGON 97310

February 22, 1979

TO G. L. Green, Division Administrator
Federal Highway Administration

Original Signed By
D. E. Swan

FROM D. E. Swan
Federal Aid Manager

SUBJECT Project Data Submission
Item No. 90118
Project No. Ix-9665(6)
Oatfield Rd. @ Aldercrest Dr. Section
Oatfield Rd.
Clackamas County

Attached is support data consisting of PR-1 forms and project maps for the subject project.

We request the following:

1) Financing for the project utilizing Interstate Substitution General funds. Approval of this request will involve an estimated total cost of $7,000 with obligation of Federal funds of $5,950.

2) Authorization to proceed with all phases of Preliminary Engineering including utility preparatory work necessary to obtain PS&E approval.

These requests are based on the February 16 letter to you from Mr. F. B. Klaboe, Director of Transportation.

JLG:dmc
Attachments
cc: R. N. Bothman, Metro
Max Klotz, Metro
Jon Rose, Metro
Ed Hardt, Region 1
Gary Zehner, w/att.

Budget Bureau No. 41-R2067

U.S.

FORM PR-1
(REV. 4-61)

FEDERAL-AID PROGRAM DATA
(PPM 21-1)

MONTHLY TRANSACTION NO.

DATE SUBMITTED TO W.O.

February 22, 1979

CARD 2	REPORT NUMBER (19) (20)	PROJECT LOCATION (45 typewriter spaces) 21 65	ADT	PRESENT	FUTURE (66) (70)	YEAR (71) (72)	REGION	STATE NAME
		Co. Rd., Jct. Aldercrest Dr.		8,920	---		10	Oregon

CARD 3	CHARACTER OF PROPOSED WORK (35 typewriter spaces) 28 62	NATL. FOREST (63) (65)	FH ROUTE NO. (66) (68)	SUPV AGCY (69)	DA CLASSIF. (70)	DA AREA (71)	EMERG. YR. (72) (73)	PL. AUTH YR (74) (75)	PROJECT NUMBER PREFIX LETTER(S) 14 23	PROJECT NUMBER NUMBER 7
	Preliminary Engineering								IX-	9665

CARD

CLASS OF FEDERAL FUNDS: Interstate Substitutions General Funded

COUNTY NAME: Clackamas

CO (14)

NAME OF URBAN AREA 17-31: Portland

ROUTE NO. U

FEDERAL-AID: 9665 (32)

STATE: Co. Rd. * (36) (37)

U.S.: ---

CARD 5	LINE NO.	CHANGE CODE	PROJECT CODE	CLASS	WORK TYPE	WORK STEP	TERMINI (Full description)	MILES	ESTIMATED PROJECT COST BY PHASES: TOTAL ESTIMATED COST	FEDERAL FUNDS 85%	STATE FUNDS	OTHER FUNDS (County)
1	(14-15)	(16	41	42	43 46	53		(54) (58)	(59) (66)	(67) (76)		
5					**PE** TOPICS			0.12	7,000	5,950	---	1,050
5					**ROW**							
5					**CONST** (CODE)		"Oatfield Rd. @ Aldercrest Dr. Sec."		(71,000)			

CARD 1	CODE 1	PREPARED BY	PROJECT TOTALS	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS	STATE FUNDS	OTHER FUNDS
		JLG		0.12	7,000	5,950	---	1,050
1	14	PROGRAM APPROVAL DATES 10-18-78			(16) (23)	(24) (33)	REMARKS	

* SE Oatfield Rd.

over

Budget Bureau No. 41-R2067; Approval Expires February 28, 1966

FORM PR-1
(REV. 4-61)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

FEDERAL-AID PROGRAM DATA

(PPM 21-1)

February 22, 1979

CT LOCATION (45 typewriter spaces) d., Jct. Aldercrest Dr.	ADT	PRESENT 8,920	FUTURE ---	YEAR	REGION 10	STATE NAME Oregon	STATE CODE 41	APPN CODE 823	ITEM NO. 90118

ORK (35 typewriter ering	NATL. FOREST	FH ROUTE NO.	SUPV AGCY	DA CLASSIF.	DA AREA	EMERG. YR.	PL. AUTH YR	PROJECT NUMBER PREFIX LETTER (S) IX-	NUMBER 9665	SEQ. NO. (6)	I. Projects Only POST MI.	DESIG.

utions General Funded

COUNTY NAME Clackamas				CODE 005	PROGRAM STAGE ☐ 1 OR ☐ 2
ROUTE NO. U	FEDERAL-AID 9665	STATE Co. Rd. *	U.S. ---		

ORK TYPE	STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS 85%	STATE FUNDS	OTHER FUNDS (County)	CHARACTER OF PROPOSED WORK (Full description)
ICS			0.12	7,000	5,950	---	1,050	Util. prep. work
W								
NST DE)		"Oatfield Rd. @ Aldercrest Dr. Sec."		(71,000)				ROW-60' min.; Access Control-none; Parking Restrictions-Complete
JLG		PROJECT TOTALS	0.12	7,000	5,950	---	1,050	

OVAL DATES
10-18-78

REMARKS

* SE Oatfield Rd.

over

USCOMM DUSCOMM-DC 48905-P61

OATFIELD RD. @ ALDERCREST DR. SECTION
PROJECT NO. IX-9665(6)

Existing Facility: Two 12-ft. bituminous surfaced travel lanes with 4-ft. paved shoulders. Stop sign control on Aldercrest Drive.

Adjacent Sections: Same as roadway under existing facility.

Project Data: The work consists of all phases of preliminary engineering including utility preparatory work for future realignment and widening of Oatfield Rd. at intersection of Aldercrest Drive.

Right-of-Way: No additional required.

System Action, Airports, Railroads, Water Developments, Historical and Recreational Areas: None involved.

FHPM 7-7-2 Requirements: Nonmajor action project concurred in by FHWA on September 27, 1978.

FHPM 4-1-4 Requirements:
a) State Clearinghouse--A-95 review exempt under working agreement.
b) District 2 Clearinghouse--A-95 review satisfied through inclusion of project in MSD TIP.

FHPM 7-7-5 Requirements:
a) Public Hearings--Not required under Oregon Action Plan.
b) Location/Design--Not a factor in the development of this project.

NOTE: 1) This project is in Congressional District No. 3.
2) Included in CRAG MSD FY 79 TIP/AE on page 134 line 316.

9368

L.

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

Intergovernmental Relations Division
Room 306, State Library Building
Salem, Oregon 97310, Phone: 378-3732

STATE A-95 REVIEW CONCLUSIONS

RECEIVED
STATE HWY ENGR
FEB 26 '79
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

APPLICANT: OR DOT, HWY DIV

PROJECT TITLE: Oatfield Road at Lake Road- Milwaukie

DATE: February 21, 1979

The state has reviewed your project and reached the following conclusions:

NOTED
H.S. COULTER

☒ No significant conflict with the plans, policies or programs of state government have been identified ~~and your proposal is endorsed as presented.~~

☒ Relevant comments of state agencies are attached and should be considered in the final design of your proposal.

☐ Potential conflicts with the plans and programs of the state agency(s) have been satisfactorily resolved. No significant issues remain.

☐ Significant conflicts with the plans, policies or programs of state government have been identified and remain unresolved. The final proposal has been reviewed and the final comments and recommendations of the state are attached.

2-26-79 copies sent to:
G. L. Green
H. S. Coulter ✓
F. E. Terpin
J. B. Boyd
J. H. Versteeg
Gary Potter
W. J. Hart
Paul Burket, Aeronautics
R. N. Bothman, Metro
E. L. Hardt, Region 1
M. Payne, Dist. 2B
B. L. Gifford

NOTICE TO FEDERAL AGENCY

The following is the officially assigned State Identifier Number:

This number should be used on all correspondence and particularly on SF 240 as required by OMB A-98.

GIFFORD
1-22 79

A copy of this notification and attachments, if any, must accompany your application to the federal agency as required by OMB A-95. Comments of the appropriate local reviewing agencies will be submitted to you separately and must also be included.

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

Intergovernmental Relations Division
Room 306, State Library Building
Salem, Oregon 97310, Phone: 378-3732

PNRS STATE REVIEW

Project #: ______________ Due Date: ______________

To Agency Addressed: If you intend to comment but cannot respond by the return date, please notify us immediately. If no response is received by the due date, it will be assumed that you have no comment and the file will be closed.

PROGRAM REVIEW AND COMMENT

To State Clearinghouse: We have reviewed the subject Notice and have reached the following conclusions on its relationship to our plans and programs:

( ) It has no adverse effect.

( ) We have no comment.

( ) Effects, although measurable, would be acceptable.

( ) It has adverse effects. (Explain in Remarks Section)

( ) We are interested but require more information to evaluate the proposal.

(x) Please coordinate the implementation of the proposal with us.

(X) Additional comments for project improvement. (Attach if necessary)

- - - - - - - - - - -

REMARKS (Please type or print legibly)

Noise Section Comments — There is a high probability that this project will cause a substantial noise impact to residential and school properties. The sound levels will probably even exceed the Non-protective FHWA noise standards. A Full scale noise study should be conducted to assess the extent of the noise impacts and to propose noise mitigation measures to minimize the impacts to the school and homes in the project area

Agency DEQ By 2-9-7

9365

February 16, 1979

TO: G. L. Green, Division Administrator
Federal Highway Administration

FROM: F. B. Klaboe
Director of Transportation

SUBJECT: Interstate Transfer Funds Projects
Portland Urban Area

[illegible]

Under authority granted to me on February 2, 1979, by Governor Atiyeh I request your approval to use Interstate Transfer Funds for two highway projects in the Portland Urban Area. Funds for these projects are available from the withdrawal of the Mt. Hood Freeway from the Interstate Highway System under Section 103(e)(4) of Title 23, U.S.C.

I concur that these are regional priorities and have been developed in conformance with the Region's continuing, cooperative, comprehensive transportation planning process.

Funding will be matched as follows:

		Fed. Funds	Local Matching Funds
Portland Ave. @ Abernethy Ln. (Gladstone) Section	PE, R/W & Const.	$17,000	$ 3,000
Aldercrest Dr. Intersection	PE, Const.	$66,000	$11,700

I have directed the Project Management Branch of the Highway Division to process this request with your office to obligate these funds as they are authorized by the Metropolitan Service District (MSD).

cc: Metropolitan Service District

bc H. S. Coulter
E. S. Hunter
L. W. Rulien
D. H. Moehring
R. N. Bothman

DES: fn

9368

Department of Transportation

TRANSPORTATION BUILDING, SALEM, OREGON 97310

February 2, 1979

TO: G. L. Green, Division Administrator
Federal Highway Administration

Original Signed By
D. E. Swan

FROM: D. E. Swan
Federal Aid Manager

SUBJECT: Project Data Submission
Item No. 90100
Project No. IX-9665(5)
Oatfield Road @ Lake Road (Milwaukie) Section
Clackamas County

Attached is support data consisting of PR-1 forms with project maps and signal warrants for subject project.

We request the following:

1) Financing for the project utilizing Interstate Substitution General funds. Approval of this request will involve an estimated total cost of $9,000 with obligation of Federal funds of $7,650.
2) Authorization to proceed with all phases of Preliminary Engineering including utility preparatory work and archeological salvage.

These requests are based on Governor Straub's letter dated October 27, 1978 to Mr. G. L. Green, Division Administrator.

DRH:pf
Attachments

cc: R. N. Bothman, Metro
Max Klotz, Metro
Jon Rose, Metro
Ed Hardt, Region 1
Gary Zehner, w/att.

Budget Bureau No. 41-R2067
U.S.

FORM PR-1
(REV. 4-61)

FEDERAL-AID PROGRAM DATA
(PPM 21-1)

MONTHLY TRANSACTION NO.

DATE SUBMITTED TO W. O. 2-2-79

CARD 2	REPORT NUMBER (19) (20)	PROJECT LOCATION (45 typewriter spaces) City St., Oatfield Rd. @ Lake Rd. (Milwaukie) 21 65	ADT	PRESENT 9,400	FUTURE --- (66) (70)	YEAR -- (71) (72)	REGION 10	STATE NAME Oregon

CARD 3	CHARACTER OF PROPOSED WORK (35 typewriter spaces) Preliminary Engineering 28 62	NATL. FOREST (63) (65)	FH ROUTE NO. (66) (68)	SUPV AGCY (69)	DA CLASSIF. (70)	DA AREA (71)	EMERG. YR. (72) (73)	PL. AUTH YR (74) (75)	PROJECT NUMBER	PREFIX LETTER (S) IX- 14 23	NUMBER 9665 7

CARD	CLASS OF FEDERAL FUNDS Interstate Substitutions General Funded	COUNTY NAME Clackamas				
	NAME OF URBAN AREA Portland 17-31	ROUTE NO. U	FEDERAL-AID 9665	STATE (32) City St.*	(36) (37)	U.S. --

ESTIMATED PROJECT COST BY PHASES

CARD 5	LINE NO.	CHANGE CODE	PROJECT CODE	CLASS	WORK TYPE	WORK STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS 85%	STATE FUNDS	OTHER FUNDS (City)
1	(14-15)	(16	41	42	43 40	53		(54) (58)	(59) (66)	(67) (76)		
5					PE			0.0	9,000	7,650	---	1,350
5					ROW							
5					CONST (CODE)		"Oatfield Road @ Lake Road (Milwaukie) Section"		(107,000)			

CARD 1	CODE 1	PREPARED BY DRH	PROJECT TOTALS	0.0	9,000 (16) (23)	7,650 (24) (33)	---	1,350
14	14	PROGRAM APPROVAL DATES 10-18-78					REMARKS	

* Oatfield Rd.

Budget Bureau No. 41-R2067; Approval Expires February 28, 1966

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

FORM PR-1
(REV. 4-61)

2-2-79

FEDERAL-AID PROGRAM DATA

(PPM 21-1)

REGION	STATE NAME	STATE ODE	APPN CODE	ITEM NO.
10	Oregon	41	823	90100

LOCATION (45 typewriter spaces): St., Oatfield Rd. @ Lake Rd. (Milwaukie)

ADT	PRESENT	FUTURE	YEAR
	9,400	---	--

K (35 typewriter: gineering

NATL. FOREST	FH ROUTE NO.	SUPV AGCY	DA CLASSIF.	DA AREA	EMERG. YR.	PL. AUTH YR

PROJECT NUMBER

PREFIX LETTER(S)	NUMBER	SEQ. NO.	I. Projects Only POST MI. DESIG.
IX-	9665	(5)	

nterstate Substitutions General Funded

COUNTY NAME: Clackamas

CODE: 005

ROUTE NO.	FEDERAL-AID	STATE	U.S.
U	9665	City St.*	--

PROGRAM STAGE ☐ 1 OR ☐ 2

ortland

ESTIMATED PROJECT COST BY PHASES

RK TYPE	STEP	TERMINI (Full description)	MILES	TOTAL ESTIMATED COST	FEDERAL FUNDS 85%	STATE FUNDS	OTHER FUNDS (City)	CHARACTER OF PROPOSED WORK (Full description)
			0.0	9,000	7,650	---	1,350	
W								
NST DE)		"Oatfield Road @ Lake Road (Milwaukie) Section"		(107,000)				ROW-50' min.; Access Control-none; Parking Restrictions-Partial.
DRH		PROJECT TOTALS	0.0	9,000	7,650	---	1,350	

REMARKS

OVAL DATES 10-18-78

* Oatfield Rd.

-OVER-

USCOMM DUSCOMM-DC 49905

OATFIELD ROAD @ LAKE ROAD (MILWAUKIE) SECTION
PROJECT NO. IX-9665(5)

Existing Facility:

Oatfield Road (FAU 9665) -- Bituminous surfaced 2 lane roadway with paved shoulders as bikeways.

Lake Road (FAU 9659) -- Bituminous surfaced 2 lane roadway.
West -- 29' paved width with sidewalk oneside.
East -- 34' paved width with bike path oneside.

34th Avenue -- Bituminous surfaced 2 lane roadway 36' in width with sidewalks on both sides.

Adjacent Sections:

Same as existing.

Project Data:

The work consists of all phases of preliminary engineering including utility preparatory work and archeological salvage for future realignment and widening of intersection of 34th and Oatfield Road at Lake Road intersection, channelization and multiphase traffic signals.

System Action, Airports, Railroads, Water Developments, Historical and Recreational Areas:

None involved.

FHPM 7-7-2 Requirements:

Nonmajor action project concurred in by FHWA on January 25, 1979.

FHPM 4-1-4 Requirements:

a) State Clearinghouse - A-95 review approved letter dated ___________.

b) District 2 Clearinghouse - A-95 review satisfied through inclusion of project in CRAG TIP.

FHPM 7-7-5 Requirements:

In accordance with Oregon Action Plan, Federal Regul and Statutes.

Data for PR 37

Field Work	$7,500
PS&E Preparation	1,500
TOTAL	$9,000

NOTE:

1) This project is in Congressional District No. 3.

2) Included in CRAG FY'79 TIP/AE on page 134, line

AD @ LAKE ROAD (MILWAUKIE) SECTION
X-9665(5)

cility:

Road (FAU 9665) -- Bituminous surfaced 2 lane roadway with paved shoulders as bikeways.

d (FAU 9659) -- Bituminous surfaced 2 lane roadway.
West -- 29' paved width with sidewalk oneside.
East -- 34' paved width with bike path oneside.

enue -- Bituminous surfaced 2 lane roadway 36' in width with sidewalks on both sides.

ections:

existing.

ta:

consists of all phases of preliminary engineering including
preparatory work and archeological salvage for future realign-
widening of intersection of 34th and Oatfield Road at Lake
ersection, channelization and multiphase traffic signals.

ion, Airports, Railroads, Water Developments, Historical
tional Areas:

volved.

Requirements:

action project concurred in by FHWA on January 25, 1979.

Requirements:

te Clearinghouse - A-95 review approved letter dated __________.

trict 2 Clearinghouse - A-95 review satisfied through inclusion of project in CRAG TIP.

FHPM 7-7-5 Requirements:

In accordance with Oregon Action Plan, Federal Regulations and Statutes.

Data for PR 37

Field Work	$7,500
PS&E Preparation	1,500
TOTAL	$9,000

NOTE:

1) This project is in Congressional District No. 3.

2) Included in CRAG FY'79 TIP/AE on page 134, line 316.

9368

b

January 31, 1979

TO: OREGON TRANSPORTATION COMMISSION

FROM: H. S. Coulter
State Highway Engineer

SUBJECT: Interstate Transfer Project Requests

On the Consent Calendar for the February 8 meeting will be five requests for approval of projects utilizing Interstate Transfer funds withdrawn from the Mt. Hood Freeway.

Beaverton submitted two requests. One is for a $332,000 project to improve a 2.4 mile segment of Tualatin Valley Highway, upgrade existing signals, and construct a park-and-ride lot, the other is for a $277,000 project to provide multiple improvements at various locations within a 2.9 mile section of Beaverton-Tualatin Highway.

Lake Oswego is requesting a $778,000 project to provide four travel lanes and a left-turn lane on Oswego Highway and provide a computerized signal system.

Two requests were received from Clackamas County. One is for a $78,000 project to realign Oatfield Road and modify the Aldercrest Drive approaches, the other is for a $130,000 project to widen Price-Fuller Road and install an emergency fire signal at King Road.

Interstate Transfer funds for these projects are estimated at $1,355,750, with Local Government providing all of the required $239,250 of local match.

These projects have been investigated and are eligible for funding. I recommend your approval of the projects and request authorization to sign the necessary agreements for and on your behalf.

Attachments

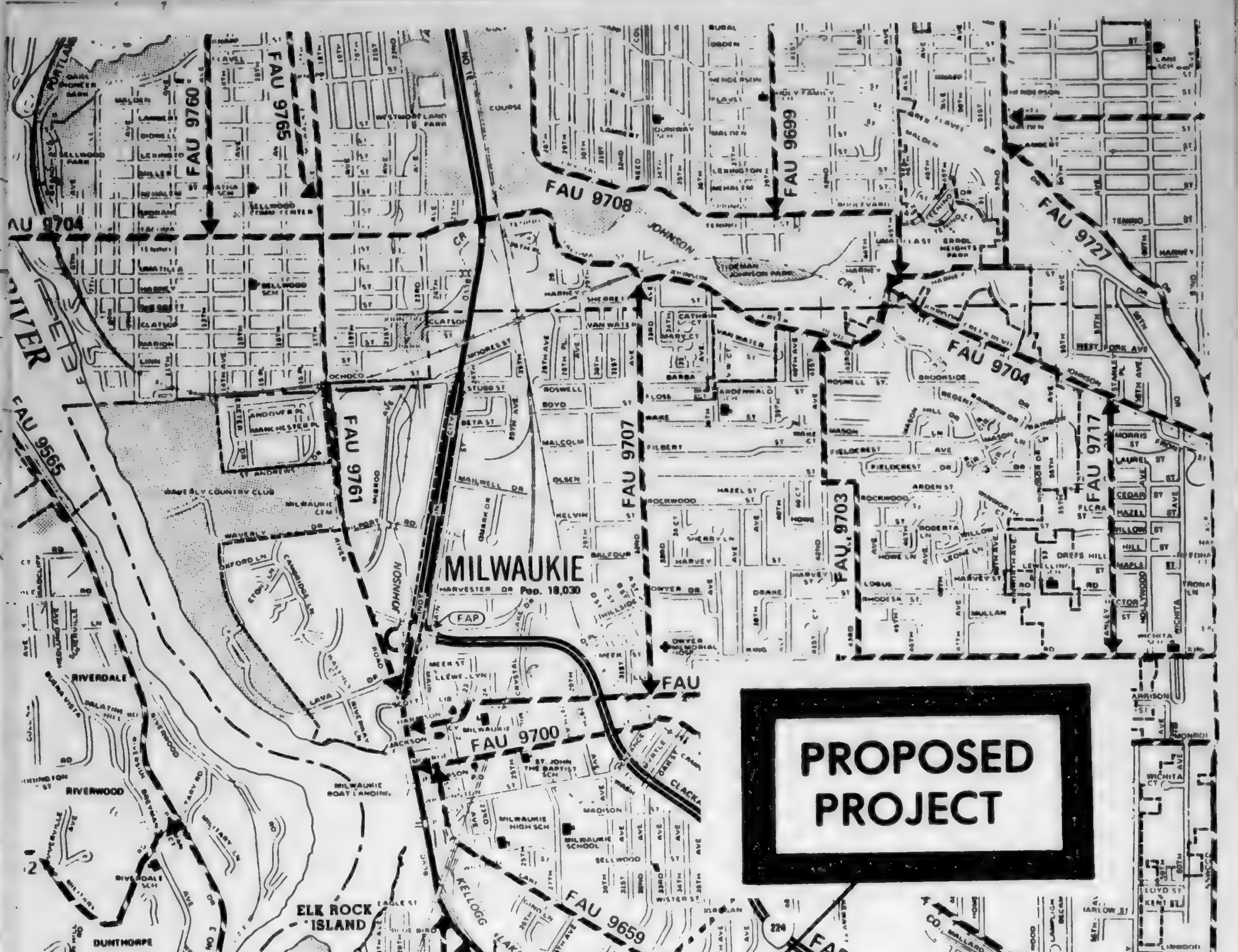
GEZ:lml
BC: F. B. Klaboe
C. W. Head
E. S. Hunter
D. H. Moehring
R. L. Schroeder
C. T. Keasey
L. W. Rulien
V. E. Skoog
J. H. Versteeg
E. L. Hardt
G. W. Wimer (3)
George Bell
R. N. Bothman

CLACKAMAS COUNTY
Proposed Interstate Transfer Project

Aldercrest Drive Intersection
Oatfield Road, FAU 9665
Grade, Pave, Structures, Signing & Striping
0.11 miles
$78,000

This project consists of realigning Oatfield Road and modifying approaches at the Aldercrest Drive intersection. Oatfield Road centerline will be shifted to the northwest and the 36-foot curbed pavement section will be contained within the existing right-of-way by constructing retaining walls where necessary. Aldercrest Drive will be curbed and resurfaced to a 32-foot pavement section.

State will perform preliminary and construction engineering.


PROPOSED PROJECT
MILWAUKIE
Pop. 18,030
FAU 9704
FAU 9760
FAU 9765
FAU 9708
FAU 9699
FAU 9727
FAU 9704
FAU 9565
FAU 9761
FAU 9707
FAU 9703
FAU 9717
FAU 9700
FAU
FAP
FAP 74
FAU 9659
FAU 9703
FAU 9671
FAU 9684
FAU 9682
FAU 9665
FAU 9690
FAU 9687
FAU 9692
FAU 9680
FA
224
JOHNSON
JOHNSON CR.
KELLOGG
KELLOGG LAKE
KELLOGG CR.
CLACKAMAS
ELK ROCK ISLAND
RIVERDALE
RIVERWOOD
DUNTHORPE
BRIARWOOD
OAK GROVE
MILWAUKIE HIGH SCH
MILWAUKIE BOAT LANDING
WAVERLY COUNTRY CLUB
NORTH CLACKAMAS PARK
NORTH CLACKAMAS COUNTY PARK
OAK HILLS CHURCH PARK
NORTH OAK GROVE SCHOOL
MT. SCOTT CR.
RIVER
HARVESTER DR
INTERNATIONAL WAY
MINTHORN
RAILROAD

93608

L.

January 26, 1979

City of Milwaukie
City Hall
Milwaukie, OR 97222

Attention: Dorothy E. Farrell
City Recorder

MISC. CONTRACTS and
AGREEMENTS No. 6875

Gentlemen:

Attached for your records are fully executed copies of two agreements covering the following projects:

1) Clackamas Highway-33rd Avenue Section of Harrison Street (FAU 9714)

2) Oatfield Road (FAU 9665) at Lake Road

We have retained a fully executed copy of each agreement for the Transportation Commission's files.

Very truly yours,

C. W. Head
COMMISSION SERVICES

dda
Attachments

bc Gerald Wimer (Agreements attached)

Form FHWA 121 (Rev. 5-73)
9368

UNITED STATES GOVERNMEN

DEPAR ENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
The Equitable Center, Suite 100
530 Center NE. - Salem OR 97301

Memorandum

DATE: January 25, 1979

In reply refer to: HFO.1-OR

SUBJECT: Oregon Project IX-9665(-)
Project Assessment
Oatfield Rd. at Lake Rd.
City of Milwaukie
Clackamas County

FROM : G. L. Green, Division Administrator

TO : Mr. Gary A. Potter, Manager
Environmental Section
Oregon Department of Transportation

The subject project assessment submitted with your January 9, 1979, letter has been reviewed.

We concur with your finding that the proposed project constitutes a non-major action.

The proposed standards, design and other specific details contained in the assessment will be subject to future reviews at the appropriate stage during the project development.

P.V. Riedl
G. L. Green
for

cc:
ODOT (Moehring, Proj Mgmt)
OSHD (Reg 1, Env)

Environmental Section
January 29, 1979

cc: D. H. Moehring
J. B. Boyd (3)
L. E. George
W. J. Hart
C. T. Keasey
J. H. Versteeg (4)
F. E. Terpin (3)
George Bell
Surfacing Design
R. N. Bothman
Ed Hardt
Jef Kaiser
Maury Payne
Gerald Wimer ✓
B. L. Gifford (2)

a M R

OREGON STATE HIGHWAY DIVISION
PROJECT ASSESSMENT

IX-9665(-)

PART 1. GENERAL INFORMATION

A. Project Identification:

Date January 9, 1979
Section Oatfield Rd. at Lake Rd. (Milwaukie)
Unit (if appl)
County Clackamas
City Milwaukie
Highway FAU 9665
State Hwy. No.
Termini: M.P.(if appl) ----
Length ----
Region I
Construction Estimate $116,000.00
Program Amount

B. Purpose of Project:

Improve transportation safety and traffic flow of intersection and provide multi-phase signal.

C. Origin & History of Project:

Lake Road & Oatfield Road are County and City arterials. The suggested improvements are from the "Roadway and Traffic Safety Management Plan" done for the City in 1977-78 by Transportation Planning and Management, Inc., and funded through the Oregon Traffic Safety Commission.

D. General Description of Project:

Signalize, realign, channelize, and widen intersection for safety, pedestrian, and bus stop improvement. Provide safety overlay over entire project.

Alignment: New ____ Existing ____ Combined X*

Typical Section: Existing: No. Lanes 2 ; Med. No ; Shldrs. varies Parking restricted
Proposed: No. Lanes 3 ; Med. Yes ; Shldrs. none ; Parking restricted

Traffic: Existing Facility: Existing ADT 9,400 ; Projected ADT 13,000 ; Yr. 1999
Existing Level of Service ____

Proposed Facility: Projected ADT 13,000 ; Yr. 1999
Projected Level of Service ____

*Minor realignment of Oatfield & 34th.

734-3953 (10-75)

Right of Way: Additional anticipated Yes (Yes, No); if yes, give approx. No. Parcels 2

Acres 0.1 ; Type of Relocation Req. None ; No. 0

Materials Source, Borrow, Waste Disposal Requirements, if any:

Material will be available from local commercial suppliers. Waste material will be dumped in local dump site, to be determined if necessary.

Type of Structure(s):

None

Brief Description of River or Stream and Type of Involvement, if any:

None

Local City, County or COG priorities of project:

High priority in T.S.M. improvements.

FHWA and/or OSHD approvals given, if any:

None

Location or Design Alternatives (identify and describe):

No build option

Other Descriptive Information or Comments: The principal right-of-way impacts of this project would be to the property on the SW corner of the intersection. From a field evaluation it appears that the most effective improvement to the Oatfield leg would be a greatly increased curb radius on that corner (see sketch).

If there is an appreciable amount of westward shift of the centerline, impacts to this property could be severe. It may be that a slight westward cuve in the Oatfield centerline would satisfy the needs of the intersection while preserving the integrity of the adjoining planting more distant from the intersection.

(Attach project sketch map.)

PART II. ENVIRONMENTAL ASSESSMENT

A. Brief Environmental Setting of Project Area:

1. Natural:

The area surrounding the project is residential. Topography is hilly. Flora consists of residential planting. On Oatfield, 145 feet south of the intersection on the west side, there are two (2) 30-inch Douglas firs. On the east side at 90 feet south of the intersection, there is a 48-inch Ponderosa pine. These trees are immediately adjacent to the bikeways which lie on both sides of the street.

2. Cultural:

The area adjacent to the project is residential. A junior high school is located less than one quarter mile to the east of the project and a high school athletic field is located the same distance to the west.

Utilities:
Power - Portland General Electric
Gas - Northwest Natural Gas
Communication - Pacific Northwest Bell Telephone
Water - City of Milwaukie
Sewer - City of Milwaukie

B. Preliminary Assessment of Environmental Impacts:

1. Consequences and Significance of Right-of-Way Acquisition:

Depending on the shape and extent of the taking, the acquisition could have considerable impact on two residences, particularly the one on the SW corner of the intersection.

2. Estimated Impact on Traffic Patterns:

Improve flow - no appreciable change in traffic patterns.

Consequences--Air Quality, Noise, Safety, etc.:

No affect on air quality. Safety will be greatly improved with the signalization and channelization of the intersection. Noise levels may increase as a result of the project. Conflicts may arise in meeting FHWA design noise levels at the residential and school receptors.

3. Estimated Impact on Land Use:

City of Milwaukie Comprehensive Plan will have governing effects on land use.

Consequences:

None anticipated.

4. Expected Impact on Natural Ecological Resources:

None

Consequences:

None anticipated.

5. Expected Impact on Cultural and Scenic Resources:

House on SW corner could lose considerable plant screening.

Consequences:

Planting would need to be replaced.

6. Preliminary Identification of Areas of Critical Concern:

No specific areas identified.

7. Potential for Controversial Issues:

None anticipated.

8. Potential for Consistency of Proposal With:

a. Clean Air Implementation Plans
No significant change.

b. Noise Standards
A noise study will be required.

c. Water Quality Standards
No change evident.

d. Area Land Use and Transportation Plans, and Zoning
In compliance with City of Milwaukie Comprehensive Plan.

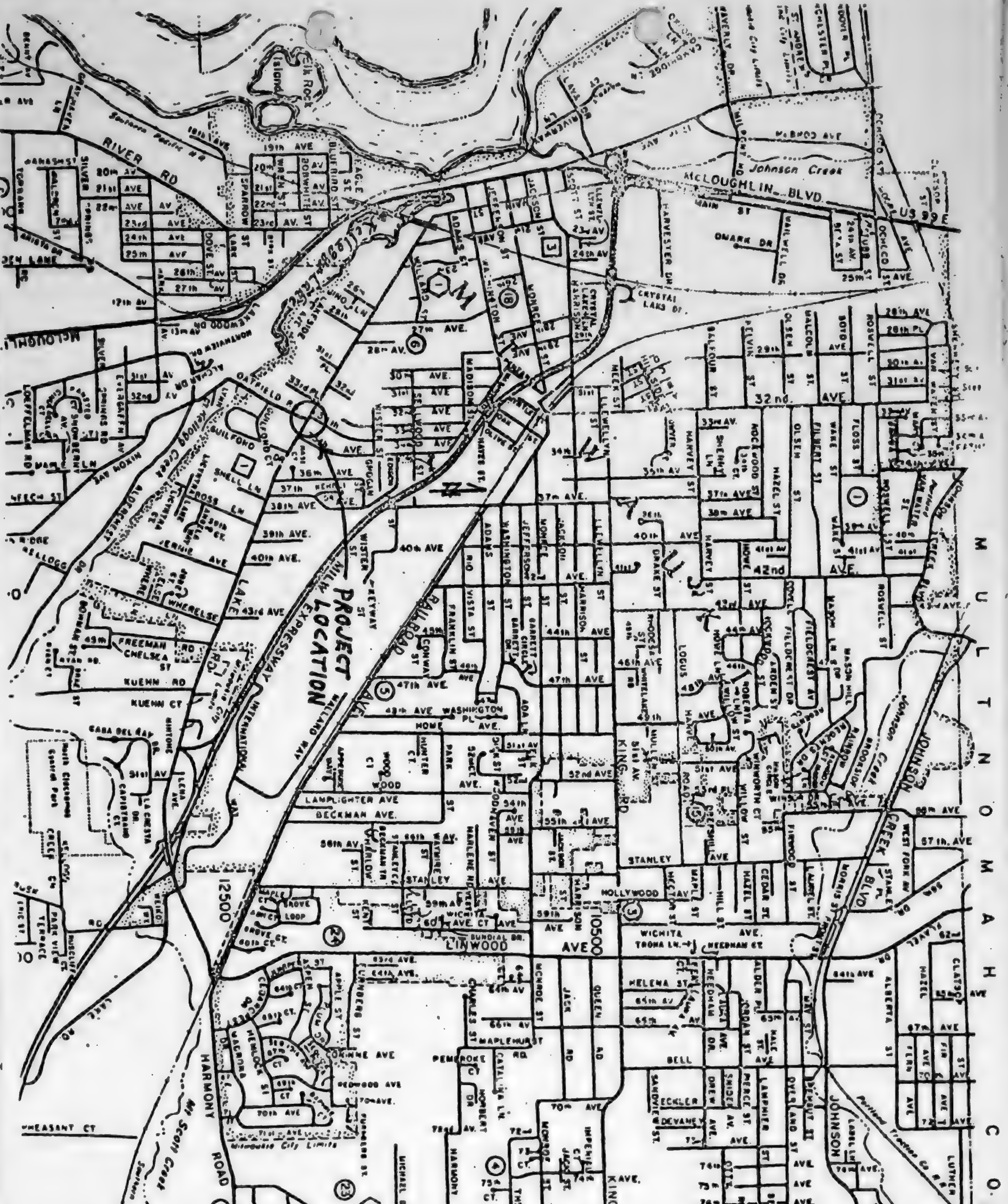
C. Recommended Type of Action and Documentation:

-------------MAJOR ACTION-----------------		----NON-MAJOR ACTION-----
SIGNIFICANT:	NON-SIGNIFICANT:	
____ D & FEIS	____ D & F Neg.Dec.	_X__ ASSESSMENT ONLY
____ Section 4(f)	____ Section 4(f)	____ STATEWIDE ASSESSMENT

Basis for Type of Action and Documentation:

In veiw of the limited and temporary impact of the proposed project upon the human environment it is recommended that it be classified as an Assessment Only action.

D. Recommended Project Category: _____ 1 _____ 2 __X__ 3 _____ 4


PROJECT LOCATION
MILWAUKIE EXPRESSWAY
INTERNATIONAL WAY
LAKE RD
RAILROAD AVE
McLOUGHLIN BLVD
US 99E
RIVER RD
Johnson Creek
JOHNSON CREEK BLVD
Elk Rock Island
Kellogg Lake
Kellogg Creek
Mt Scott Creek
LINWOOD AVE
KING RD
HARMONY ROAD
FULLER
HOLLYWOOD
WICHITA AVE
STANLEY AVE
BELL
42nd AVE
32nd AVE
LAMPLIGHTER AVE
BECKMAN AVE
MULTNOMAH CO.
12500
10500
Milwaukie City Limits
Southern Pacific RR

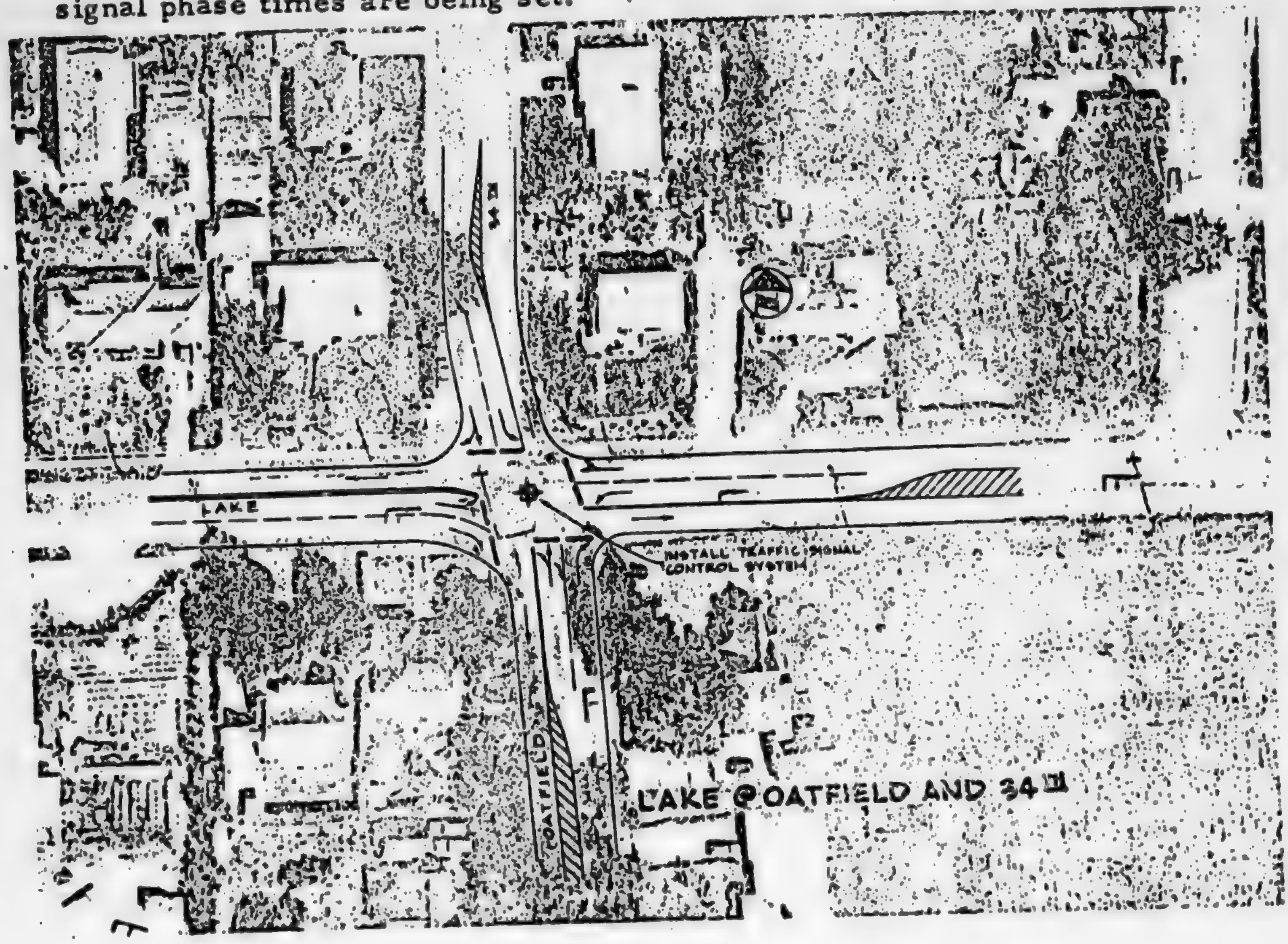
The misalignment between the north and south legs (Oatfield Road and 34th Avenue) causes confusion, poor operation of the intersection, and creates a safety problem.

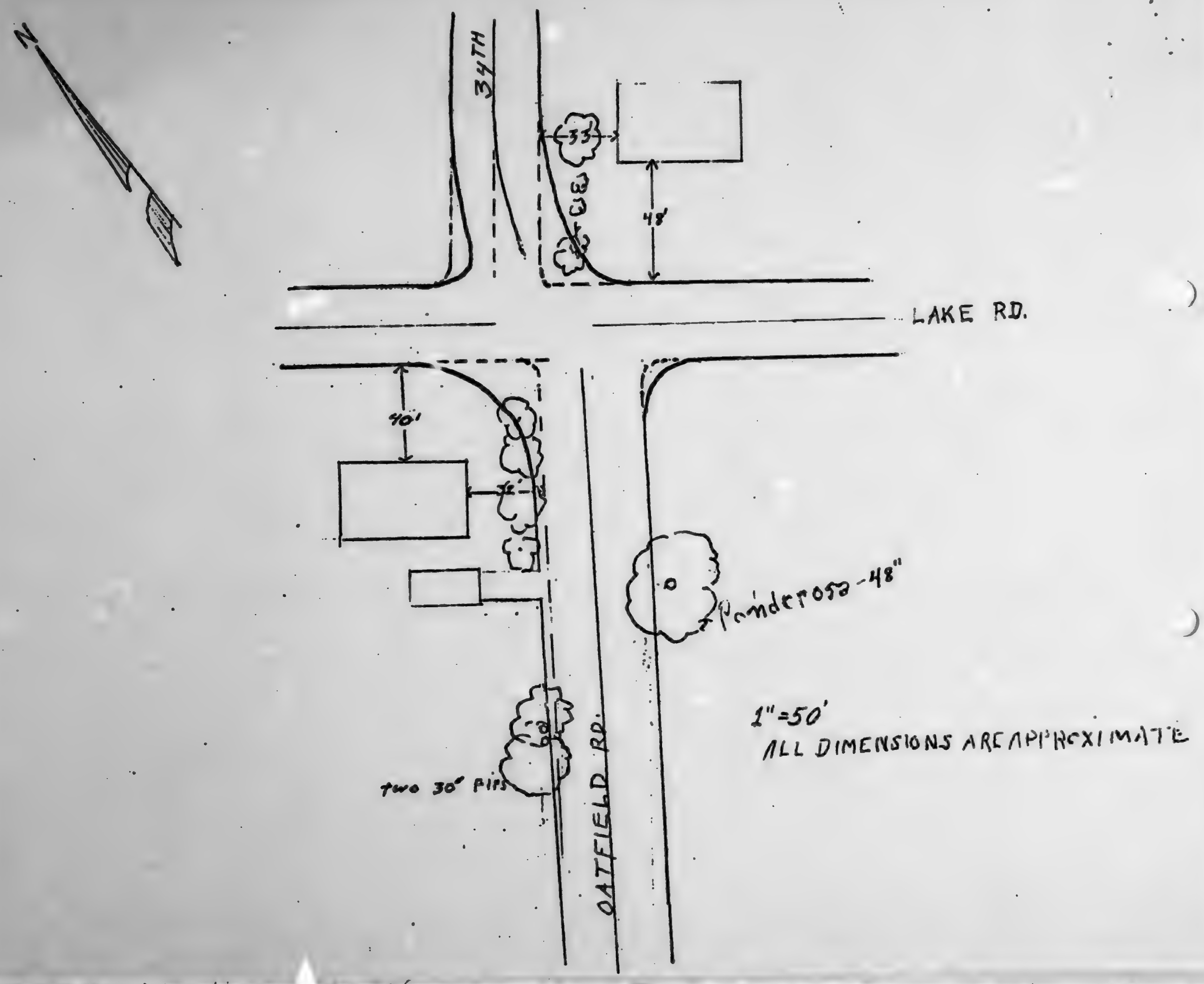
The grade of Oatfield contributes to sight and operation problems on this leg of the intersection.

Recommended Improvements

Realign and channelize the intersection as shown in the Figure below. Provide the lane use control as shown in the Figure to meet the demands for turning movements. A bikeway crossing may be necessary south of the intersection to connect the bikeways on both sides of Oatfield.

Signalize the intersection providing a separate left turn phase for traffic turning left from S.E. Lake Road to S.E. Oatfield Road. The school located east of the intersection necessitates adequate pedestrian consideration when signal phase times are being set.




N
34TH
33'
48'
LAKE RD.
40'
32'
Ponderosa-48"
two 30" firs
OATFIELD RD.
1"=50'
ALL DIMENSIONS ARE APPROXIMATE

9368

(#2)

L.

ROBERT W. STRAUB
Governor

Department of Transportation

TRANSPORTATION BUILDING, SALEM, OREGON 97310

January 22, 1979

TO: Executive Department
Federal Aid Coordination Unit

FROM: D. E. Swan
Federal Aid Manager

SUBJECT: Notice of Intent for Federal Aid Funds
State Admin. Dist. No. 2
Section: Oatfield Rd. at Lake Rd. (Milwaukie)
Highway: FAU-9665, City St., Milwaukie
County: Clackamas

In accordance with Executive Memorandum 02-270-20, attached are copies of the Notices of Intent for the subject project.

Early programming of this project for advance planning in anticipation of future construction is necessary; therefore, your prompt attention to this proposal will be appreciated.

Allowing time for your review, we estimate the date of filing for federal aid funds on this project to be February 22, 1979.

BLG:pf
Attachments

cc: G. L. Green
H. S. Coulter ✓
F. E. Terpin
J. B. Boyd
J. H. Versteeg
Gary Potter
W. J. Hart

Region 1 E. L. Hardt
District 2 Maury Payne
Aeronautics Division
David Powers, Parks
Gerald Wimer
B. L. Gifford
R. N. Bothman, Metro

RECEIVED
STATE HWY ENGR
JAN 26'79
REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

NOTED
H.S.COULTER

OREGON PRO CT NOTIFICATION AND EVIEW SYSTEM

NOTIFICATION OF INTENT TO APPLY FOR FEDERAL AID

For Internal Use Only	1-8] PNRS #			Page One
02	12] APPLICANT [45 Department of Transportation	46] DIVISION [79 Highway		
03	12] APPLICANT ADDRESS STREET [45 O'DOT Building	46] CITY [60 Salem	76] ZIP [80 97310	
04	12] CONTACT PERSON [45 D. H. Moehring	46] AREA CODE [48 503	49] PHONE [55 378	56] EXTENSION [59 6563
01	12] PROJECT TITLE [71 Oatfield Rd. at Lake Rd. (Milwaukie)			
11	12] PROJECT LOCATION—CITY FAU-9665 City St., Milwaukie	PROJECT LOCATION—COUNTY Clackamas	PROJECT LOCATION SEC: T: R:	

05 SUMMARY PROJECT DESCRIPTION (ATTACH SUPPORTING DOCUMENTS AS NECESSARY—SEE INSTRUCTIONS ON BACK)

06 12] Improve transportation safety and traffic flow of intersection and provide multi-phase signal. [71

07 12] Signalize, realign, channelize, and widen intersection for safety, pedestrian, [71

08 12] and bus stop improvement. Provide safety overlay over entire project. [71

09 12] [71

10 12] [71

12	AMOUNT REQUESTED—FEDERAL FUNDS		NON-FEDERAL MATCHING FUNDS		OTHER	TOTAL
	12] (A) Grant [19	20] (B) Other [27	28] (C) State [35	36] (D) Local [43	44] (E) FUNDS [51	52] (F) FUNDS [60
	116,000	- - -	- - -	16,240	- - -	116,000

13	12] TYPE OF OTHER FEDERAL FUNDS (See 12B) [45	46] TYPE OF OTHER NON-FEDERAL FUNDS (See 12E) [79
14	12] FEDERAL PROGRAM TITLE [71 Title 23 USC Highways	
15	12] FEDERAL AGENCY NAME [45 U. S. Department of Transportation	46] FEDERAL SUB-AGENCY NAME [79 FHWA

17 **(A) TYPE OF APPLICANT:** (Check (X) the single most applicable box)

STATE ☒ 12 | INTER-STATE ☐ 13 | COUNTY ☐ 14 | CITY ☐ 15 | SCHOOL DISTRICT ☐ 16 | SPECIAL DISTRICT ☐ 17 | COMMUNITY ACTION ☐ 18 | SPONSORED ORGANIZATION ☐ 19 | OTHER ☐ 20

(B) TYPE OF ACTION: (Check (X) as many boxes as apply to this action)

NEW GRANT ☒ 21 | CONT. GRANT ☐ 22 | SUPPL'T GRANT ☐ 23 | INCREASE DURATION ☐ 24 | DECREASE DURATION ☐ 25 | CANCELLATION ☐ 26 | INCREASE DOLLARS ☐ 27 | DECREASE DOLLARS ☐ 28

(C) HAS DISTRICT CLEARINGHOUSE BEEN NOTIFIED? Yes ☒ 29 No ☐ 30 Date: TIP

(D) REVIEW REQUIRED by A-95 Yes ☒ 31 No ☐ 32

(E) ENVIRONMENTAL IMPACT Yes ☐ 33 No ☒ 34

(F) HOUSING RELOCATION REQUIRED Yes ☐ 35 No ☒ 36

(G) ESTIMATED APPLICATION FILING DATE: 41] MONTH [42 February 43] DAY [44 22 45] YEAR [46 1979

ADDITIONAL INFORMATION—ALL APPLICANTS

I. A. Is the project consistent with the city or county comprehensive plan, zoning and subdivision ordinance? No ☐ Yes ☒

I. B. Is the proposal consistent with statewide land use goals? No ☐ Yes ☒

I. C. Is the proposal consistent with state and regional plans? No ☐ Yes ☒

II. Will the project have an impact on a neighboring jurisdiction? No ☒ Yes ☐

If so, is the project consistent with the comprehensive plan for that jurisdiction? No ☐ Yes ☐

III. Explain deviations if any, from pertinent plans.

IV. Federal Catalog number (or Public Law no. and title) 20.205 Highway Planning & Construction

V. Has funding agency been notified? No ☐ Yes ☒ Date: TIP

VI. If project includes state funds (12C), identify agency

STATE AGENCIES ONLY

VIII. (a) IS PROGRAM BUDGETED ☐ NON-BUDGETED ☐

(b) STATE SHARE

GENERAL FUND CASH	OTHER FUND CASH	IN KIND
$	$	$

(c) FUNDING METHOD

	FEDERAL SHARE		STATE SHARE		TOTAL	
First Year	%	$	%	$	%	$
Second Year	%	$	%	$	%	$
Third Year	%	$	%	$	%	$

(d) WILL PROGRAM REQUIRE HIRING OF NEW STATE EMPLOYEES? No ☐ Yes ☐ Number

(e) Will accounting for this grant be administered by the Executive Dept. Accounting Division? Yes ☐ No ☐

PLEASE ATTACH ANY ADDITIONAL NARRATIVE OR REMARKS

This is a Category 3 Project of Non-Major environmental impact under Oregon's Action Plan.

OREGON STATE HIGHWAY DIVISION
PROJECT ASSESSMENT

IX-9665(-)

PART 1. GENERAL INFORMATION

A. Project Identification:

Date January 9, 1979

Section Oatfield Rd. at Lake Rd. (Milwaukie)

Unit (if appl)

County Clackamas

City Milwaukie

Highway FAU 9665

State Hwy. No.

Termini: M.P.(if appl) ----

Length ----

Region I

Construction Estimate $116,000.00
Program Amount

B. Purpose of Project:

Improve transportation safety and traffic flow of intersection and provide multi-phase signal.

C. Origin & History of Project:

Lake Road & Oatfield Road are County and City arterials. The suggested improvements are from the "Roadway and Traffic Safety Management Plan" done for the City in 1977-78 by Transportation Planning and Management, Inc., and funded through the Oregon Traffic Safety Commission.

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Alignment: New ______ Existing ______ Combined X*

Typical Section: Existing: No. Lanes 2 ; Med. No ; Shldrs. varies Parking restricted

Proposed: No. Lanes 3 ; Med. Yes ; Shldrs. none ; Parking restricted

Traffic: Existing Facility: Existing ADT 9,400 ; Projected ADT 13,000 ; Yr. 1999

Existing Level of Service

Proposed Facility: Projected ADT 13,000 ; Yr. 1999

Projected Level of Service

*Minor realignment of Oatfield & 34th

Right of Way: Additional anticipated Yes (Yes, No); if yes, give approx. No. Parcels 2

Acres 0.1; Type of Relocation Req. None; No. 0

Materials Source, Borrow, Waste Disposal Requirements, if any:

Material will be available from local commercial suppliers. Waste material will be dumped in local dump site, to be determined if necessary.

Type of Structure(s):

None

Brief Description of River or Stream and Type of Involvement, if any:

None

Local City, County or COG priorities of project:

High priority in T.S.M. improvements.

FHWA and/or OSHD approvals given, if any:

None

Location or Design Alternatives (identify and describe):

No build option

Other Descriptive Information or Comments: The principal right-of-way impacts of this project would be to the property on the SW corner of the intersection. From a field evaluation it appears that the most effective improvement to the Oatfield leg would be a greatly increased curb radius on that corner (see sketch).

If there is an appreciable amount of westward shift of the centerline, impacts to this property could be severe. It may be that a slight westward cuve in the Oatfield centerline would satisfy the needs of the intersection while preserving the integrity of the adjoining planting more distant from the intersection.

(Attach project sketch map.)

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A. Brief Environmental Setting of Project Area:

1. Natural:

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2. Cultural:

The area adjacent to the project is residential. A junior high school is located less than one quarter mile to the east of the project and a high school athletic field is located the same distance to the west.

Utilities:
Power - Portland General Electric
Gas - Northwest Natural Gas
Communication - Pacific Northwest Bell Telephone
Water - City of Milwaukie
Sewer - City of Milwaukie

B. Preliminary Assessment of Environmental Impacts:

1. Consequences and Significance of Right-of-Way Acquisition:

Depending on the shape and extent of the taking, the acquisition could have considerable impact on two residences, particularly the one on the SW corner of the intersection.

2. Estimated Impact on Traffic Patterns:

Improve flow - no appreciable change in traffic patterns.

Consequences--Air Quality, Noise, Safety, etc.:

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3. Estimated Impact on Land Use:

City of Milwaukie Comprehensive Plan will have governing effects on land use.

Consequences:

None anticipated.

4. Expected Impact on Natural Ecological Resources:

None

Consequences:

None anticipated.

5. Expected Impact on Cultural and Scenic Resources:

House on SW corner could lose considerable plant screening.

Consequences:

Planting would need to be replaced.

6. Preliminary Identification of Areas of Critical Concern:

No specific areas identified.

7. Potential for Controversial Issues:

None anticipated.

8. Potential for Consistency of Proposal With:

a. Clean Air Implementation Plans
No significant change.

b. Noise Standards
A noise study will be required.

c. Water Quality Standards
No change evident.

d. Area Land Use and Transportation Plans, and Zoning
In compliance with City of Milwaukie Comprehensive Plan.

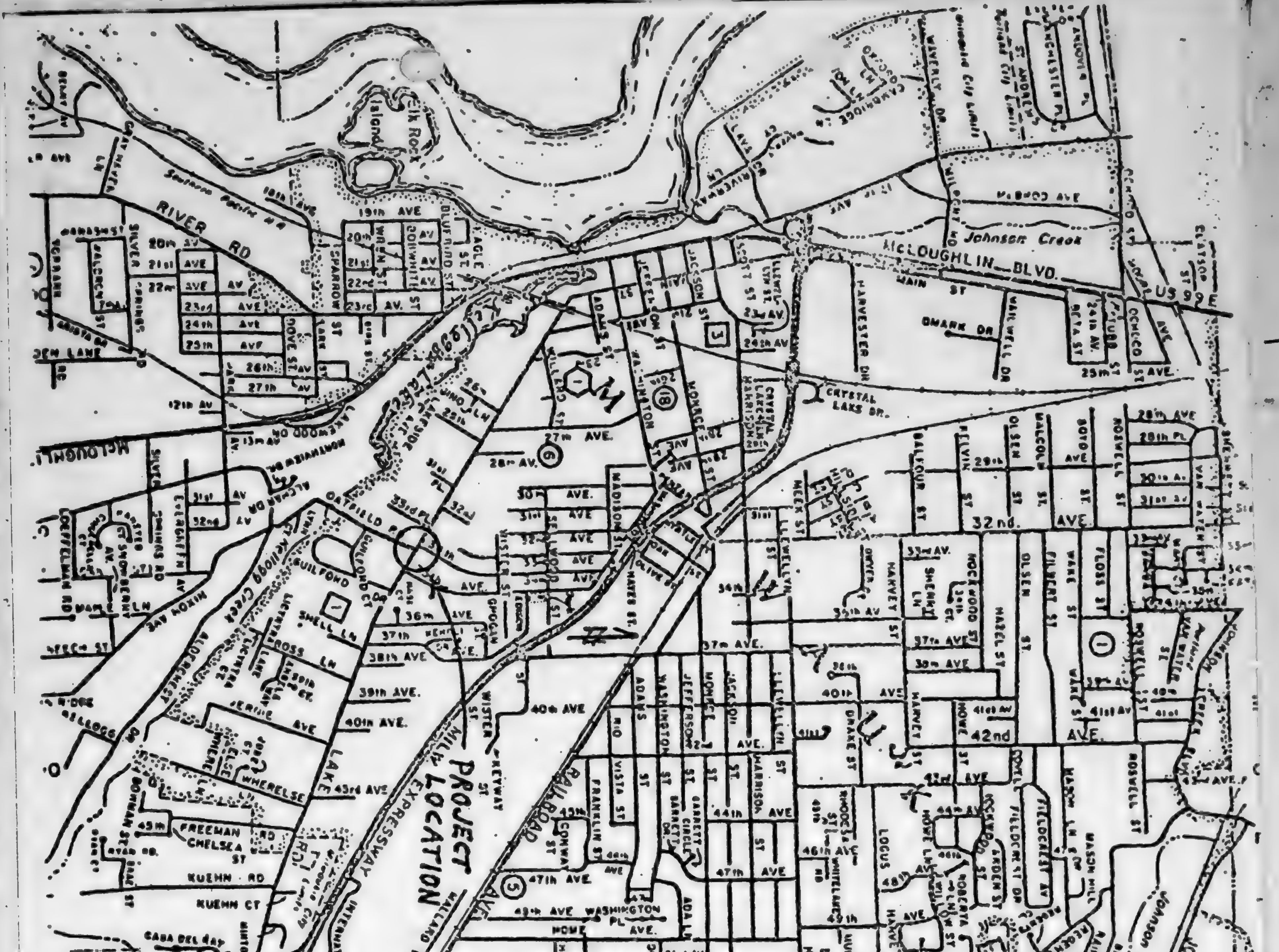
C. Recommended Type of Action and Documentation:

-------------MAJOR ACTION-----------------		----NON-MAJOR ACTION-----
SIGNIFICANT:	NON-SIGNIFICANT:	
____ D & FEIS	____ D & F Neg.Dec.	X ASSESSMENT ONLY
____ Section 4(f)	____ Section 4(f)	____ STATEWIDE ASSESSMENT

Basis for Type of Action and Documentation:

In veiw of the limited and temporary impact of the proposed project upon the human environment it is recommended that it be classified as an Assessment Only action.

D. Recommended Project Category: ____ 1 ____ 2 X 3 ____ 4


PROJECT LOCATION
MILW. EXPRESSWAY
RAILROAD
Elk Rock Island
Kellogg Lake
Kellogg Creek
Johnson Creek
Mt. Scott Creek
RIVER RD
Southern Pacific R.R.
McLOUGHLIN BLVD.
US 99 E
MAIN ST
LAKE RD
HARMONY ROAD
INTERNATIONAL WAY
KING RD
LINWOOD AVE
JOHNSON CREEK BLVD
Milwaukie City Limits
Portland Traction Co. R.R.
12500
10500
HOLLYWOOD
STANLEY AVE
LAMPLIGHTER AVE
BECKMAN AVE
WICHITA AVE
HELENA ST
BELL AVE
MAPLEHURST RD
KUEHN RD
KUEHN CT
FREEMAN
CHELSEA
WHERELSE
GUILFORD
OATFIELD
SHELL LN
ROSS LN
WISTER
LOGUS RD
HARVEY ST
OLSEN ST
ROSWELL ST
FLOSS ST
WASHINGTON
JEFFERSON
ADAMS
MONROE
JACKSON
HARRISON
CRYSTAL LAKE DR
JOHNSON
32nd AVE
42nd AVE
27th AVE
40th AVE
47th AVE
49th AVE
52nd AVE
56th AV
60th AVE
PHEASANT CT
MICHAEL DR
QUEEN RD
JACK RD
KING AVE
LUTHER
KELLOGG
1
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18
23
24

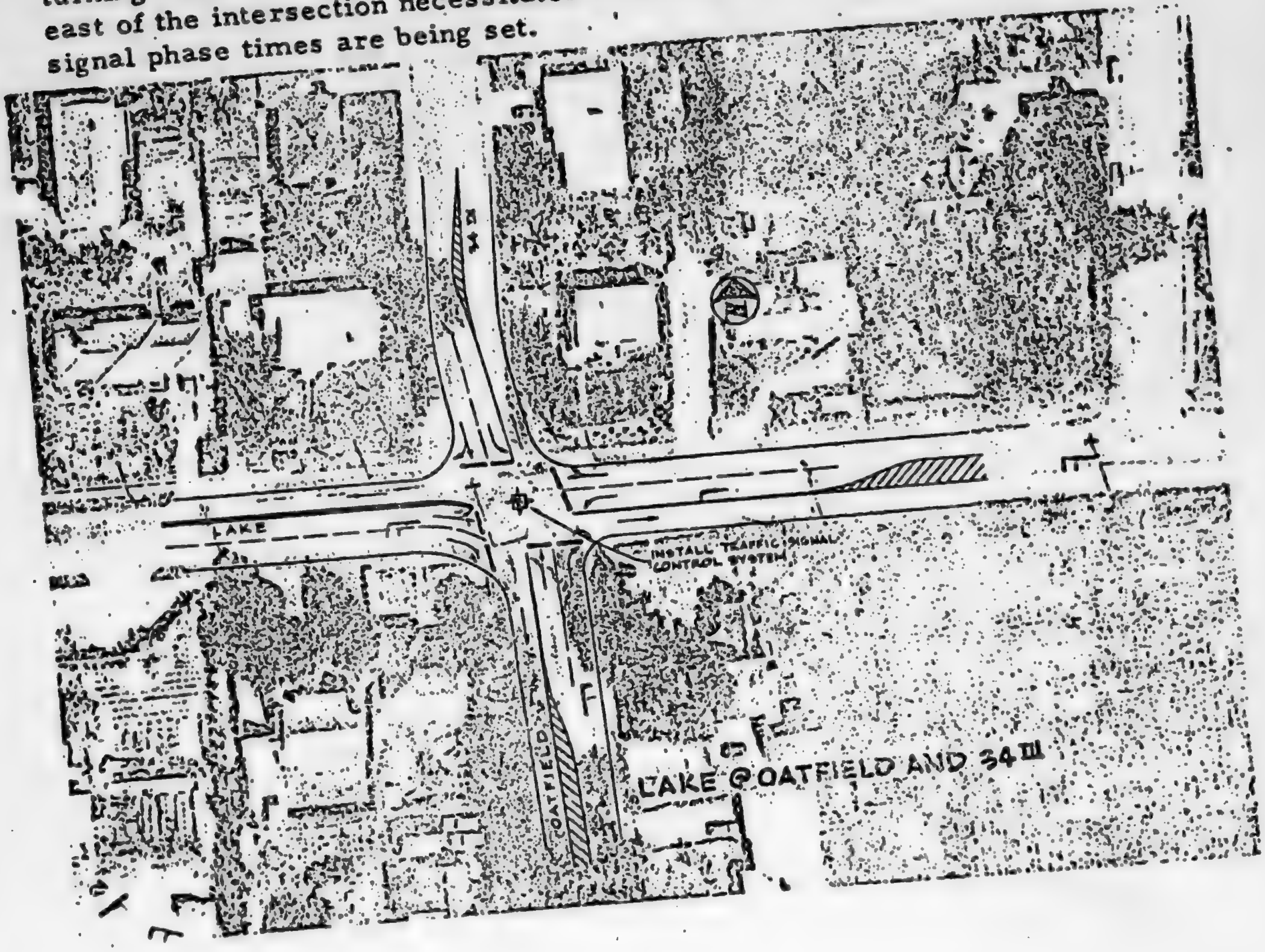
The misalignment between the north and south legs (Oatfield Road and 34th Avenue) causes confusion, poor operation of the intersection, and creates a safety problem.

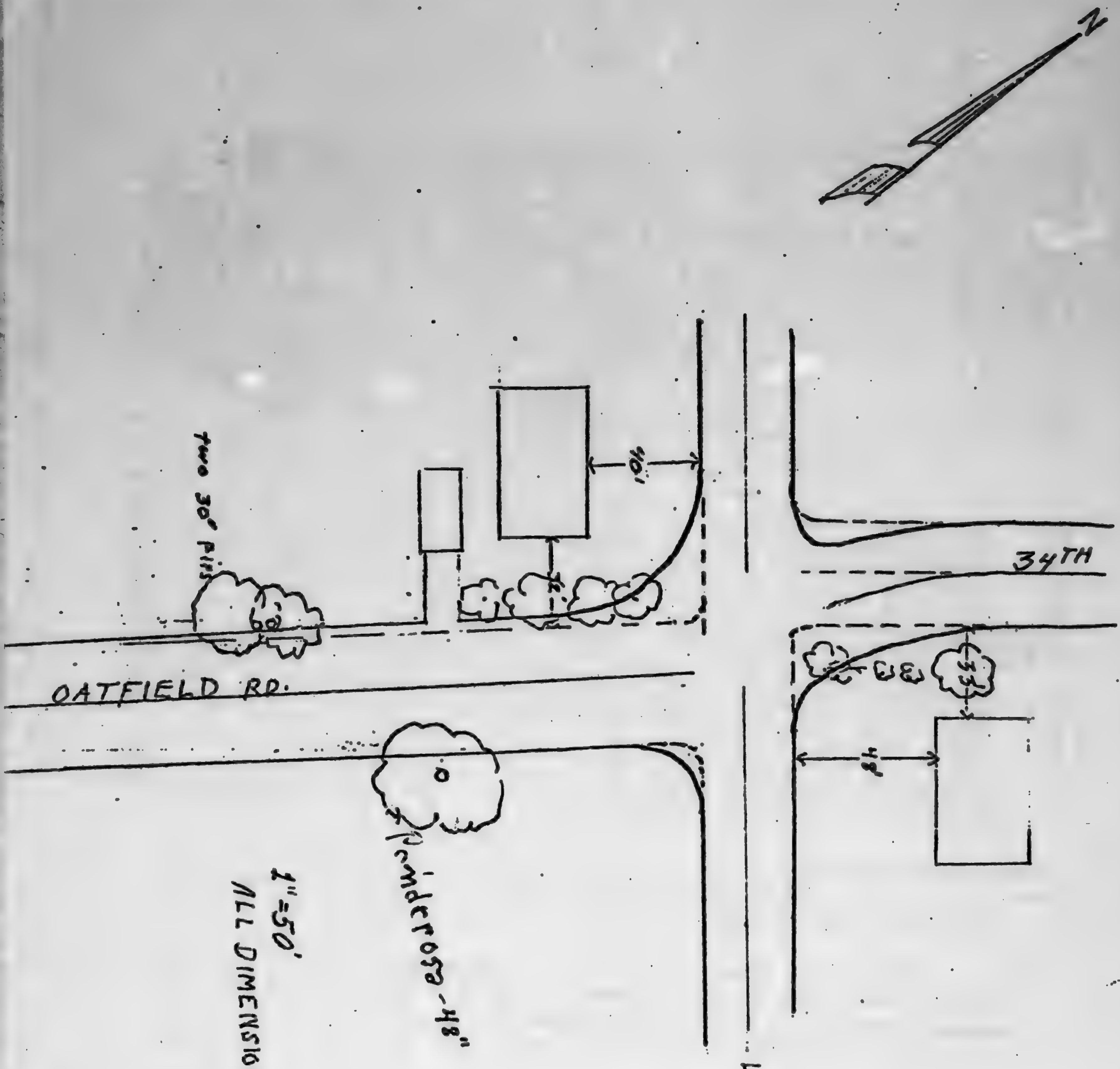
The grade of Oatfield contributes to sight and operation problems on this leg of the intersection.

Recommended Improvements

Realign and channelize the intersection as shown in the Figure below. Provide the lane use control as shown in the Figure to meet the demands for turning movements. A bikeway crossing may be necessary south of the intersection to connect the bikeways on both sides of Oatfield.

Signalize the intersection providing a separate left turn phase for traffic turning left from S. E. Lake Road to S. E. Oatfield Road. The school located east of the intersection necessitates adequate pedestrian consideration when signal phase times are being set.




N
two 30" firs
40'
34TH
OATFIELD RD.
33'
48'
Ponderosa-48"
LAKE RD.
1"=50'
ALL DIMENSIONS ARE APPROXIMATE

9368

January 16, 1979

City of Milwaukie
926 Main Street
Milwaukie, Oregon 97222

Attn: Mr. Harold L. Schilling
City Manager

Gentlemen:

We intend to submit a program to the Federal Highway Administration for approval of the preliminary engineering phase of the Oatfield Road at Lake Road Interstate Transfer project.

Financial sharing of the preliminary engineering is:

Total P.E.	$9,000.00
Federal Funds	7,650.00
Balance	$1,350.00
City Share:	$1,350.00

Please make your check in the amount of $1,350.00 payable to the Oregon State Highway Division and send it to Highway Accounting, Room 434, Transportation Building, Salem, Oregon 97310.

Very truly yours,

Gerald Wimer

Gerald W. Wimer
Local Government Manager

GEZ:dmc

bc w/AD#572:Vern Skoog-Please return completed AD#572 when check is received.
Jon Rose

ROBERT W. STRAUB
GOVERNOR

Department of Transportation

TRANSPORTATION BUILDING, SALEM, OREGON 97310

January 9, 1979

FAU 9659 12-11-78

Clackamas County
902 Abernathy Road
Oregon City, Oregon 97045

Attn: Mr. John C. McIntyre
Director of Public Works

Gentlemen:

We intend to submit a program to the Federal Highway Administration for approval of the preliminary engineering phase of the Oatfield Road at Lake Road Interstate Transfer project.

Financial sharing of the preliminary engineering is:

Total P.E.	$9,000.00
Federal Funds	7,650.00
Balance	$1,350.00
Local Share:	
$1,350.00	

Please make your check in the amount of $1,350.00 payable to the Oregon State Highway Division and send it to Highway Accounting, Room 434, Transportation Building, Salem, Oregon 97310.

Very truly yours,

Gerald W. Wimer
Local Government Manager

GEZ:dmc

9368

PROJECT INFORMATION SHEET
(to be submitted with the project request)

Section Aldercrest Drive Intersection **Date** 1/8/79
Highway Oatfield Road (FAU 9665) **County** Clackamas

Existing Facility

Access control? None parking restrictions? Complete
Airport within 2 miles? None name
Water development in the area? None involved
Recreation areas None involved
Historical areas None involved

Roadway: no. lanes 2 paved shoulders? Yes (4' on each side)
pavement width 32 ft.

Structures: MP None description

Signals: location None

Descriptions of adjacent sections

North end: 2 - 12' travel lanes, 4' paved shoulders
end: 2 - 12' travel lanes, 4' paved shoulders

Railroad crossings

Name of railroad None no. of tracks
Number of trains no. of hi-speed trains
Present protection
Proposed protection
Railroad benefits

Project Aldercrest Drive Intersection, Oatfield Road

Agency Clackamas County Date 1/8/79

Type of Project Intersection realignment

Funds SOS [✓ e(4)] FAUS FASC Title II HBR

The agreement on this project should provide for the following responsibilities where applicable:

	N/A	State	Applicant	Consultant
Major PE	( )	(X)	( )	( )
Monitor PE	(X)	( )	( )	( )
Field Survey	( )	(X)	( )	( )
Prepare Environmental Statements	( )	( )	(X)	( )
Review & Process Envir. Statements	( )	(X)	( )	( )
Public Hearings	( )	( )	(X)	( )
Citizen Involvement	( )	( )	(X)	( )
Action Plan Requirements	( )	( )	(X)	( )
Preliminary Design Plans & Specs.	( )	(X)	( )	( )
Prepare for Contract Bids	( )	(X)	( )	( )
Advertise, Let and Award	( )	(X)	( )	( )
Major Construction Engineering	( )	(X)	( )	( )
Lab Testing, Final Checking	( )	(X)	( )	( )
Utility Responsibility	( )	(X)	( )	( )
Maintenance After Completion	( )	( )	(X)	( )
Signal Maintenance	(X)	( )	( )	( )
Power Consumption	(X)	( )	( )	( )
Local Match	( )	( )	(X)	( )
Provide for Right-of-way Agreement		[✓ Yes]	No	

Construction by Contract (X) State Forces ( ) Local Forces ( )

Advance Deposit Required PE (X) Construction ( ) N/A ( )

State will Advertise, Let and Award All Contracts

State will Monitor Preliminary Engineering and Construction Activities for Federal Compliance

Remarks:

Form E-39 (Rev. 9-71)

AD10001

1 -9368.

OATFIELD RD. AT

OREGON STATE HIGHWAY DIVISION

Planning File No. 78-115

AUTHORITY FOR SURVEY

Section Aldercrest Drive ~~Intersection~~

Date January 4, 1979

Highway Oatfield Road (FAU 9665)

Authorization No. 1

County Clackamas

Survey Prefix 203 - 1911 (Assigned by Salem office)

Description of termini, route, length, etc.:

The project is a spot location at the intersection of Aldercrest Drive and Oatfield Road.

Proposed: Realign Oatfield Road within existing right-of-way. Provide a 36 foot roadbed section and construct curbs and sidewalks. Revise storm drainage. Modify Aldercrest Drive to match the realignment. Provide 32 foot roadbed section with curbs and resurface.

Purpose of survey: State to perform field survey, prepare plan, specifications, estimates of cost and complete PS & E.

County to provide action plan requirements, if any.

IX-9665(6)

3-29-79

CAT 3 NM (Assessment only)
Funding (e-4)

		Estimate of Cost
Field Survey	(901)	$4,000
Citizen Participation	(902)	
City or County	(903)	
Consultant	(904)	
Final Design	(905)	2,000
Bridge Design	(906)	
Preliminary Design	(907)	
R/W Descriptions	(909)	
Soils & Geology	(910)	
Traffic	(911)	
Landscape	(912)	
Liaison R/W	(913)	
Utility	(914)	500
Photogrammetry	(916)	
Location Studies	(918)	
Engr. Graphics	(919)	
Office Engineer	(920)	
Specifications	(921)	500
Environmental	(923)	
Foundation Exploration	(926)	
Seminars	(950)	
Hearings	(980)	
Equal Opportunity	(985)	
Advisory Committees	(986)	

INSTRUCTIONS

Submit four copies to Salem. After approval by the Assistant State Highway Engineer, one copy will be sent to the Regional Engineer and one copy to the Resident Engineer.

This form does not constitute authority for making survey until approved and returned.

Submit separate order for each survey.

Total estimated cost of survey . . . . . . $ 7,000

Previous authorization . . . .

Additional authorization requested . . .

Additional authorization approved (Salem) .

Total all authorizations approved (Salem) . .

Requests made by:

K. D. LIMBOCKER, METRO Design Engineer

Recommended for Approval:

M. J. Klotz, METRO Technical Services Engineer

SP*23604-734

Recommended for Approval:

Location Engineer

Approved:

DAN GIFFORD

9368

STATE OF OREGON

INTEROFFICE MEMO

METRO TECHNICAL SERVICES — DEPT.
238-8230 — TELEPHONE

TO: THE FILE

DATE: January 3, 1979

FROM: EARL MERSHON Earl Mershon
Metro Tech. Svs. Assistant

SUBJECT: Aldercrest Drive Intersection
Oatfield Road
Clackamas County
Planning File 78-115

Dennis Everson called on Friday, December 29, 1978 regarding the subject project. He called to discuss the ODOT cost estimate for the proposed project. The ODOT estimate is $30,000 more than what was requested by Clackamas County on their project request.

Dennis said that he had taken another look at the project location. He agrees that additional retaining walls are necessary as part of the project, from what Clackamas County had originally estimated. Dennis stated that the ODOT total estimate of $78,000 is acceptable to Clackamas County for purposes of programming. This includes $7,000 for preliminary engineering.

I told Dennis that we would revise the cost estimate on the Clackamas County project request and proceed with programming the project.

js

cc: Max J. Klotz
Jon R. Rose

81-128-1387

9368

L.

November 16, 1973

TO OREGON TRANSPORTATION COMMISSION

FROM H. S. Coulter
State Highway Engineer

SUBJECT Interstate Transfer Project Requests

On the Consent Calendar for the November 28 meeting will be nine requests for approval of projects utilizing Interstate Transfer funds withdrawn from the Mt. Hood Freeway.

Gladstone submitted three requests. 1) A $127,500 project to widen and improve a 0.76 mile segment of Webster Road, 2) a $50,000 project to signalize the intersection of S.E. 82nd Drive and Oatfield Road, and 3) a $10,000 project to widen Webster Road at Swanson Loop for transit vehicles and riders, have been requested.

Two requests were received from Milwaukie. One is for a $117,000 project to widen and channelize the intersection of Harrison Avenue and 32nd Avenue and install traffic signals, the other is for a $116,000 project to realign 34th Avenue and Oatfield Road at Lake Road and signalize the intersection.

Portland is requesting a $433,200 project consisting of a series of small projects, mainly at intersections, on a 4.55 mile segment of S.E. Division Street.

Clackamas County submitted two requests. One is for a $39,000 project to widen the existing roadway and realign curves on Thiessen Road, the other is for a $62,000 project to widen both sides of Jennings Avenue to accommodate pedestrian and bicycle traffic.

The request from Washington County is for a $1,500,000 project to straighten the Tualatin Valley Highway between S.W. 182nd Avenue and S.W. 187th Avenue, and install an eight-phase signal at the intersection of Tualatin Valley Highway and S. W. 185th Avenue.

Interstate Transfer funds for these projects are estimated at $2,086,495, with Local Government providing all of the required $368,205 of local match.

These projects have been investigated and are eligible for funding. I recommend your approval of the projects and request authorization to sign the necessary agreements for and on your behalf.

Attachment

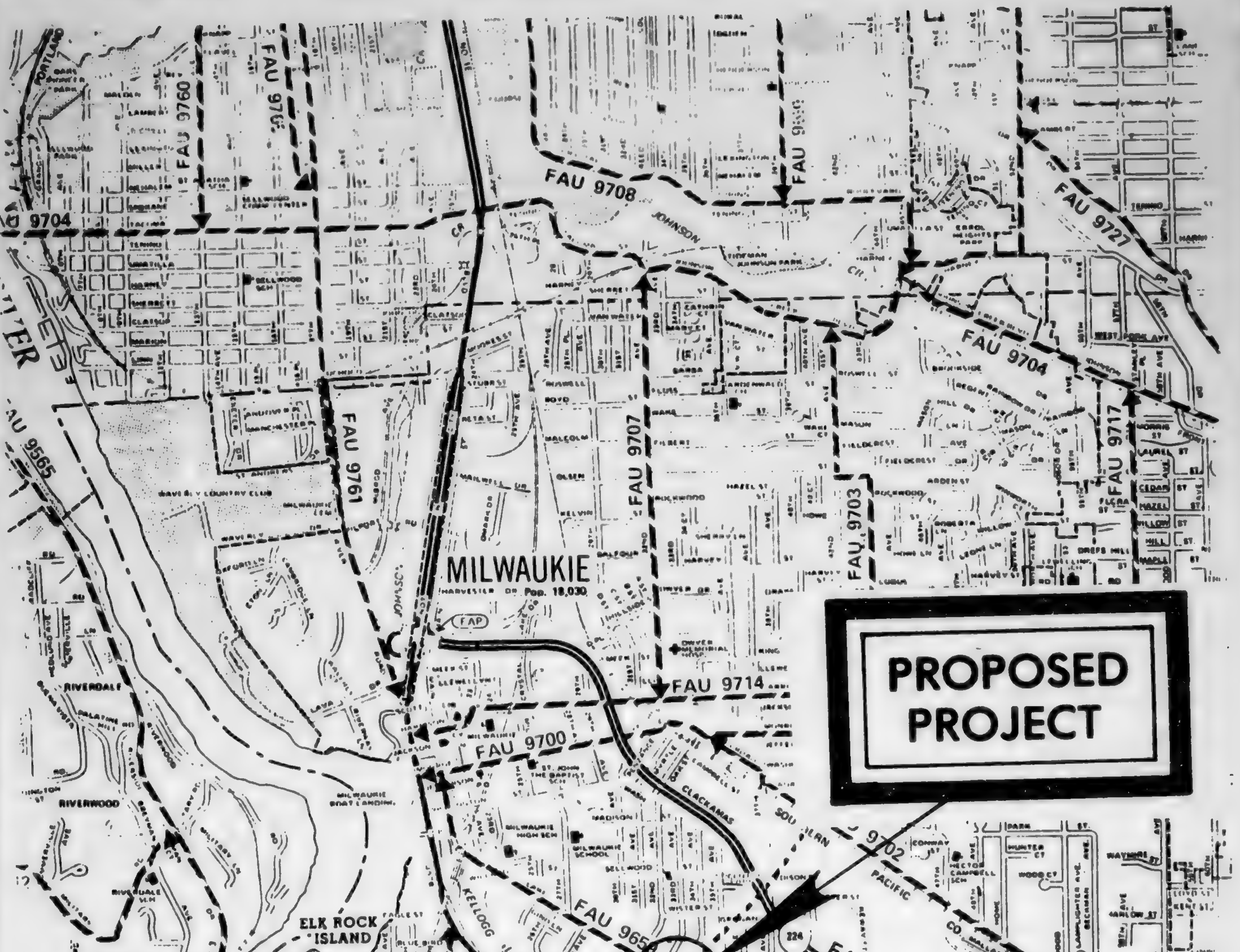
bc: R. A. Burco
F. B. Klaboe
C. W. Head
E. S. Hunter
D. H. Moehring
R. N. Bothman
V. E. Skoog
J. H. Versteeg
E. L. Hardt
D. N. Harwell
George Bell

CITY OF MILWAUKIE
Proposed Interstate Transfer Project

Oatfield Road (FAU 9665) at Lake Road
Grade, Pave, Signals, Illumination, Signing and Striping
$116,000

This project consists of realigning 34th Avenue and Oatfield Road at Lake Road. Left-turn refuges will be provided and a 5-phase traffic actuated signal will be installed. Additional right-of-way is required and will be acquired as a participating cost of the project.

State will perform preliminary and construction engineering.


PROPOSED PROJECT
MILWAUKIE
Pop. 18,030
FAU 9704
FAU 9760
FAU 9708
FAU 9727
FAU 9761
FAU 9707
FAU 9703
FAU 9717
FAU 9565
FAU 9714
FAU 9700
FAU 9702
FAU 9658
FAU 9703
FAP 74
FAU 9671
FAU 9684
FAU 9665
FAU 9682
FAU 9680
FAU 9692
FAU 9690
FAU 9687
FAP
224
ELK ROCK ISLAND
RIVERDALE
RIVERWOOD
DUNTHORPE
BRIARWOOD
OAK GROVE
JOHNSON CR.
CLACKAMAS
SOUTHERN PACIFIC CO.
KELLOGG
LAKE
MILWAUKIE HIGH SCH
NORTH CLACKAMAS COUNTY PARK

9368

October 27, 1978

Mr. G. L. Green
Division Administrator
Federal Highway Administration
The Equitable Center, Suite 100
530 Center N.E.
Salem, Oregon 97301

Dear Mr. Green:

I request your approval to use Interstate Transfer funds for a highway project in the Portland area. Funds for this project are available from the withdrawal of the Mt. Hood Freeway from the Interstate Highway System under Section 103(e)(4) of Title 23, U.S.C.

I concur that this project is a regional priority and has been developed in conformance with the Region's continuing, cooperative, comprehensive transportation planning process.

Funding will be matched as follows:

		Federal Funds	Local Matching Funds
Oatfield Rd. @ Lake Rd. Oatfield Road (Milwaukie)	PE, R/W & Constr.	$99,000	$17,000

I have directed the Oregon Department of Transportation to process this request with the Federal Highway Administration to obligate these funds as they are authorized by the Columbia Region Association of Governments.

Sincerely,

Governor

RWS:pf
cc: Columbia Region Association
of Governments
bc: Robert A. Burco, ODOT

9368

STATE OF OREGON **INTEROFFICE MEMO**

TECHNICAL SERVICES 238-8231
DEPT. TELEPHONE

TO: D.H. MOEHRING, Manager ATTN: D.E. SWAN **DATE:** October 18, 1978
Project Management

FROM: MAX J. KLOTZ
Metro Technical Services Engineer

SUBJECT: oatfield Rd. @ Lake Rd.
~~Lake Road Intersection~~
Oatfield Road
City of Milwaukie
Clackamas County
Planning File No. 78-94

Here is our programming packet for the subject project. Included are a project information sheet, agreement information sheet, authority for survey, federal aid project request, environmental assessment, and a traffic signal warrant comparison.

to Terpin
10-20-78

This is an e(4) project. This is part of the Gladstone-Milwaukie Subarea TSM project listed in the CRAG TIP.

Please program $9,000 for preliminary engineering at this time.

js

attachments

cc: F.E. Terpin
Technical Services (8)

10-20-78
cc program packet
to Swan.
✓

PROJECT MANAGEMENT
PME ☐ CCE ☐
[illegible] ☐ [✓ FAE ☐] [illegible]
OCT 19 1978
File: [illegible] [illegible]
TAA LG [illegible]

OK
2

81-125-1387

9368

PROJECT INFORMATION SHEET
(to be submitted with the project request)

Section ~~LAKE ROAD INTERSECTION~~ Oatfield Rd @ Lake Rd   Date 10/16/78

Highway Oatfield Road (FAU 9665)   County Clackamas

Existing Facility

Access control? None   parking restrictions? Partial
Airport within 2 miles? No   name
Water development in the area? None involved
Recreation areas None involved
Historical areas None involved

Roadway: no. lanes 2   paved shoulders? Yes
pavement width Oatfield Rd. - 39'; Lake Rd. - 29' (west) 33.5' (east); 34th Ave. - 36'.

Structures: MP   description
None

Signals: location None

Descriptions of adjacent sections

end: See roadway widths above.
end:

Railroad crossings

Name of railroad None   no. of tracks
Number of trains   no. of hi-speed trains
Present protection
Proposed protection
Railroad benefits

Oatfield Rd. @ Lake Rd.

Project ~~LAKE ROAD INTER[illegible]ION~~, OATFIELD ROAD (FAU 9665)

Agency City of Milwaukie Date 10/16/78

Type of Project Realignment and signalization.

The agreement on this project should provide for the following responsibilities where applicable:

	State	Applicant	Consultant
Field Survey	(X)	( )	( )
Soils Investigation	(X)	( )	( )
Base Design	(X)	( )	( )
Bridge Design N/A	( )	( )	( )
Signal Design	(X)	( )	( )
Final Design and Specs	(X)	( )	( )
Acquire R/W	(X)	( )	( )
Relocate Utilities	(X)	( )	( )
Construction Engineering	(X)	( )	( )
Environmental Statements	(X)	( )	( )
Action Plan Requirements		(X)	

	State	Applicant	Contractor
Maintenance During Construction	( )	( )	(X)
Maintenance After Completion - Roadway	( )	(X)	
Maintenance After Completion - Signals	( )	(X)	
Power Consumption - Signals	( )	(X)	
Power Consumption - Lighting	( )	(X)	
Pay for Irrigation Water	( )	( )	

Construction will be by Contract (X) State Forces ( ) Local Forces ( )

Advance Deposit for PE Required Yes (X) No ( )

State will Advertise, Let and Award All Contracts

State will Monitor Preliminary Engineering and Construction Activities for Federal Compliance

2/77

Form [illegible] (Rev 9-71)

9368

ORL0001

2

OREGON STATE HIGHWAY DIVISION

Planning File No. 78-94

AUTHORITY FOR SURVEY

Section Oatfield Road & Lake Road

Date 10/13, 1978

Highway Oatfield Road (FAU 9665)

Authorization No. 1

County Clackamas

Survey Prefix 203-1910 (Assigned by Salem office)

Description of termini, route, length, etc.: Project is a spot location at the intersection of Lake Road, Oatfield Road and 34th Avenue

Proposed: Realign Oatfield Road and 34th Ave. signalize the intersection, provide a safety overlay 250' in all directions from intersection, widen to provide channelization on all four legs of the intersection

Purpose of survey: State to perform field survey, prepare environmental assessment, plans, specifications, estimate of cost, and complete P S & E. County to be responsible for citizen involvement and any required hearing.

IX-9665(5)
3-29-79

Funding e(4)
Cat 3NM (Assessment only)

		Estimate of Cost
Field Survey	(901)	$3,500
Citizen Participation	(902)	
City or County	(903)	
Consultant	(904)	
Final Design	(905)	1,000
Bridge Design	(906)	
Preliminary Design	(907)	
R/W Descriptions	(909)	500
Soils & Geology	(910)	
Traffic	(911)	2,000
Landscape	(912)	
Liaison R/W	(913)	1,000
Utility	(914)	500
Photogrammetry	(916)	
Location Studies	(918)	
Engr. Graphics	(919)	
Office Engineer	(920)	
Specifications	(921)	500
Environmental	(923)	
Foundation Exploration	(926)	
Seminars	(950)	
Hearings	(980)	
Equal Opportunity	(985)	
Advisory Committees	(986)	

INSTRUCTIONS

Submit four copies to Salem. After approval by the Assistant State Highway Engineer, one copy will be sent to the Regional Engineer and one copy to the Resident Engineer.

This form does not constitute authority for making survey until approved and returned.

Submit separate order for each survey.

Total estimated cost of survey	$ $9,000
Previous authorization	
Additional authorization requested	
Additional authorization approved (Salem)	
Total all authorizations approved (Salem)	

Requests made by:

K. D. LIMBOCKER, METRO Design Engineer

Recommended for Approval:

M. J. Klotz, METRO Technical Services Engineer

SP*23604-734

Recommended for Approval:
Frank E. Perpin
Location Engineer

Approved:

N # P

9368

OREGON STATE HIGHWAY DIVISION
PROJECT ASSESSMENT

RT. GENERAL INFORMATION

A. Project Identification:

Date October 10, 1978
Section Lake Rd./Oatfield Rd/34th Ave.
Unit (if appl)
County Clackamas
City Milwaukie
Highway Oatfield FAU 9665
State Hwy. No.
Termini: M.P.(if appl) --
Length --
Region I
Construction Estimate $116,000.00
Program Amount

B. Purpose of Project:

Improve transportation safety and traffic flow of intersection and provide multi-phase signal.

C. Origin & History of Project:

Lake Road & Oatfield Road are County and City arterials. The suggested improvements are from the "Roadway and Traffic Safety Management Plan" done for the City in 1977-78 by Transportation Planning and Management, Inc., and funded through the Oregon Traffic Safety Commission.

D. General Description of Project:

Signalize, realign, channelize, and widen intersection for safety, pedestrian, and bus stop improvement.
Provide safety overlay over entire project.

Alignment: New ____ Existing ____ Combined X *

Typical Section: Existing: No. Lanes 2 ; Med. No ; Shldrs. varies Parking restricted
Proposed: No. Lanes 3 ; Med. Yes ; Shldrs. none ; Parking restricted

Traffic: Existing Facility: Existing ADT 9,400 ; Projected ADT 13 000 ; Yr. 1999
Existing Level of Service ____

Proposed Facility: Projected ADT 13,000 ; Yr. 1999
Projected Level of Service ____

*Minor reallignment of Oatfield & 34th

[illegible]

Right of Way: Additional anticipated Yes ; if yes, give approx. No. Parcels 2
Yes, No

Acres 0.1 ; Type of Relocation Req. None ; No. 0

Materials Source, Borrow, Waste Disposal Requirements, if any:

Material will be available from local commercial suppliers. Wast material will be dumped in local dump site, to be determined if necessary.

Type of Structure(s):

None

Brief Description of River or Stream and Type of Involvement, if any:

None

Local City, County or COG priorities of project:

High Priority in T.S.M. improvements

FHWA and/or OSHD approvals given, if any:

None

Location or Design Alternatives (identify and describe):

No build option

Other Descriptive Information or Comments: The principal right-of-way impacts of this project would be to the property on the SW corner of the intersection. From a field evaluation it appears that the most effective improvement to the Oatfield leg would be a greatly increased curb radius on that corner (see sketch).

If there is an appreciable amount of westward shift of the centerline, impacts to this property could be severe. It may be that a slight westward curve in the Oatfield centerline would satisfy the needs of the intersection while preserving the integrity of the adjoining planting more distant from the intersection.

tach project sketch map.)

PART II. ENVIRONMENTAL ASSESSMENT

A. Brief Environmental Setting of Project Area:

1. Natural: The area surrounding the project is residential. Topography is hilly. Flora consists of residential planting. On Oatfield, 145' south of the intersection on the west side, there are two 30" Douglas firs. On the east side at 90' south of the intersection, there is a 48" Ponderosa pine. These trees are immediately adjacent to the bikeways which lie on both sides of the street.

2. Cultural: The area adjacent to the project is residential. A junior high school is located less than one quarter mile to the east of the project and a high school athletic field is located the same distance to the west.

   Air and noise aesthetics will be little affected by the project.

   Utilities:
   Power: Portland General Electric
   Gas: Northwest Natural Gas
   Communication: Pacific Northwest Bell Telephone
   Water: City of Milwaukie
   Sewer: City of Milwaukie

B. Preliminary Assessment of Environmental Impacts:

1. Consequences and Significance of Right-of-Way Acquisition:

   Depending on the shape and extent of the taking, the acquisition could have considerable impact on two residences, particularly the one on the SW corner of the intersection.

2. Estimated Impact on Traffic Patterns:

   Improve flow - no appreciable change in traffic patterns.

   Consequences--Air Quality, Noise, Safety, etc.:

   No affect on air quality. Safety will be greatly improved with the signalization and channelization of the interseciton.

3. Estimated Impact on Land Use:

   City of Milwaukie Comprehensive Plan will have governing effects on land use.

   Consequences:

   None anticipated.

4. Expected Impact on Natural Ecological Resources:

   None

   Consequences:

   None anticipated.

5. Expected Impact on Cultural and Scenic Resources:

   House on SW corner could lose considerable plant screening.

   Consequences:

   Planting would need to be replaced.

6. Preliminary Identification of Areas of Critical Concern:
No specific areas identified.

7. Potential for Controversial Issues:
None anticipated.

8. Potential for Consistency of Proposal With:

a. Clean Air Implementation Plans
No significant change.

b. Noise Standards
A noise study may be required.

c. Water Quality Standards
No change evident.

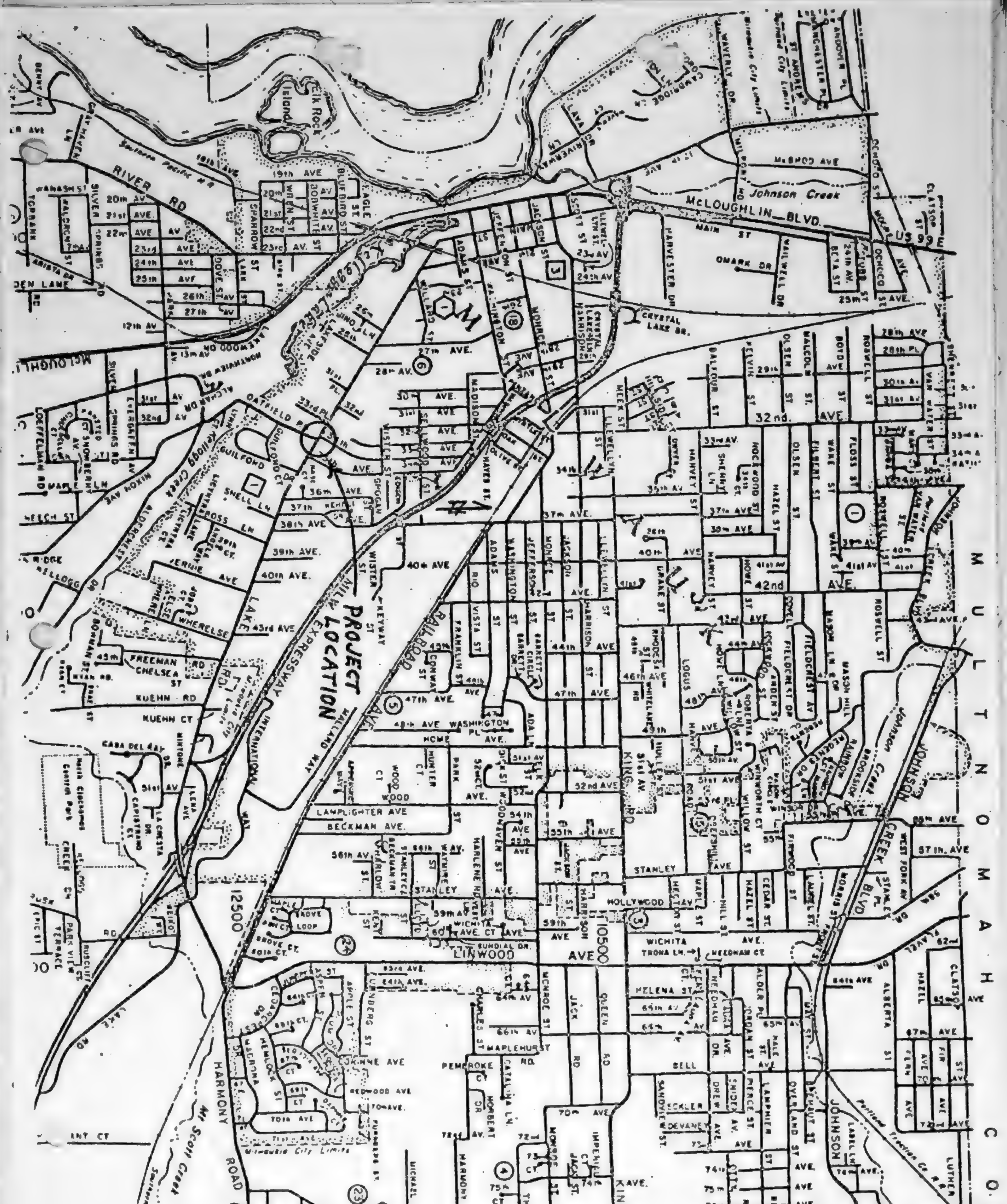
d. Area Land Use and Transportation Plans, and Zoning
In compliance with City of Milwaukie Comprehensive Plan.

C. Recommended Type of Action and Documentation:

-------------MAJOR ACTION-------------		----NON-MAJOR ACTION-----
SIGNIFICANT:	NON-SIGNIFICANT:	
____ D & FEIS	____ D & F Neg.Dec.	X ASSESSMENT ONLY
____ Section 4(f)	____ Section 4(f)	____ STATEWIDE ASSESSMENT

Basis for Type of Action and Documentation:
In view of the limited and temporary impact of the proposed project upon the human environment it is recommended that it be classified as an Assessment Only action. TSL

D. Recommended Project Category: ____ 1 ____ 2 X 3 ____ 4


PROJECT LOCATION
MILW EXPRESSWAY
McLOUGHLIN BLVD.
US 99E
MULTNOMAH CO.
Johnson Creek
Elk Rock Island
RIVER RD
Southern Pacific R.R.
LAKE RD
Kellogg Creek
RAILROAD AVE
32nd AVE.
42nd AVE.
KING RD
LINWOOD AVE
12500
10500
HARMONY ROAD
JOHNSON CREEK BLVD
Mt. Scott Creek
Milwaukie City Limits
Portland Traction Co. R.R.
FULLER

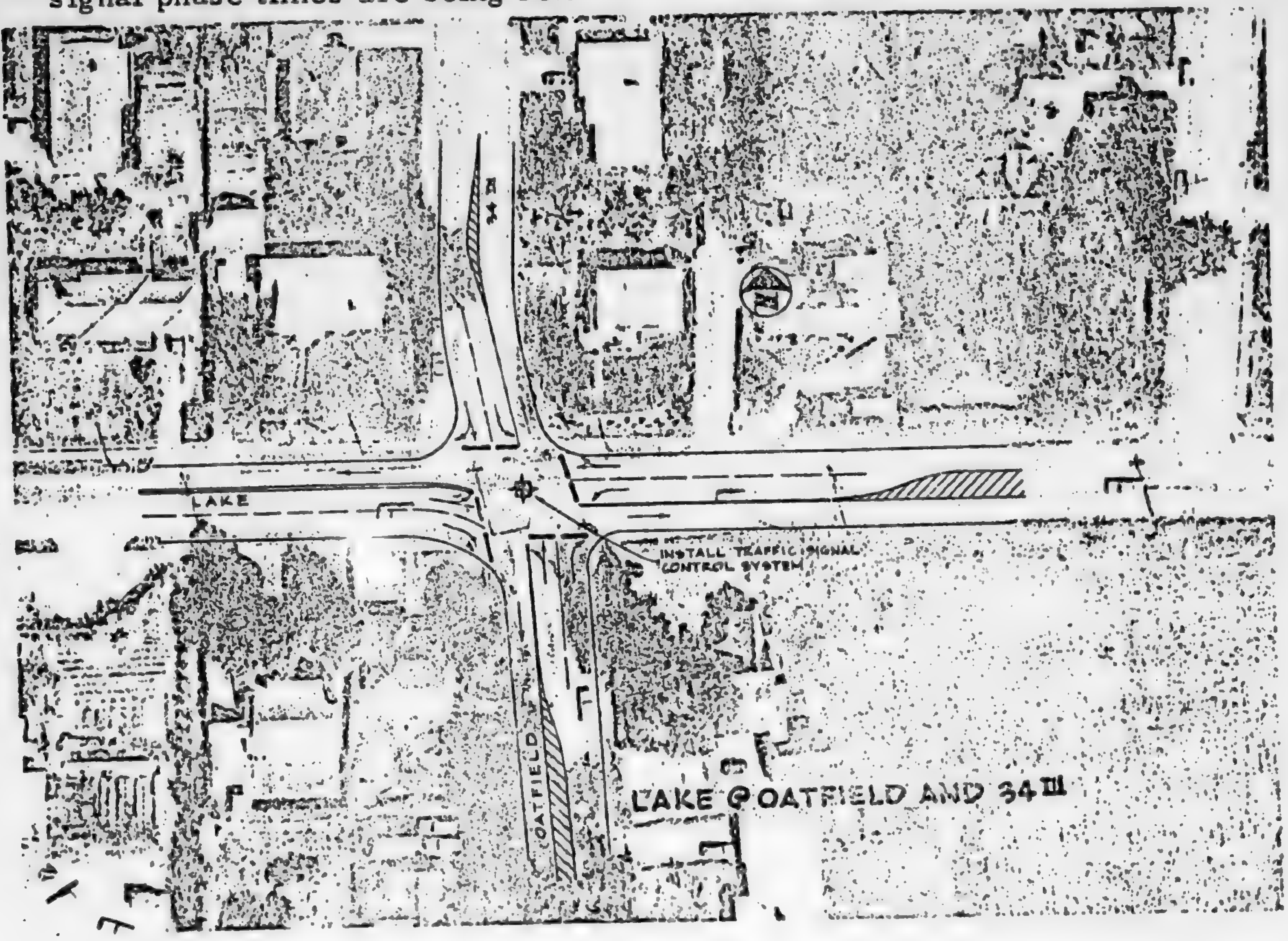
The misalignment between the north and south legs (Oatfield Road and 34th Avenue) causes confusion, poor operation of the intersection, and creates a safety problem.

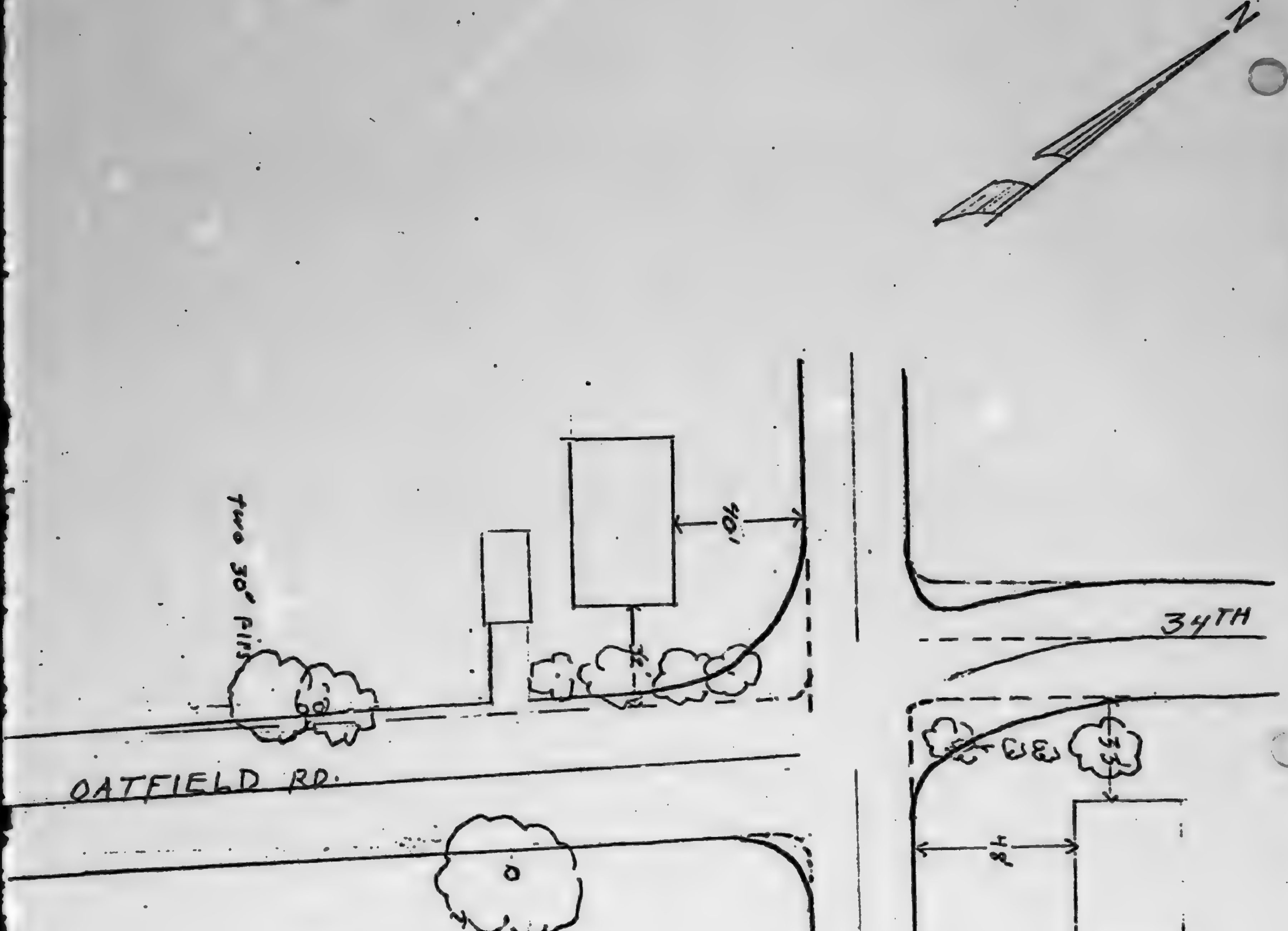
The grade of Oatfield contributes to sight and operation problems on this leg of the intersection.

Recommended Improvements

Realign and channelize the intersection as shown in the Figure below. Provide the lane use control as shown in the Figure to meet the demands for turning movements. A bikeway crossing may be necessary south of the intersection to connect the bikeways on both sides of Oatfield.

Signalize the intersection providing a separate left turn phase for traffic turning left from S. E. Lake Road to S. E. Oatfield Road. The school located east of the intersection necessitates adequate pedestrian consideration when signal phase times are being set.




N
two 30" firs
10'
34TH
OATFIELD RD.
33
48'
Ponderosa-48"
LAKE RD.

1"=50'
ALL DIMENSIONS ARE APPROXIMATE

Form 734-3106

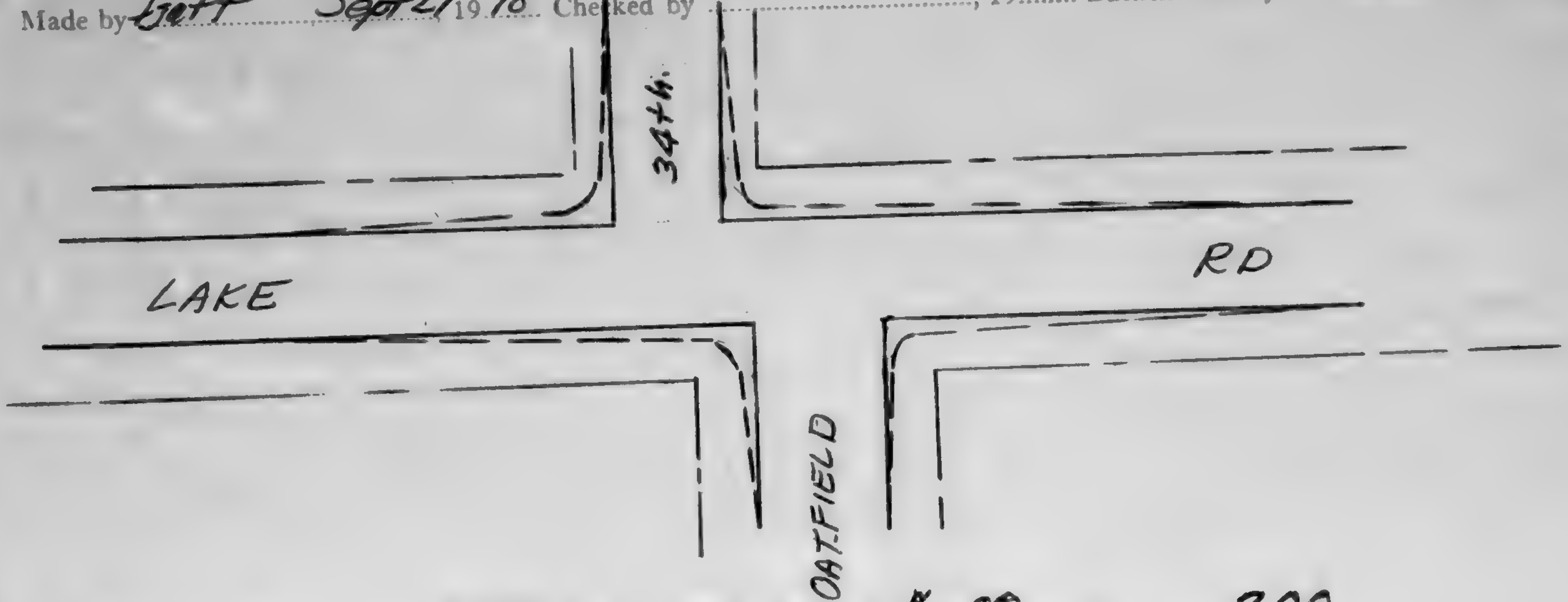
Job No. ....

Sheet .... of .... Sheets

OREGON STATE HIGHWAY DIVISION

Calculations for Oatfield Rd.-Lake Road-34th Ave. Cost Check

Made by Tjett Sept 27 1978 Checked by ...., 19........ Backchecked by ...., 19........



Excavation	$\frac{2000}{2} \times 4 \times 1^{5}/27 \times \$3^{\underline{00}}$ =	700
Surfacing, Full Depth	$\frac{2000}{2} \times 4 \times \$0.81$ =	\$3,200
Overlay	$30 \times 1000 \times \$0.37$ =	\$11,100
Curb	$1500' \times \$5^{\underline{00}}$ =	\$7,500
Sidewalk	$1000 \times \$8^{\underline{25}}$ =	\$8,300
Drainage		\$2,000
Contingencies	+20%	6,600
Total Roadway		\$38,400
City's Estimate		36,000 (within 10%)

DEPARTMENT OF TRANSPORTATION
OREGON STATE HIGHWAY DIVISION
Traffic Engineering Section

LAKE ROAD & OATFIELD ROAD (34th Ave) - MILWAUKIE

TRAFFIC SIGNAL WARRANT COMPARISON*

9/20/78

Hourly Volumes on Major Street - Any 8 Hrs. (Total of both approaches)	866	849	650	585	557	542	535	495
Hourly Minor Street Volumes - Same 8 Hrs. (Highest hourly volumes from either approach)	418	376	330	431	358	409	304	279
Hourly Pedestrian Volumes Across Major Street - Same 8 Hrs. (Highest volume crosswalk)			NOT	STUDIED				

	Minimum Volume Warrant**	Number of Hours Warrant is Met (8 required)
1. Minimum Vehicular Volume:		
Major Street	500	7
Minor Street	150	8
2. Interruption of Continuous Traffic:		
Major Street	750	2
Minor Street	75	8
3. Minimum Pedestrian Volume:		
Vehicular Volume (Major Street)	—	—
Pedestrian Volume		
4. Accident Experience:		
Preventable Accidents (last 12 months)	NOT STUDIED	
Minimum Warrant	5	
5. Systems Warrant:		
Entering Volume (Weekday peak hour)	—	
Minimum Warrant	800	

Date of Traffic Count 9/13/78

---

* The hourly warrants are those prescribed in the National Manual on Uniform Traffic Control Devices for Streets and Highways, 1971 edition.

** X standard warrants used.
___ 70% of standard warrants used due to 85 percentile speed in excess of 40 MPH or isolated community with population less than 10,000.

OREGON DEPARTMENT OF TRANSPORTATION
Metropolitan Section

MILWAUKIE AUTOMATIC RECORDER TRAFFIC DATA BY DAY AND HOUR

Street: S.E. LAKE Rd. Station: ________ Direction: EAST

Location: 100' W. OF S.E. 34th Year: 1978

		Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	~~Sat.~~ E & W	
Day of Week									
Date (Month & Day)				9-12	9-13	7-14		Combined (WED)	
Hour of Day:									
A.M.	12 - 1				30	30		75	
	1 - 2				7	9		28	
	2 - 3				13	5		28	
	3 - 4				3	7		10	
	4 - 5				4	0		15	
	5 - 6				4	8		35	
	6 - 7				48	37		175	
	7 - 8				139	137		542	5
	8 - 9				134	121		483	
	9 - 10				109	127		382	
	10 - 11				139			353	
	11 - 12				204			495	8
P.M.	12 - 1				241			535	7
	1 - 2				202			492	
	2 - 3				251			557	5
	3 - 4			282	286			650	6
	4 - 5			363	331			866	1
	5 - 6			422	386			849	2
	6 - 7			238	216			585	4
	7 - 8			180	164			469	
	8 - 9			105	156			387	
	9 - 10			112	106			261	
	10 - 11			68	70			179	
	11 - 12			55	33			104	
Automatic Recorder Total 24 Hours					3,276				
Axle Correction Factor 1)									
24-Hour Adjusted Total									

1) 1.00 - (0.5 x S&F Truck Percentage)

OREGON DEPARTMENT OF TRANSPORTATION
Metropolitan Section

MILWAUKIE

AUTOMATIC RECORDER TRAFFIC DATA BY DAY AND HOUR

Street: S.E. LAKE Rd Station: ________ Direction: WEST

Location: 50' E. of S.E. 34th Year: 1978

	Day of Week	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
	Date (Month & Day)			9-12	9-13	9-14		
	Hour of Day:							
A.M.	12 - 1				45	65		
	1 - 2				21	18		
	2 - 3				15	11		
	3 - 4				7	14		
	4 - 5				11	11		
	5 - 6				31	31		
	6 - 7				127	133		
	7 - 8				403	387		
	8 - 9				349	301		
	9 - 10				273	220		
	10 - 11				214			
	11 - 12				291			
P.M.	12 - 1				294			
	1 - 2				290			
	2 - 3				306			
	3 - 4			332	364			
	4 - 5			506	535			
	5 - 6			411	463			
	6 - 7			309	361			
	7 - 8			310	305			
	8 - 9			206	231			
	9 - 10			154	155			
	10 - 11			106	109			
	11 - 12			78	71			
	Automatic Recorder Total 24 Hours				5,279			
	Axle Correction Factor 1)							
	24-Hour Adjusted Total							

1) 1.00 - (0.5 x S&F Truck Percentage)

OREGON DEPARTMENT OF TRANSPORTATION
Metropolitan Section

AUTOMATIC RECORDER TRAFFIC DATA BY DAY AND HOUR

Street: OATFIELD Rd.
Station:
Direction: NORTH
Location: 100' S. OF S.E. LAKE Rd.
Year: 1978

		Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Day of Week		Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Date (Month & Day)				9-12	9-13	9-14		
Hour of Day:								
A.M.	12 - 1				36	46		
	1 - 2				21	19		
	2 - 3				16	22		
	3 - 4				9	11		
	4 - 5				12	11		
	5 - 6				33	35		
	6 - 7				133	169		
	7 - 8				409 6	456		
	8 - 9				314	385		
	9 - 10				272	238		
	10 - 11				228			
	11 - 12				279 c			
P.M.	12 - 1				304 7			
	1 - 2				352			
	2 - 3				358 5			
	3 - 4			385	330 3			
	4 - 5			410	418 1			
	5 - 6			337	376 2			
	6 - 7			370	431 4			
	7 - 8			425	435			
	8 - 9			235	279			
	9 - 10			196	196			
	10 - 11			123	145			
	11 - 12			97	113			
Automatic Recorder Total 24 Hours					5,479			
Axle Correction Factor 1)								
24-Hour Adjusted Total								

1) 1.00 - (0.5 x S&F Truck Percentage)

OREGON DEPARTMENT OF TRANSPORTATION
Metropolitan Section

MILWAUKIE

AUTOMATIC RECORDER TRAFFIC DATA BY DAY AND HOUR

Street: S.E. 34th Station: ______ Direction: SOUTH

Location: 100' N. OF S.E. LAKE Rd. Year: 1978

		Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Day of Week		Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Date (Month & Day)				9-12	9-13	9-14		
Hour of Day:								
A.M.	12 - 1				12	16		
	1 - 2				4	4		
	2 - 3				5	5		
	3 - 4				1	0		
	4 - 5				2	2		
	5 - 6				8	10		
	6 - 7				22	23		
	7 - 8				50	44		
	8 - 9				57	67		
	9 - 10				58	72		
	10 - 11				50			
	11 - 12				58			
P.M.	12 - 1				88			
	1 - 2				48			
	2 - 3				66			
	3 - 4			91	115			
	4 - 5			124	115			
	5 - 6			116	121			
	6 - 7			87	91			
	7 - 8			95	77			
	8 - 9			54	70			
	9 - 10			54	57			
	10 - 11			38	44			
	11 - 12			22	33			
Automatic Recorder Total 24 Hours					1,258			
Axle Correction Factor 1)								
24-Hour Adjusted Total								

1) 1.00 - (0.5 x S&F Truck Percentage)

Form FHWA 121 (Rev. 5-73)
9368

UNITED STATES GOVERNMEN

Memorandum

DEPAR ENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
The Equitable Center, Suite 100
530 Center NE. - Salem OR 97301

DATE: September 27, 1978

In reply refer to: HFO.1-OR 1X

SUBJECT: Project Assessment
Oregon Project M-9665(-)
Aldercrest Drive Intersection
Oatfield Rd. #21368 FAU 9665
Clackamas County

FROM : G. L. Green, Division Administrator

TO : Mr. Gary A. Potter
Manager, Environmental Section
Oregon Department of Transportation
Salem, Oregon

The subject project assessment submitted with your September 15, 1978, letter has been reviewed.

We concur with your finding that the proposed project constitutes a non-major action.

P. V. Riedel
G. L. Green for

cc:
ODOT (Moehring, Mgr., Proj. Mgmt.)
OSHD (Reg. 1, Env.)

Environmental Section
September 29, 1978

cc: D. H. Moehring
J. B. Boyd (3)
L. E. George
W. J. Hart
C. T. Keasey
J. H. Versteeg (4)
F. E. Terpin (3)
George Bell
Surfacing Design
R. N. Bothman
Ed Hardt
Harry Woodward
Jef Kaiser
Gerald Wimer
B. L. Gifford (2)

OREGON STATE HIGHWAY DIVISION
PROJECT ASSESSMENT

M-9665 (-)

PART 1. GENERAL INFORMATION

A. Project Identification:

Date September 14, 1978

Section Aldercrest Drive Intersection

Unit (if appl)

County Clackamas

City

Highway Oatfield Rd. #21368 FAU 9665

State Hwy. No.

Termini: M.P.(if appl)

Length 600 ft.

Region I

Construction Estimate $48,000.00
Program Amount

B. Purpose of Project:

To improve the safety characteristics of this segment of Oatfield Road and the Aldercrest Drive approach. Pedestrian access and bus transit loading will be improved by the addition of sidewalks and the added roadway width.

C. Origin & History of Project:

Oatfield Road is a County arterial roadway and Aldercrest Drive is a County collector. Their intersection along a horizontal curve present the need for safety improvements. This project is submitted as part of the total Transportation System Management Program within the Gladstone-Milwaukie Subarea.

D. General Description of Project:

Realign and widen Oatfield Road to a 36 ft. roadway section with curb and sidewalks, modifying the superelevation and the Aldercrest Drive approach. Widening should be accomplished within the existing right-of-way with the use of retaining walls.

Alignment: New ______ Existing ______ Combined X

Typical Section: Existing: No. Lanes 2; Med. None; Shldrs. 4; Parking Restricted

Proposed: No. Lanes 2; Med. None; Shldrs. None; Parking Restricted

Traffic: Existing Facility: Existing ADT 8,920 5/78 Projected ADT ______; Yr. ______

Existing Level of Service ______

Proposed Facility: Projected ADT ______; Yr. ______

Projected Level of Service ______

Right of Way: Additional anticipated No (Yes, No), if yes, give approx. No. Parcels________

Acres________; Type of Relocation Req.________________; No.________

Materials Source, Borrow, Waste Disposal Requirements, if any:

All materials are available through commercial sources. Waste disposal will be at sites approved by Clackamas County.

Type of Structure(s):

Retaining walls located as necessary to obtain the desired roadway width.

Brief Description of River or Stream and Type of Involvement, if any:

N/A

Local City, County or COG priorities of project:

This project is set as a high priority in the T.S.M. improvements.

FHWA and/or OSHD approvals given, if any:

Location or Design Alternatives (identify and describe):

No Build Option.

Other Descriptive Information or Comments:

Tri-Met buses presently must stop in the travel lane to pick up passengers. This blocks northbound through traffic and southbound uphill traffic seeking to turn left onto Aldercrest. It would be highly desirable to eliminate the northbound blockage but impossible to prevent the obstruction of turns into Aldercrest. The geometry of Tri-Met bus operation must be closely integrated into the design of this project if it is to fulfill its purpose of getting the bus stop out of the travel lane (see attached sketch).

(Attach project sketch map.)

PART II. ENVIRONMENTAL ASSESSMENT

A. Brief Environmental Setting of Project Area:

1. Natural:

This project segment of Oatfield Road is set along an established residential area with various mature coniferous and deciduous trees adjoining the road right-of-way. Landscape shrubbery and lawn grasses also border the project. The topography is hilly sloping to the North. Vehicles coming from the north must use lower gears to negotiate the hilly curve.

2. Cultural:

Oatfield Road and Aldercrest Drive are County maintained roadways. The land use is single family residential along the project area. Utilities have been installed above and below ground within the road right-of-way serving the adjacent neighborhood. There is storm drainage on Oatfield Road.

UTILITIES:

Electric	PGE
Gas	Northwest Natural Gas
Telephone	Pacific Northwest Bell
Water	Oak Lodge Water
Sewer	Oak Lodge Sanitary

B. Preliminary Assessment of Environmental Impacts:

1. Consequences and Significance of Right-of-Way Acquisition:

There is no additional right-of-way required.

2. Estimated Impact on Traffic Patterns:

Traffic patterns will not be affected, traffic flow and safety characteristics will be improved.

Consequences--Air Quality, Noise, Safety, etc.:

No significant effects anticipated other than improved safety conditions.

3. Estimated Impact on Land Use:

Clackamas County Comprehensive Plan will have the governing effect on land use.

Consequences:

None Anticipated.

4. Expected Impact on Natural Ecological Resources:

Some minor reduction of encroaching roadside plantings.

Consequences:

No significant effects.

5. Expected Impact on Cultural and Scenic Resources:

None

Consequences:

6. Preliminary Identification of Areas of Critical Concern:

No specific areas identified.

7. Potential for Controversial Issues:

None anticipated

8. Potential for Consistency of Proposal With:

a. Clean Air Implementation Plans

No significant change.

b. Noise Standards

A noise study report is required.

c. Water Quality Standards

No change anticipated.

d. Area Land Use and Transportation Plans, and Zoning

In compliance with Clackamas County Comprehensive Plan.

C. Recommended Type of Action and Documentation:

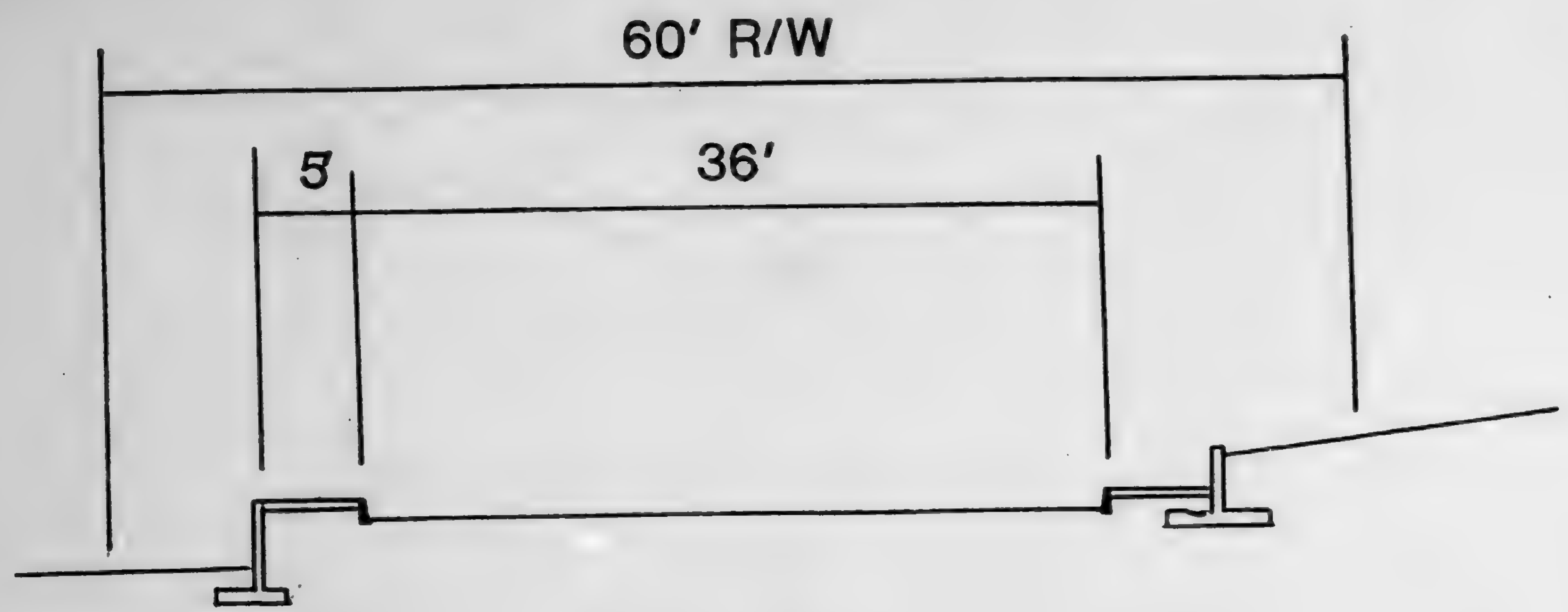
-------------MAJOR ACTION-------------		----NON-MAJOR ACTION-----
SIGNIFICANT:	NON-SIGNIFICANT:	
____ D & FEIS	____ D & F Neg.Dec.	X ASSESSMENT ONLY
____ Section 4(f)	____ Section 4(f)	____ STATEWIDE ASSESSMENT

Basis for Type of Action and Documentation:

Since this project will not have an adverse impact on the human or natural environment, it is recommended that it be classified an assessment only action.

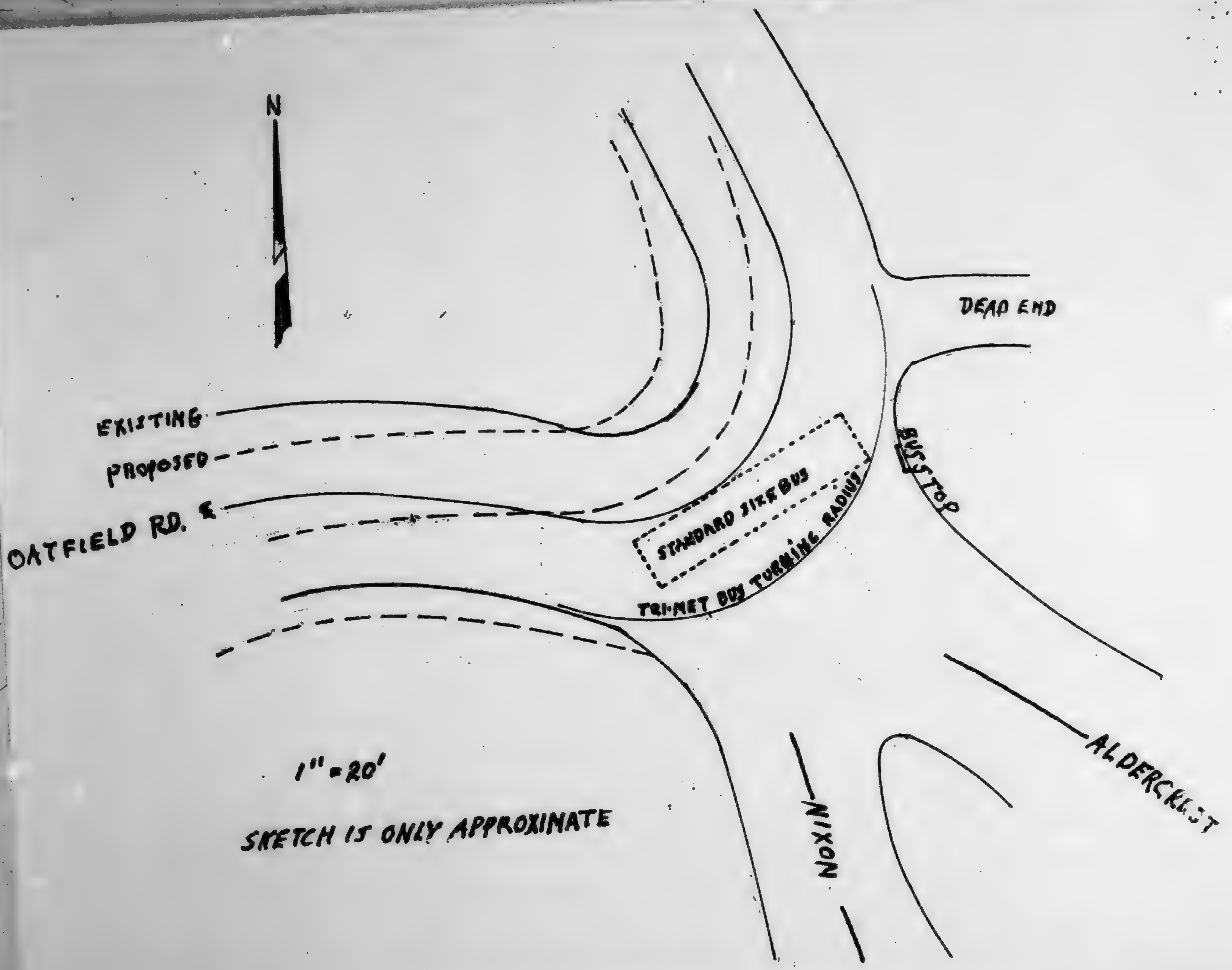
TBL

D. Recommended Project Category: ____ 1 ____ 2 X 3 ____ 4



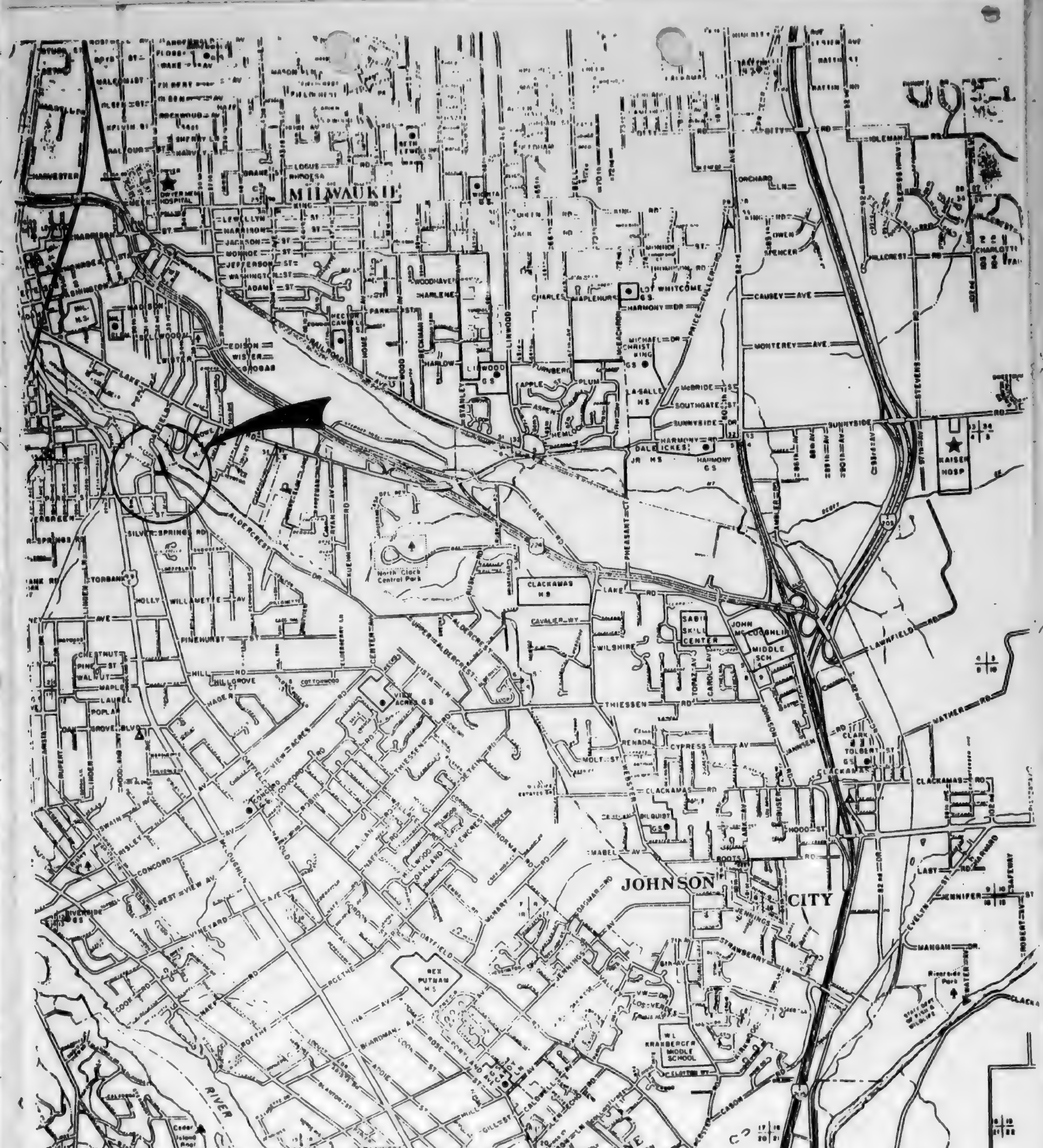
PROPOSED
SECTION

OATFIELD ROAD


N
EXISTING
PROPOSED
OATFIELD RD. ℄
STANDARD SIZE BUS
TRI-MET BUS TURNING RADIUS
BUS STOP
DEAD END
NIXON
ALDERCREST

1" = 20'

SKETCH IS ONLY APPROXIMATE


MILWAUKIE
JOHNSON
CITY
GLADSTONE
RIVER
North Clack Central Park
CLACKAMAS HS
KAISER HOSP
REX PUTNAM HS
W L KRANBERGER MIDDLE SCHOOL
JOHN McLOUGHLIN MIDDLE SCH
SABIN SKILL CENTER
LA SALLE HS
MICHAEL CHRIST KING GS
LOT WHITCOMB GS
LINWOOD GS
DALE ICKES JR HS
HARMONY GS
VIEW ACRES GS
JENNINGS LODGE GS
Riverside Park
Mary S. Young State Park
SUNNYSIDE RD
CAUSEY AVE
MONTEREY AVE
HARMONY DR
LAWNFIELD RD
MATHER RD
CLACKAMAS
THIESSEN
LAKE RD
CAVALIER WY
WILSHIRE
CYPRESS AV
MABEL AV
JENNINGS
CONCORD
WEST VIEW AV
VINEYARD
ROETHE
OATFIELD
ALDERCREST
SILVER SPRINGS RD
TORBANK
HOLLY
WILLAMETTE
FINEHURST
HILL RD
HAGER
CHESTNUT
PINE ST
WALNUT
MAPLE
LAUREL
POPLAR
GROVE BLVD
LINDEN
CEDAROAK
BENTHORPE
MAPLETON DR
JENNIFER ST
MANGAN DR
HEREFORD
GLOUCESTER
DARTMOUTH
CLARENDON
FAIRFIELD
EXETER
JERSEY
IPSWICH
HOOD ST
LAST RD
EVELYN ST
ORCHARD LN
CHARLOTTE
HILLCREST
LEWELLYN
HARRISON
JACKSON
MONROE
JEFFERSON
WASHINGTON
ADAMS
EDISON
WISTER
CORONADO
LOCUST
RHODESA
HOSPITAL
CHARLENE
WOODHAVEN
STANLEY
HARLOW
SOUTHGATE
McBRIDE
APPLE
PLUM
HEMLOCK

7368

FEDERAL AID PROJECT REQUEST

Date July 6, 1978

Applicant Agency City of Milwaukie
Request for: Off-System ____, FAS-C ____, FAUS ____ Project e(4)
Federal Aid Route No. FAU 9665 Route Name Oatfield Road
Project Name Oatfield Road - Lake Road - 34th Avenue Realignment and Signalization
Project Length 0.1 mile Project Location (Attach sketch map)
Project Description Signalize, realign, channelize, and widen to 3 12 foot lanes with curb and sidewalk extending 250 ft. on all approaches. PROVIDE SAFETY OVERLAY ON ENTIRE PROJECT.

Average Daily Traffic Lake Rd.W.7000 - E.9200 Oatfield Rd. 9400 - 34th 2300 Design Speed 30

Complete Applicable Sections:

I. ROADWAY DATA

1. Existing Roadway: (Attach sketch)

Width Oatfield -39' Lake Rd. - 29' W.; 33.5 E. 34th - 36' Travel Lanes 2 Shoulders S.side,E.leg Lake Rd.6' paved Oatfield 6'paved
Medians None Parking Restricted
Sidewalks West leg of Lake Rd. and 34th Ave. (both sides)
Remarks Bike path on East leg of Lake Road and on Oatfield (both sides)

2. Desired Roadway Cross Section: (Attach sketch)

Width 36 ft. Travel Lanes 3 Shoulders None
Medians Painted islands Parking None
Curbed 250 ft. all approaches Length Curb Radii Min. 25 ft.
Sidewalk/Bikeway 5 ft. sidewalk all approaches
Remarks ____

II. RIGHT-OF-WAY DATA

1. Existing Right-of-Way:
General Width Lake Rd.&Oatfield - 60ft. 34th Ave. 50ft. Minimum ____ Maximum ____

2. Has right-of-way been acquired for this project subsequent to January 2, 1971?
Yes ____ No X

3. Will additional right-of-way be needed? Yes X No ____
If answer is "yes," will cost of right-of-way be subject to Federal reimbursement? Yes X No ____
Remarks ____

III. TRAFFIC CONTROL DATA

1. Existing Signalization and Location:

None

2. **Proposed Signalization:**

Location Lake Rd. - Oatfield Rd. & 34th Avenue

Type Traffic activated
Phases 5
Type of Suspension Cantilever
Interconnected No
Remarks

3. **Permanent Signing:**

Include in project or by applicant? Include in project

4. **Permanent Striping:**

Include in project or by applicant? Include in project

IV. ILLUMINATION DATA

1. **Existing Illumination and Location:**
20,000 lumen mercury vapor units on power poles at the southwest corner of intersection, 125 ft. east of intersection, 125 ft. south of intersection and 150 ft. west of intersection. Also, one 7000 lumen mercury vapor unit on power pole 225 ft. North of intersection on 34th Ave.

2. **Proposed Illumination:**

Location On signal poles at intersection
Type Integ[illegible]l with cantilever signal poles

Remarks

V. STRUCTURE DATA

1. **Existing Structure:**

Location None
Type
Approach Roadway Width Shoulder Width
Length Width
To remain in place?

2. **Proposed Structure:**

Location None

Approximate Size: Length Width

Are sidewalk/bikeways desired:

Are any utilities to be attached to structure?

Are provisions for illumination desired?

Are there any unusual or complicating conditions?

Remarks

VI. RAILROAD DATA

1. Are there any railroad crossings? Yes____ No X

   Name of Railroad
   Existing Crossing Protection

2. Will existing railroad crossing be altered?

   Remarks

VII. ACTION PLAN REQUIREMENTS

During project development for Category 1, 2, and 3 projects, the city or county shall perform and document responsibilities as found indexed in the Oregon Action Plan, particularly Citizen Involvement and Participation; Environmental Aspects; and Public Hearing Requirements.

The OSHD Region Engineer will provide assistance, liaison and monitoring for these activities.

Responsible local office and party to be contacted for the following activities:

1. Citizen Involvement — Steve Hall, Director of Public Works (Office)
2. Environmental — Steve Hall, Director of Public Works (Office)
3. Public Hearing — Steve Hall, Director of Public Works (Office)

Remarks

VIII. GENERAL INFORMATION

1. Project preliminary engineering to be performed by:

   Applicant____ State X Consultant____

2. Project construction engineering to be performed by:

Applicant______ State X Consultant______

3. Will applicant perform any work prior to or after award of contract?
Yes______ No X
If "yes," describe briefly:______

4. Applicant's estimate of cost for requested project:

Roadway Work		$ 36,000.
Right-of-way costs (if participating)		2,000.
Traffic control		50,000.
Illumination		1,000.
Structures		0
Railroad		0
Other Contingency	~~10%~~	9,000.
Preliminary engineering	~~10%~~	9,000
Construction Engineering		9,000
PROJECT TOTAL		$ 116,000.

Remarks This project is submitted as part of the total transporation system management program within the Gladstone-Milwaukie subarea.

THIS APPLICATION IS AN OFFICIAL REQUEST FROM:

CITY OF Milwaukie and/or ______ COUNTY

By______ By______

By J. M. Hall By______

By______

9368

REGON STATE HIGHWAY DIVISION
PROJECT ASSESSMENT

PART 1. GENERAL INFORMATION

A. Project Identification:

Date June 1, 1978

Section Aldercrest Drive Intersection

Unit (if appl)

County Clackamas

City

Highway Oatfield Rd. #21368 FAU 9665

State Hwy. No.

Termini: M.P.(if appl)

Length 600 ft.

Region I

Construction Estimate ~~$48,000.00~~ $78,000. ecm.

Program Amount

B. Purpose of Project:

To improve the safety characteristics of this segment of Oatfield Road and the Aldercrest Drive approach. Pedestrian access and bus transit loading will be improved by the addition of sidewalks and the added roadway width.

C. Origin & History of Project:

Oatfield Road is a County arterial roadway and Aldercrest Drive is a County collector. Their intersection along a horizontal curve present the need for safety improvements. This project is submitted as part of the total Transportation System Management Program within the Gladstone-Milwaukie Subarea.

D. General Description of Project:

Realign and widen Oatfield Road to a 36 ft. roadway section with curb and sidewalks, modifying the superelevation and the Aldercrest Drive approach. Widening should be accomplished within the existing right-of-way with the use of retaining walls.

Alignment: New ______ Existing ______ Combined X

Typical Section: Existing: No. Lanes 2 ; Med. None ; Shldrs. 4 ; Parking Restricted

Proposed: No. Lanes 2 ; Med. None ; Shldrs. None ; Parking Restricted

raffic: Existing Facility: Existing ADT 8,920 5/78 Projected ADT ______ ; Yr. ______

Existing Level of Service ______

Proposed Facility: Projected ADT ______ ; Yr. ______

Projected Level of Service ______

Right of Way: Additional anticipated No, if yes, give approx. No. Parcels________
Yes, No

Acres________; Type of Relocation Req.________________; No.________

Materials Source, Borrow, Waste Disposal Requirements, if any:

All materials are available through commercial sources. Waste disposal will be at sites approved by Clackamas County.

Type of Structure(s):

Retaining walls located as necessary to obtain the desired roadway width.

Brief Description of River or Stream and Type of Involvement, if any:

N/A

Local City, County or COG priorities of project:

This project is set as a high priority in the T.S.M. improvements.

FHWA and/or OSHD approvals given, if any:

Location or Design-Alternatives (identify and describe):

No Build Option.

Other Descriptive Information or Comments:

Tri-Met buses presently must stop in the travel lane to pick up passengers. This blocks northbound through traffic and southbound uphill traffic seeking to turn left onto Aldercrest. It would be highly desirable to eliminate the northbound blockage but impossible to prevent the obstruction of turns into Aldercrest. The geometry of Tri-Met bus operation must be closely integrated into the design of this project if it is to fulfill its purpose of getting the bus stop out of the travel lane (see attached sketch).

(Attach project sketch map.)

PART II. ENVIRONMENTAL ASSESSMENT

A. Brief Environmental Setting of Project Area:

1. Natural:

This project segment of Oatfield Road is set along an established residential area with various mature coniferous and deciduous trees adjoining the road right-of-way. Landscape shrubbery and lawn grasses also border the project. The topography is hilly sloping to the North. Vehicles coming from the north must use lower gears to negotiate the hilly curve.

2. Cultural:

Oatfield Road and Aldercrest Drive are County maintained roadways. The land use is single family residential along the project area. Utilities have been installed above and below ground within the road right-of-way serving the adjacent neighborhood. There is storm drainage on Oatfield Road.

UTILITIES:

Electric	PGE
Gas	Northwest Natural Gas
Telephone	Pacific Northwest Bell
Water	Oak Lodge Water
Sewer	Oak Lodge Sanitary

B. Preliminary Assessment of Environmental Impacts:

1. Consequences and Significance of Right-of-Way Acquisition:

There is no additional right-of-way required.

2. Estimated Impact on Traffic Patterns:

Traffic patterns will not be affected, traffic flow and safety characteristics will be improved.

Consequences--Air Quality, Noise, Safety, etc.:

No significant effects anticipated other than improved safety conditions.

3. Estimated Impact on Land Use:

Clackamas County Comprehensive Plan will have the governing effect on land use.

Consequences:

None Anticipated.

4. Expected Impact on Natural Ecological Resources:

Some minor reduction of encroaching roadside plantings.

Consequences:

No significant effects.

5. Expected Impact on Cultural and Scenic Resources:

None

Consequences:

6. Preliminary Identification of Areas of Critical Concern:

No specific areas identified.

7. Potential for Controversial Issues:

None anticipated

8. Potential for Consistency of Proposal With:

a. Clean Air Implementation Plans

No significant change.

b. Noise Standards

No significant change.

c. Water Quality Standards

No change anticipated.

d. Area Land Use and Transportation Plans, and Zoning

In compliance with Clackamas County Comprehensive Plan.

C. Recommended Type of Action and Documentation:

-------------MAJOR ACTION-----------------		----NON-MAJOR ACTION-----
SIGNIFICANT:	NON-SIGNIFICANT:	
____ D & FEIS	____ D & F Neg.Dec.	_X_ ASSESSMENT ONLY
____ Section 4(f)	____ Section 4(f)	____ STATEWIDE ASSESSMENT

Basis for Type of Action and Documentation:

Since this project will have only local and temporary impact on the human environment, it is recommended that it be classified an assessment only action.

D. Recommended Project Category: ____ 1 ____ 2 _X_ 3 ____ 4

9368

④

FEDERAL AID P OJECT REQUEST

Date June 1, 1978

Applicant Agency Clackamas County

Request for: Off-System____, FAS-C____, FAUS____ Project e(4)

Federal Aid Route No. FAU 9665 Route Name Oatfield Road #21368

Project Name Oatfield Road realignment at the Aldercrest Drive Intersection

Project Length 600 feet Project Location (Attach sketch map)

Project Description Realign Oatfield Road within the existing right-of-way placing inlets, curb and sidewalk on both sides maintaining a 36 foot pavement section allowing bus transit stops against the curb. Super elevation and approach modification at the Aldercrest intersection are required. Realignment will shift the Oatfield Road centerline to the northwest; the Aldercrest approach will be curbed and resurfaced with a 32 ft. pavement section.

Average Daily Traffic Oatfield Rd. 8,920 ADT 5/78 Design Speed 30 MPH

Aldercrest Rd. 1,160 ADT 5/78

Complete Applicable Sections:

I. ROADWAY DATA

1. Existing Roadway: (Attach sketch)

Width 25' Travel Lanes 2 Shoulders 4' paved

Medians None Parking Restricted

Sidewalks None

Remarks There is an existing paved bicycle path on both sides of Oatfield Road.

2. Desired Roadway Cross Section: (Attach sketch)

Width 36' Travel Lanes 2 Shoulders None

Medians None Parking Restricted

Curbed from 31st Ave. N. 600 ft. Length Curb Radii 25' with mounting ramps

Sidewalk/Bikeway 5' sidewalk both sides behind curb with asphalt taper to match

~~Remarks~~ existing bike path at ends.

II. RIGHT-OF-WAY DATA

1. Existing Right-of-Way:

General Width 60' Minimum 60' Maximum ____

2. Has right-of-way been acquired for this project subsequent to January 2, 1971?
Yes ____ No X

3. Will additional right-of-way be needed? Yes ____ No X
If answer is "yes," will cost of right-of-way be subject to Federal reimbursement? Yes ____ No ____
Remarks Widening can be accomplished within the existing right-of-way.

III. TRAFFIC CONTROL DATA

1. Existing Signalization and Location:

None

2. Proposed Signalization:

Location None
Type
Phases
Type of Suspension
Interconnected
Remarks

3. Permanent Signing:

Include in project or by applicant? In Project.

4. Permanent Striping:

Include in project or by applicant? In Project.

IV. ILLUMINATION DATA

1. Existing Illumination and Location:

None

2. Proposed Illumination:

Location None
Type
Remarks

V. STRUCTURE DATA

1. Existing Structure:

Location None
Type
Approach Roadway Width Shoulder Width
Length Width
To remain in place?

2. Proposed Structure:

Location Retaining walls located where necessary to obtain the desired roadway width.
Approximate Size: Length Width

Are sidewalk/bikeways desired: ______

Are any utilities to be attached to structure? ______

Are provisions for illumination desired? ______

Are there any unusual or complicating conditions? ______

Remarks ______

VI. RAILROAD DATA

1. Are there any railroad crossings? Yes ______ No X

   Name of Railroad ______
   Existing Crossing Protection ______

2. Will existing railroad crossing be altered? ______

   Remarks ______

VII. ACTION PLAN REQUIREMENTS

During project development for Category 1, 2, and 3 projects, the city or county shall perform and document responsibilities as found indexed in the Oregon Action Plan, particularly Citizen Involvement and Participation; Environmental Aspects; and Public Hearing Requirements.

The OSHD Region Engineer will provide assistance, liaison and monitoring for these activities.

Responsible local office and party to be contacted for the following activities:

1. Citizen Involvement	BERNARD L. STRAIGHT - Traffic Engineer Office
2. Environmental	BERNARD L. STRAIGHT - Traffic Engineer Office
3. Public Hearing	BERNARD L. STRAIGHT - Traffic Engineer Office

Remarks ______

VIII. GENERAL INFORMATION

1. Project preliminary engineering to be performed by:

   Applicant ______ State X Consultant ______

2. Project construction engineering to be performed by:

Applicant________ State X Consultant________

3. Will applicant perform any work prior to or after award of contract?

Yes________ No________

If "yes," describe briefly:________

4. Applicant's estimate of cost for requested project:

Roadway Work	$ ~~30,000.00~~	$ 39,000.
Right-of-way costs (if participating)		
Traffic control		
Illumination	~~10,000.00~~	32,000.
Structures		
Railroad	~~4,000.00~~	
Other Contingency	~~4,000.00~~	7,000.
Preliminary engineering		
PROJECT TOTAL	$ ~~48,000.00~~	$ 78,000.

Edm.

Remarks This project is submitted as part of the total Transportation System Management Program within the Gladstone-Milwaukie Subarea.

THIS APPLICATION IS AN OFFICIAL REQUEST FROM:

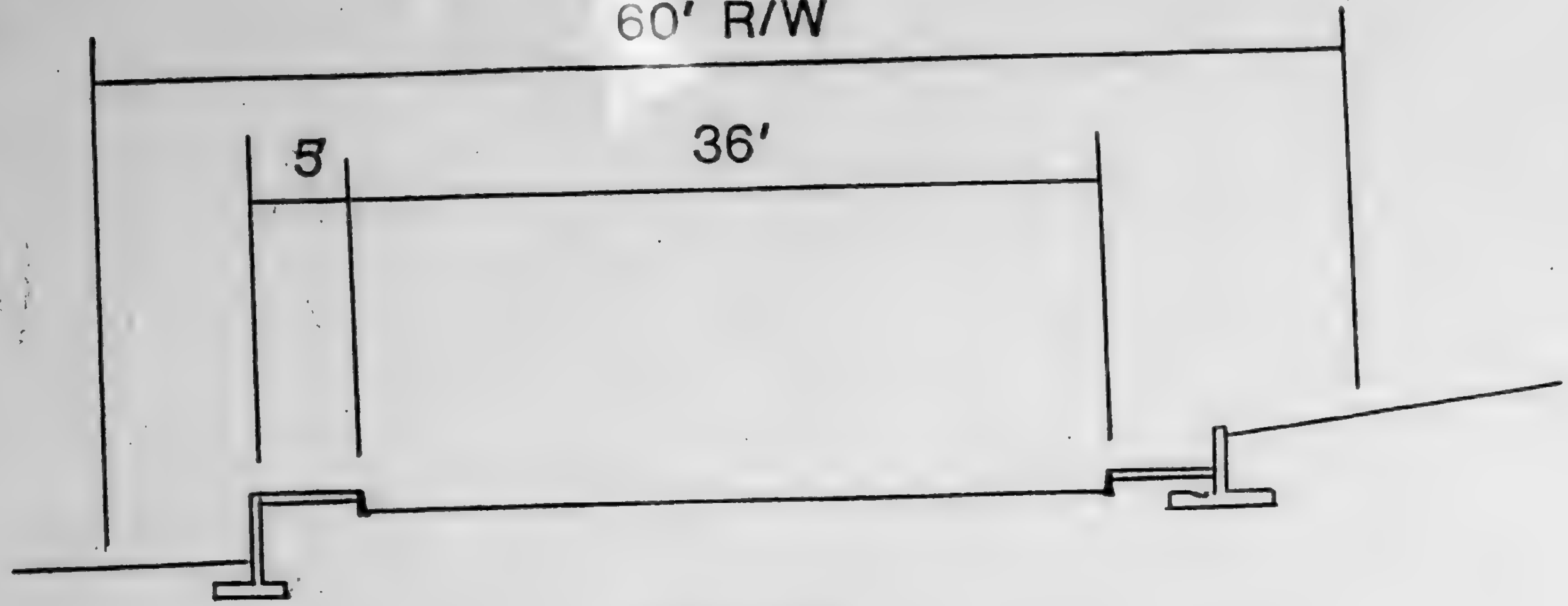
CITY OF ________ and/or CLACKAMAS COUNTY

By________ By Ralph Groener

By________ By

By Stan Skoko

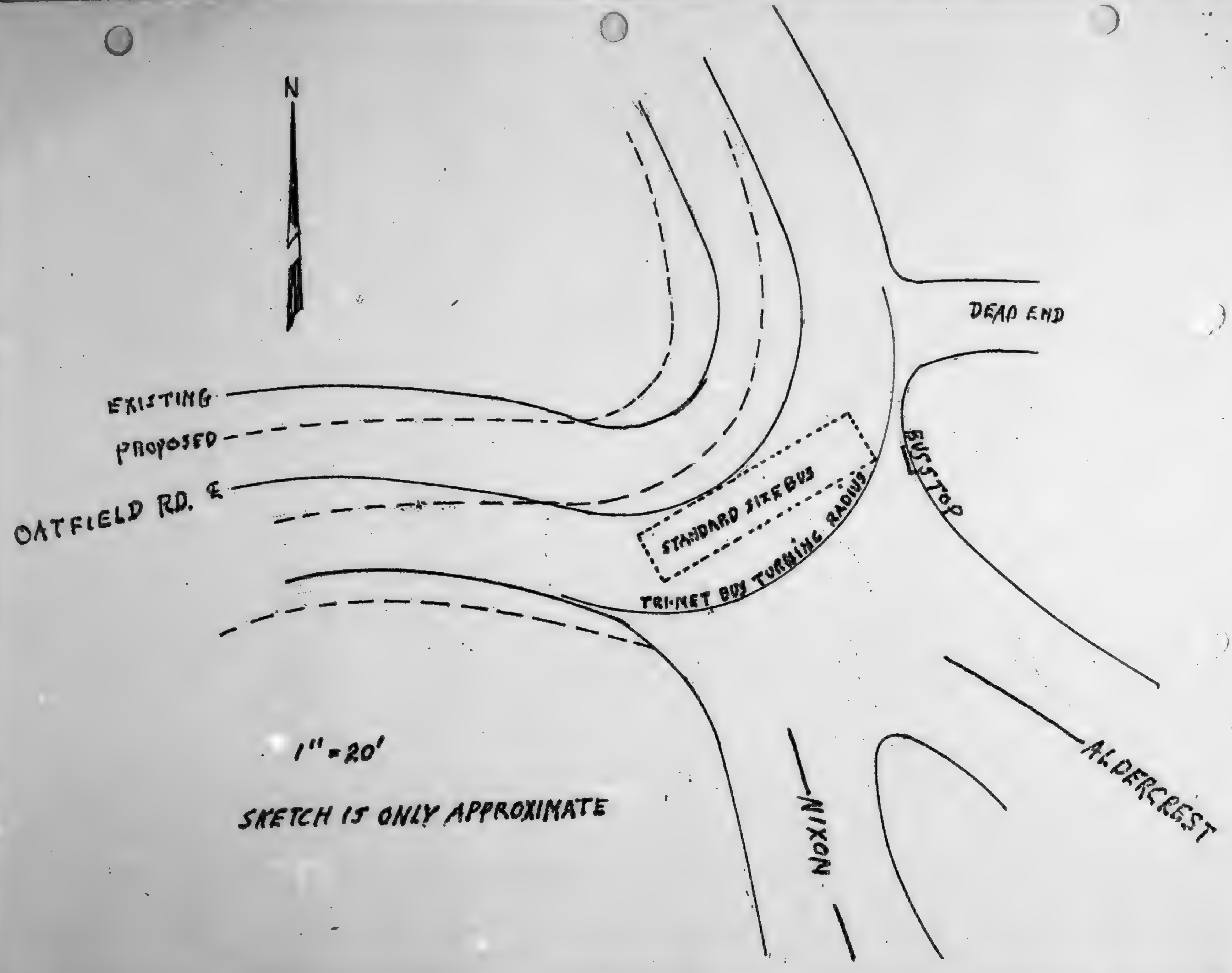
(1976)



PROPOSED
SECTION

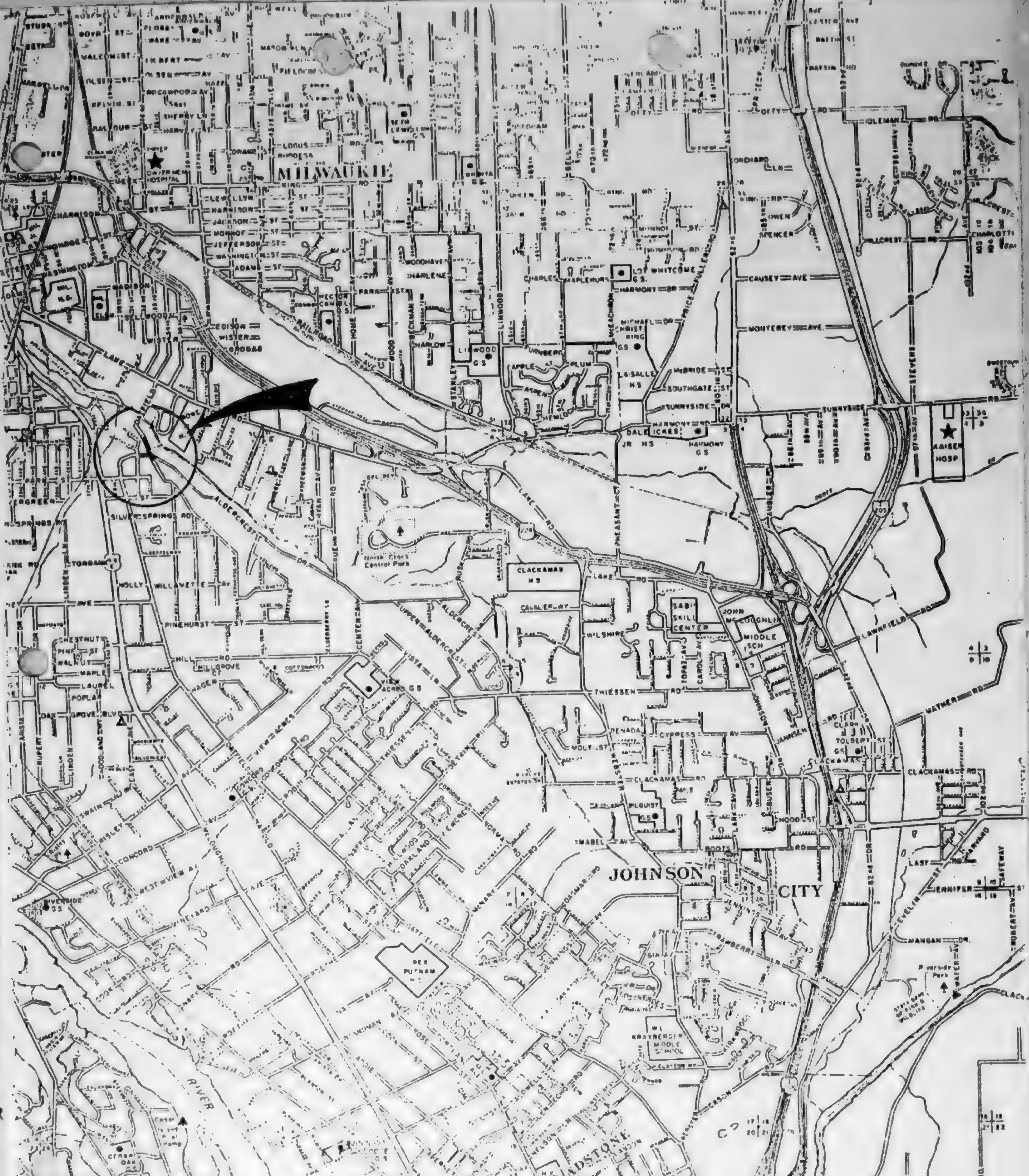
OATFIELD ROAD

NATIONAL
42-381 50 SHEETS 5 SQUARE
42-382 100 SHEETS 5 SQUARE
42-389 200 SHEETS 5 SQUARE


N
EXISTING
PROPOSED
OATFIELD RD. ℄
STANDARD SIZE BUS
TRI-NET BUS TURNING RADIUS
DEAD END
BUS STOP
NIXON
ALDERCREST

1" = 20'

SKETCH IS ONLY APPROXIMATE


MILWAUKIE
JOHNSON
CITY
ADSTONE
RIVER
North Clack Central Park
CLACKAMAS HS
REX PUTNAM HS
KAISER HOSP
LA SALLE HS
HARMONY GS
JOHN McLOUGHLIN MIDDLE SCH
WL KRAXBERGER MIDDLE SCHOOL
SILVER SPRINGS RD
ALDERCREST
CONCORD
OAK GROVE BLVD
JENNIFER
MONTEREY AVE
CAUSEY AVE
THIESSEN
CLACKAMAS
LAWNFIELD RD
MATHER RD
Mary S. Young State Park

9368

④

STATE OF OREGON **INTEROFFICE MEMO**

METRO TECHNICAL SERVICES — DEPT. 238-8231 — TELEPHONE

TO: D.H. MOEHRING Attn: D.E. Swan **DATE:** January 9, 1978
Project Management

FROM: MAX J. KLOTZ
Metro Technical Services Engineer

SUBJECT: Aldercrest Drive Intersection
Oatfield Road (FAU 9665)
Clackamas County
Planning File 78-115

to Terpin 1-12-79

Here is our programming packet on the subject project. Included are a project information sheet, authority for survey, federal aid project request, environmental assessment, and a memo regarding the project estimate. Also included is an agreement information sheet for the use of your agreement writer.

This is an e(4) project. It is included in the Gladstone-Milwaukie Subarea TSM project listed on Page 134 of the CRAG TIP.

Please program $7,000 for preliminary engineering at this time.

js

attachments

cc: F.E. Terpin
Metro Technical Services (8)

cc: Program Packet
to Swan 1-15-79

PROJECT [illegible]

81-125-1387

1981 Burnt Hill-Thomas Ck. Sec. 9369
of the Oregon Coast Hwy.
(Grading, Paving & Guard Rail)

9369

STATE COPY

TO BE COMPLETED BY FHWA	U.S. Department of Transportation Federal Highway Administration	Form Approved; O M B No. 04-R2089
MONTHLY TRANSACTION NUMBER 9-12	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	State Oregon
PROJECT REPORT NUMBER		County Curry
MODIFICATION NUMBER 1	8-31-84	Project Number F-2-1(11)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 9, 1981, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,445,271.00	$ 1,238,871.00
Federal funds	$ 1,274,439.00	$ 1,092,436.00
Other revisions		

This modification is made for the following reasons:

To release appn code 010 funds for use on construction contracts.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 31st day of August, 1984.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By Gary L. Potter

Manager, Program Section
(Title)

~~By~~ For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By
(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

FOR: Dale E. Wilken

Form PR-2A
(Rev. 7-83)

Previous editions are obsolete

JAn

OREGON STATE HIGHWAY DIVISION
SALEM, OREGON AUGUST 29, 1984

FEDERAL AID PROJECT NO. F-2-1(11)

Burnt Hill - Thomas Creek
Oregon Coast Highway
Curry County

REVISED PROJECT AGREEMENT ESTIMATE

TYPE CODE 6201
Roadway (M.P. 340.90 to M.P. 347.69)

ITEM	UNIT PRICE	ORIGINAL QUANTITY	ORIGINAL AMOUNT	REVISED QUANTITY	REVISED AMOUNT
Temporary Protection and Direction of Traffic	$ 11,000.00	All Required	$ 11,000.00	--	(P.A. #2)
Price Agreement #2	--	--	--	All Required	$ 10,450.00
Temporary Signs	4.00	545	2,180.00	296	1,184.00
Temporary Barricades	50.00	8	400.00	(Eliminated)	
Pilot Car	14.00	900	12,600.00	253.5	3,549.00
Embankment In Place	6.00	2,000	12,000.00	577.4	3,464.40
Watering	20.00	100	2,000.00	16.4	328.00
Aggregate Shoulders	8.00	5,600	44,800.00	3,737.955	29,903.64
Asphalt Cement in Mixture	207.00	2,110	436,770.00	1,660.571	343,738.20
Asphalt In Tack Coat	207.00	70	14,490.00	57.7	11,943.90
12-inch Culvert Pipe	8.00	1,610	12,880.00	928	7,424.00
Guard Rail Anchors, Type 1	250.00	52	13,000.00	50	12,500.00
SUBTOTALS			$562,120.00		$424,485.14

Decrease	$ 137,634.86
Subtotal from Estimate of October 6, 1984	1,284,685.60
Subtotal	$1,147,050.74
Engineering	91,820.26
Total	$1,238,871.00

Length of Project ---------------------- 6.49 miles
Cost of Roadway per mile --------------- $190,889.21

Federal Funds (88.18%)	$1,092,436.00
State Funds	146,435.00
TOTAL	$1,238,871.00

Group 1: 100%
Contract No. 9369
Prefix: 8-1430
Prefix: 8-1064

WH:me

9369

STATE COPY 4,

TO BE COMPLETED BY FHWA 10 - 103	**U.S. DEPARTMENT OF TRANSPORTATION** **FEDERAL HIGHWAY ADMINISTRATION** **FEDERAL-AID PROJECT AGREEMENT** 10/9/81	STATE Oregon COUNTY Curry PROJECT NO. F-2-1(11)

The State, through its Highway Agency, having complied, or hereby agreeing to comply, with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) the Regulations issued pursuant thereto and, (3) the policies and procedures promulgated by the Federal Highway Administrator relative to the above designated project, and the Federal Highway Administration having authorized certain work to proceed as evidenced by the date entered opposite the specific item of work, Federal funds are obligated for the project not to exceed the amount shown herein, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends only to project costs incurred by the State after the Federal Highway Administration authorization to proceed with the project involving such costs.

PROJECT TERMINI

Burnt Hill-Thomas Creek

PROJECT CLASSIFICATION OR PHASE OF WORK	EFFECTIVE DATE OF AUTHORIZATION	APPROXIMATE LENGTH *(Miles)*
HIGHWAY PLANNING AND RESEARCH (HP & R)		
PRELIMINARY ENGINEERING		
RIGHTS-OF-WAY		
CONSTRUCTION	9-2-81	6.49
OTHER *(Specify)*		

FUNDS PRO RATA 88.18%

ESTIMATED TOTAL COST OF PROJECT $ 1,445,271.00	FEDERAL FUNDS $ 1,274,439.00

The State further stipulates that as a condition to payment of the Federal funds obligated, it accepts and will comply with the applicable provisions set forth on the reverse hereof.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Exec. Asst. to State Hwy. Engr.
(Title)

XXX For; H.S. Coulter

State Highway Engineer
(Title)

By ____________________

____
(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By ____________________
(Division Administrator)

For: Dale E. Wilken

Date executed by Division Administrator OCT 9 1981

FORM PR-2 (REV. 10-75) PREVIOUS EDITIONS ARE OBSOLETE

AGREEMENT PROVISIONS

1. RESPONSIBILITY FOR WORK

a. Except for projects constructed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in compliance with the approved plans and specifications or project proposal which, by reference, are made a part hereof.

b. With regard to projects performed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in accordance with the terms of its approved Certification, or exceptions thereto as may have been approved by the Federal Highway Administration.

2. HIGHWAY PLANNING AND RESEARCH (HP&R) PROJECT. The State highway agency will (a) conduct or cause to be conducted, under its direct control, engineering and economic investigations of projects for future construction, together with highway research necessary in connection therewith, pursuant to the work program approved by the Federal Highway Administration and (b) prepare reports suitable for publication of the result of such investigations and research, but no report will be published without the prior approval of the Federal Highway Administration.

3. PROJECT FOR ADVANCE ACQUISITION OF RIGHTS-OF-WAY. In the event that actual construction of a road on this right-of-way is not undertaken by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

4. PRELIMINARY ENGINEERING PROJECT FOR PREPARATION OF RIGHT-OF-WAY PLANS OR FOR PREPARATION OF CONSTRUCTION PLANS, SPECIFICATIONS AND ESTIMATES. In the event that right-of-way acquisition for, or actual construction of the road for which this preliminary engineering is undertaken is not started by the close of the fifth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

5. INTERSTATE SYSTEM PROJECT. (a) The State highway agency will not add or permit to be added, without the prior approval of the Federal Highway Administration any points of access to, or exit from, the project in addition to those approved in the plans and specifications for the project. (b) The State highway agency will not permit automotive service stations, or other commercial establishments for serving motor vehicle users, to be constructed or located on the right-of-way of the interstate system. (c) The State highway agency will not after June 30, 1968, permit the construction of any portion of the Interstate Route on which this project is located, including spurs and loops, as a toll road without the written concurrence of the Secretary of Transportation or his officially designated representative. The term 'toll road' does not include toll bridges or toll tunnels.

6. PROJECT FOR CONSTRUCTION IN ADVANCE OF APPORTIONMENT. (a) This project authorized pursuant to 23 U.S.C. 115 as amended, will be subject to all procedures and requirements, and conform to the standards applicable to projects on the system on which located, financed with the aid of Federal funds. (b) No obligation of previously apportioned Federal funds is created by this agreement, its purpose and intent being to provide that, upon application by the State highway agency, and approval thereof by the Federal Highway Administration, any Federal-aid funds of the class designated by the project number prefix, apportioned to the State under 23 U.S.C. 104 subsequent to the date of this agreement, may be used to reimburse the State for the Federal share of the cost of work done on the project.

7. STAGE CONSTRUCTION. The State highway agency agrees that all stages of construction necessary to provide the initially planned complete facility, within the limits of this project, will conform to at least the minimum values set by approved AASHTO design standards applicable to this class of highways, even though such additional work is financed without Federal-aid participation..

8. BOND ISSUE PROJECT. Construction, inspection and maintenance of the project will be accomplished in the same manner as for regular Federal-aid projects. No present or immediate obligation is created by this Agreement against Federal funds, its purpose and intent being to provide aid to the State, as authorized by 23 U.S.C. 122, for retiring maturities of the principal indebtednesss of the bonds referred to below. When the State requests Federal reimbursement to aid in the retirement of such bonds, the request will be supported by the appropriate certification required by 23 CFR Part 140, Subpart F, and Volume 1, Chapter 4, Section 8 of the Federal-Aid Highway Program Manual or the alternative State procedure set forth in the State's Certificate, and payment of the authorized Federal share will be made from appropriate funds available. If in any year there is no unobligated balance of any apportioned Federal funds available from which payments hereunder may be made, there will be no obligation on the part of the Federal Government on account of bond maturities for that year. Funds available to the highway agency for this project are the proceeds of bonds issued by the governmental unit indicated on the attached tabulation, pursuant to the authority and in the amounts by date of issue and beginning date of maturities set forth therein.

9. SPECIAL HIGHWAY PLANNING AND RESEARCH PROJECT. The State Highway agency hereby authorizes the Federal Highway Administration to charge the State's pro rata share of costs incurred against funds apportioned to the State under 23 U.S.C. 307 (c), as amended. In the event a project is financed with both Federal-aid funds and State matching funds, the State agrees to advance to The Federal Highway Administration the State matching funds for its share of the estimated cost. For a National Pooled Fund study, the State hereby assigns its responsibility for the work to the Federal Highway Administration. For an Intra-Regional Cooperative Study, the State hereby assigns its responsibility for the work to the lead State for the study.

10. PARKING REGULATION AND TRAFFIC CONTROL. The State highway agency will not permit any changes to be made in the provisions for parking regulations and traffic control as contained in the agreement between the State and the local unit of Government referred to in the paragraph on "Additional Provisions," without the prior approval of the Federal Highway Administration, unless the State determines, and the Division Administrator concurs, that the local unit of Government has a functioning traffic engineering unit with the demonstrated ability to apply and maintain sound traffic operations and control.

Oregon State Highway Division
Salem, Oregon October 6, 1981

Federal Aid Project
No. F-2-1(11)

Burnt Hill-Thomas Creek Section
Oregon Coast Highway
Curry County

PROJECT AGREEMENT ESTIMATE

Type Code 6201
Roadway (M.P. 340.90 to M.P. 347.69)

Furnishing Field Laboratory	1 Each	200.00	$ 200.00
Mobilization		All Required	100,000.00
Temporary Protection and Direction of Traffic		All Required	11,000.00
Temporary Signs	545 Sq. Ft.	4.00	2,180.00
Temporary Barricades	8 Each	50.00	400.00
Flagmen	1,800 Hour	8.00	14,400.00
Pilot Car	900 Hour	14.00	12,600.00
Removal of Structures and Obstructions		All Required	20,000.00
Embankment in Place	2,000 Cu. Yd.	6.00	12,000.00
Watering	100 M-Gal.	20.00	2,000.00
Aggregate Shoulders	5,600 Ton	8.00	44,800.00
Class "B" Asphalt Concrete Mixture	32,500 Ton	9.92	322,400.00
Asphalt Cement in Mixture	2,110 Ton	207.00	436,770.00
Asphalt in Tack Coat	70 Ton	207.00	14,490.00
12-inch Culvert Pipe	1,610 Lin. Ft.	8.00	12,880.00
18-inch Culvert Pipe	150 Lin. Ft.	14.00	2,100.00
Guard Rail, Type 2A	28,563 Lin. Ft.	5.20	148,527.60
Guard Rail, Type 3	50 Lin. Ft.	7.50	375.00
Guard Rail Anchors, Type 1	52 Each	250.00	13,000.00
Guard Rail Anchors, Type 2	12 Each	325.00	3,900.00
Rail End Pieces, Type B	13 Each	35.00	455.00
Rail End Pieces, Type C	38 Each	75.00	2,850.00
Extra for Asphalt Approaches	17 Each	200.00	3,400.00
Drainage Curbs	13,240 Lin. Ft.	1.70	22,508.00
Delineators, Type 2	100 Each	19.00	1,900.00
Delineators, Type 4	100 Each	12.00	1,200.00
Adjusting Inlets	5 Each	500.00	2,500.00
			$1,208,835.60

Anticipated Items

Permanent Pavement Striping	All Required	$ 4,400.00
Temporary Pavement Striping	All Required	1,500.00
Roadside Seeding and Mulching	All Required	250.00
Asphalt Cement Adjustment	All Required	65,000.00
On-the-job Trainees (1-1,000 Hrs. @ .80)	All Required	800.00
Pavement Markers	All Required	3,900.00
		$ 75,850.00
	SUBTOTAL	$1,284,685.60
	Engineering	160,585.40
	TOTAL	$1,445,271.00

Length of Project ------------ 6.49 mi.
Cost of Roadway Per Mile -----$222,691.98

Federal Funds (88.18%)--------$1,274,439.00
State Funds ------------------ 170,832.00
TOTAL FUNDS $1,445,271.00

Group 1-100%: Group 8-0.00%
Contract No. 9369
Prefix: 8-1430
Prefix: 8-1064

Burnt Hill-Thomas Creek
Oregon Coast Highway
Curry County

State Responsibility
(Nonparticipating Items)

State Responsibility for Damages	$ 7,000.00

9369

STATE COPY

US Department of Transportation
Federal Highway Administration

SC

CC: OSHD (Coulter)

FINAL ACCEPTANCE REPORT

8-17-84

REGION NO. 10	REPORT NO. 4	COUNTY Curry	DIVISION Oregon
DATE OF REPORT 8/17/84	REPORT MADE BY W. N. Bryant, Area Engineer W. N. Bryant Area Engineer		PROJECT NO. F-2-1(11)
COMPLETION DATE (Actual) 9-20-82	ACCEPTANCE DATE BY CONRTACT AGENCY 11-2-83	TIME ELAPSED 82 %	CONTRACT TIME 300 CWD

LOCATION

US 101, 7.7 miles N of NCL of Brookings northerly 6.8 miles.

The FHWA-47, Statement of Materials and Labor Used by Contractors on Highway Construction Involving Federal Funds, has been submitted. (Projects over $500,000)
A copy of the State's materials certificate is attached to the Division office copy of this report.
There is compliance with section 1.23 of the Regulations pertaining to encroachments on the right-of-way.

REMARKS: *The project has been completed in reasonably close conformity with the approved plans and specifications including authorized changes and extra work.*

BURNT HILL - THOMAS CREEK SECTION
OREGON COAST HIGHWAY
Grading, Paving, & Guardrail

This project provided for the construction of an asphalt concrete overlay and modernization of guardrail on a 6.8 miles section of the Oregon Coast Highway. A contract in the bid amount of $1,208,835.60 was awarded Tidewater Contractors Inc., Brookings, Oregon on 9-29-81. Work began on 12-31-81 and was completed in reasonable close conformance with the plans and specifications, including approved changes, on 9-20-82 at a final cost of $1,248,606.10 which includes $1,052,962.82 for original bid item work. $36,394.41 for work completed under approved change orders, $7,229.02 for work completed under approved extra work orders, $8,020.00 for State Force work and $144,000.00 for construction engineering.

A satisfactory explanation of all overruns and underruns are attached to the Division Office copy of this report.

NOTED
W. E. SCHWARTZ

RECEIVED
STATE HWY ENGR
AUG 27 '84
REFER TO
Fredrickson
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Cy
8/28

ACCEPTANCE OF PROJECT IS RECOMMENDED		ACCEPTED BY FEDERAL HIGHWAY ADMINISTRATION	
SIGNATURE W. N. Bryant W. N. Bryant Area Engineer		SIGNATURE G. K. Hossner [illegible] Signed By K. HOSSNER Field Operations Engineer	
TITLE Area Engineer	DATE 8/23/84	TITLE Field Operations Engineer	DATE 8/24/84

FORM FHWA 1446B PREVIOUS EDITIONS MAY BE USED

-9369

11-30-83

REPORT OF ACTION UNDER DELEGATED AUTHORITY BY

ASSISTANT STATE HIGHWAY ENGINEER

On behalf of the Commission and under delegated authority, the following contracts were accepted as being completed according to specifications:

Contractor and Contract No.	Section and County	Acceptance Date
Tidewater Contractors, Inc. No. 9369	Burnt Hill-Thomas Cr. Curry County	Nov. 2, 1983
Linnco Electric Co. No. 9595	Corvallis/Newport Hwy. @ 13th St. (Philomath) Benton County	Nov. 4, 1983
Steve Pyles, Gen. Contr. No. 9579	Lakewood Bay (N. Shore Road) Bridge Clackamas County	Nov. 10, 1983
COMCO Const., Ore. Ltd. dba Salem Road & Driveway Co. No. 9511	Emigrant Hill-Meacham Umatilla County	Nov. 28, 1983
Don Haisch Const., Inc. No. 9631	Elgin Section Union County	Nov. 29, 1983
Wildish Corvallis Const. Co. No. 9536	2nd St.-3rd St. Intchge. (Springfield) Lane County	Nov. 29, 1983
Oregon Asphaltic Paving Co. No. 9400	Fariss Rd.-Powell Blvd. (Gresham, Unit 1) Multnomah County	Nov. 29, 1983

November 30, 1983

for W. E. Schwartz, P.E.
Asst. State Highway Engineer

RDC:mk

CPC/FL6

NOTED
H.C.COM LTTR.

RECEIVED
STATE HWY ENGR
DEC 22 '83
REFER TO
FOR
Info Inves R/D D/R Sign Act File

9369

3

November 14, 1983

United Pacific Insurance Co.
Bond Department
33405 8th Ave. So. C-3000
Federal Way, WA 98003

CON 5
#9369

Gentlemen or Ladies:

On November 7, 1983, we wrote to you concerning release of final payment on Contract No. 9369 awarded to Tidewater Contractors, Inc. for work on the Burnt Hill-Thomas Creek Section of the Oregon Coast Highway in Curry County.

Final payment on this contract is $5,000. The total contract amount is $1,096,586.25 including $7,229.02 for work performed under force account.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

kjm

cc: Tidewater Contractors, Inc.
PO Box 1956
Brookings, OR 97415

United Pacific Insurance Co.
PO Box 1788
Eugene, OR 97440

bc: C. T. Keasey
Walt Hart
James J. Gix

9369

B

FORM 734-3001

FIELD ENGINEER'S WEEKLY REPORT

OREGON STATE HIGHWAY DIVISION

FOR CONSTRUCTION PROJECTS ONLY
CONSTRUCTION AND BRIDGE SECTION

SECTION: Burnt Hill - Thomas Creek

WEEK ENDING: December 25, 1982

SECTION PREFIX: 8-1064

HIGHWAY: Oregon Coast

COUNTY: Curry

NAME OF JOB:

KIND OF WORK: Grading, Paving and Guardrail

CONTRACTOR: Tidewater Contractors, Inc.

CONTRACT NUMBER: 9369

FEDERAL AID PROJECT NUMBER: F-2-1(11)

DATE OF CONTRACT: September 19, 1981

DATE WORK STARTED: December 31, 1981

ESTIMATED COMPLETION DATE: September 30, 1982

AVERAGE FORCE ON PROJECT FOR THE WEEK: MEN: 0 SUPERVISION: 0

SPECIFIED WORK DAYS:

WORK DAYS USED:

SPECIFIED CALENDAR DAYS: 300

CALENDAR DAYS USED: 254

SPECIFIED COMPLETION DATE:

PERCENT OF TIME ELAPSED: 85

PROJECT AUTHORIZATION: $ 1,453,146.30

PERCENT OF CONTRACT COMPLETED BASED ON ESTIMATED COST: 100

EXCLUSIVE OF ENGINEERING: $ 1,349,811.54

ENGINEERING AUTHORIZATION: $ 103,334.65

PERCENT OF CONTRACT COMPLETED BASED ON TOTAL AUTHORIZATION: 100

ESTIMATED COST OF COMPLETED PROJECT, EXCLUSIVE OF ENGINEERING: $ 1,105,000.00

ENGINEERING COST TO DATE: $ 137,000.00

DATE PROJECT WAS COMPLETED: September ~~2~~30, 1982

ESTIMATED PERCENT: ~~OVERRUN~~ UNDERRUN 18 %

PERCENT OF AUTHORIZATION: 133 %

ESTIMATED PERCENT COMPLETE (ROADWORK)

CLEARING	DRAINAGE	GRADING	BASE	OIL AND/OR PAVE.	MAT'L. PROD.		
		100	100	100	100		

	GRADING	SURFACING	MAINTENANCE MATERIALS	OIL & BITUMINOUS MACADAM	PAVING
MILES IN PROJECT	6.1				
MILES PARTIALLY COMPLETED	6.1				
MILES COMPLETED	6.1				
TOTAL ESTIMATED QUANTITIES (CONTRACT)	2,000 CY	5,600 T			32,500 T
TOTAL QUANTITIES CORRECTED TO DATE	576	3,730			32,833
ESTIMATED QUANTITIES MOVED OR PLACED TO DATE	576	3,730			32,833
AVERAGE DAILY QUANTITIES					
AVERAGE DAILY QUANTITIES NECESSARY TO COMPLETE PROJECT ON TIME					
NUMBER OF SHIFTS PER DAY					
HOURS PER SHIFT					

EQUIPMENT USED DURING THE WEEK:

None

ESTIMATED PERCENT COMPLETE (STRUCTURES)

BRIDGE NO.								
PERCENT								

	WEATHER	WORK DAYS CHARGED	HOURS DELAY	CAUSE OF DELAY
SUNDAY 19	Rain	0		
MONDAY 20	Rain	0		
TUESDAY 21	Rain	0		
WEDNESDAY 22	Shwers	0		
THURSDAY 23	Showers	0		
FRIDAY 24		0		
SATURDAY 25		0		

RECEIVED
DEC 27 1982
CONSTRUCTION SECTION
CE K
CAE
FOE
OCS
SCS
FEO
OAL
CA
TC
TC
PE
CP

GENERAL DESCRIPTION OF ACTIVITIES FOR THE WEEK

SUNDAY 19	No activity by Contractor this week.
MONDAY 20	
TUESDAY 21	Submitted Semi-final estimate to Region Office
WEDNESDAY 22	
THURSDAY 23	
FRIDAY 24	
SATURDAY 25	

REMARKS

This will be final report for this project.

SIGNED ____ LOCATION Coquille

F.D. Morrison

PRIME RESIDENT SUBMIT 2 COPIES WHEN BRIDGES AND GRADING BOTH ARE INVOLVED. SUBMIT 3 COPIES

SP*F216

FORM E-491 (8-64)

OREGON STATE HIGHWAY DEPARTMENT

BPR FINAL RECORD—DEPTH AND WIDTH TEST

NOTED
W. E. SCHWARTZ

Section Burnt Hill - Thomas Ck County Curry FAP No. F-2-1 (11)
Highway Oregon Coast Contract No. 9369 B P R Representative —
Resident Engineer F. Morrison Date Submitted ______ Submitted by E. Parker

A8 Date	Type of Material	Size of Material	Hwy. Type		Station	Distance in Ft. from ℄		DEPTH		WIDTH		Tested By
			2 Lane	4 Lane		Lt.	Rt.	Specified Inches	In Place Inches	Specified Ft.	In Place Ft.	
8-11	Class B AC	3/4-0	X		853+50		X	1 3/4 T	1 3/4	38'+	38^{0}	R Pope
	"	"	X		853+50	℄		1 3/4 B	2"		38^{0}	R Pope
8-11	"	"	X		800+00		4	1 3/4 T	1 5/8"	38'+	42^{3}	"
"	"	"	X		800+00		4	1 3/4 B	2"		42^{3}	"
9-1-82	"	"	X		661+50*		15^{0}	2½" TOTAL	2½"	39^{-}	39^{0}	M. Kieffer R. Pope
"	"	"	X		713+00	12^{0}		2½"	2¼	38^{0}	37^{2}	"
"	"	"		X	765+50*		24^{0}	2½"	2½"	52^{0}	52^{2}	"
"	"	"	X		898+00*	14^{0}		2½"	2⅜"	38^{0}	37^{2}	"
9-1-82	CLASS B AC	3/4-0	X		963+50*		15^{0}	2½"	2½	38^{0}	37^{2}	M. Kieffer R. Pope

9-10-82

9369

RECEIVED
STATE HWY ENGR
SEP 13 82
REFER TO

ROSEBURG REGION
RECEIVED
SEP 10 1982

RE	RME	RO	ROE	TE
RDE	DES	RSR	RPR	RLF
GEO	FAE	RBI	ATE	M

Remarks: * THESE STATIONS ALSO HAD 1" OF LEVELING

Final Testing Complete

SP*F610

(White) Engineer of Materials; (Blue) Bureau of Public Roads; (Yellow) Construction Division; (Green) Division Engineer; (Pink) Resident Engineer.

9369 9

ROAD DESIGN SECTION DES 16

Edgar Johnsen
Special Studies and Cost Engineer
Construction Branch

January 15, 1982

From: W. G. Beard
Sign Design Supervisor

Subject: Price Agreement No. 2
Burnt Hill-Thomas Creek Section
Oregon Coast Highway
Curry County
Contract No. 9369

1 Versteeg ✓
Anderson
2 Adams
Olson
3 Sullivan
Terpin
Trout
Wakerlig

RECEIVED
JAN 18 1982
ROAD DESIGN SECTION

Do Not File ☐
Return To
Bring ___/___/___
Action

Pursuant to your request for cost justification on the above-named project, we submit the following:

As indicated on the "Work or Change Order Supporting Data" form, this office had telephone conversation with Project Manager Frank Morrison relative to the specification required electrical service for the amber flashers. The difficulty and expense were discussed, as were the alternatives.

Our recommendation was that the contractor be permitted to use the proposed 12 volt power source and that the savings to the State of $550.00 seemed reasonable. The contractor will have the expense of maintaining the wet cell batteries.

WGB:ja

cc Alfred Shirley Jr.
Frank Morrison

bc W. G. Beard

RECEIVED

OREGON DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

WORK OR CHANGE ORDER SUPPORTING DATA

PROJECT NAME (SECTION) Burnt Hill - Thomas Creek		CONTRACT NO. 9369
HIGHWAY Oregon Coast	COUNTY Curry	PREFIX 8-1064
SUBMITTED BY (RESIDENT)	DATE 12/14/81 FOR ☐ REVIEW ☒ APPROVAL	F.A. PROJECT NO. F-2-1(11)
SUBMITTED BY (REGION)	DATE FOR ☐ REVIEW ☐ APPROVAL	TO ACCOMPANY (ORDER TYPE AND NUMB P. A. No. 2

WORK OR CHANGE HAS BEEN DISCUSSED WITH—

Bill Beard BY Telephone ON 12-14-81

James J. Gix BY In Person ON 12-14-81

BY ON

BY ON

WORK OR CHANGE HAS BEEN DISCUSSED AND APPROVAL TO PROCEED OBTAINED FROM—

James J. Gix, Region Const . ngr. BY In Person ON 12-14-81

BY ON

BY ON

FEDERAL HIGHWAY TENTATIVE APPROVAL OBTAINED FROM— SUBSTANTIAL CHANGE— ☐ YES; ☐ NO

BY ON

COST ESTIMATE, FORM 734-1877 IS ATTACHED— ☐ YES; ☐ NO; ☐ NOT APPROPRIATE

COSTS HAVE BEEN DISCUSSED WITH (Construction Cost Unit or Technical Services Section)—

BY ON

ORAL APPROVAL OF COSTS OBTAINED FROM (Construction Cost Unit or Technical Services Section)—

Bill Beard BY Telephone ON 12-15-81

NET EFFECT OF ORDER ON PROJECT	PROJECT AUTHORIZATION	ESTIMATE PROJECT COST WITH ORDER	OVERRUN
~~INCREASE~~ DECREASE $ -550.00	$ 1,453,146.30	$ 1,453,146.30	None

ADDITIONAL INFORMATION THAT IS NOT INCLUDED ON ORDER (Additional Description; Who Requested; Why Necessary; Why Cost is no Contrac Responsibility; Parties other than State or FHWA that will Share the Cost; Estimated Starting Date or Date Work Started; Emergency Work Prior to Approv Estimated Effect on Project Time; Significant Discussions; References to Supporting and/or Attached Documents)—

After the contract was let, the contractor was advised that he would have to use the specified 110-120 volt amber flashers. The contractor approached the local power co. and requested power drops. They informed the contractor that he would have to get eas ments and have the lines installed to their specifications. I advised the contractor contact the projerty owners and get power from them. The contractor attempted to get power from the property owners who had power, but ran into trouble getting permission cross property adjacent to the highway R/W as the property is owned by absentee owners and is not developed. With these problems, the contractor offered a price reduction t use 12-volt amber flashers. The estimated starting date will be in January, 1982. The contractor claims this leg work cost him two weeks, but we were not charging time to the contract as the day count stopped on November 30, 1981 and is not to start up until March 1, 1982.

The contractor states that the flashers will be checked daily and serviced as needed t assure the continuous operation of the system.

I am attaching a letter from the contractor and a copy of a letter to the contractor b Coos Curry Electric Cooperative, Inc.

Power sources in this area are a problem, the closest power source is over 1000 feet from the States R/W and the property between the highway and the nearest home is undeveloped.

☐ CONTINUED ON ADDITIONAL SHEET(S)

734-1882 (11-81)

Submit Original to Construction Branch

1-P

Price Agreement

APPLYING TO EXTRA WORK AND EXTRA MATERIAL

OREGON STATE HIGHWAY DIVISION

Project Name Brnt Hill - Thomas Creek

Date 12-28, 19 8

Highway Oregon Coast

Contract No. 9369

County Curry

Prefix 8-1064

Contractor Tidewater Contractors, Inc.

F. A. Project No. F-2-1(11)

Address P. O. Box 1956, Brookings, Oregon 97415

Price Agreement No. 2

For the below described extra work or extra material to be performed or furnished under the contract above referred to, the contractor agrees to accept payment at the prices given herein, understanding that, except as herein otherwise provided, the work is to be performed and the material is to be furnished in accordance with the specifications which form a part of the contract and in accordance with the instructions of the engineer.

Work to be done: Replace 110-120 Volt Amber Flashers with 12-volt Amber Flashers, Model 1774 Super Light.

Locations by station numbers:
1,000 feet in advance of each end of the project facing incomming traffic.

Names of pay items, estimated quantities and agreed prices:

Reduce Bid Item No. 3 - Temporary Protection and Direction of Traffic from $11,000.00 to $10,450.00.

Specifications, basis of measurement and other provisions: Standard Specifications for Highway Construction 1974 are to apply, more particularly Section 111.11 (1). The Special Provisions call for 110 - 120 Volt Amber Flashers. Commercial power is available, approximately 1,000 feet from the Hwy. R/W line but the adjoining property is owned by absentee owners. Attempts to contact them have been unsuccessful. Under these circumstances, the contractor offered 12 volt flashers at a reduced price. Measurement & payment will be Lump Sum.

INSTRUCTIONS

After the signature of the contractor has been obtained, submit six copies (including original copy) to the Salem Office. After approval by the Assistant State Highway Engineer, approved copies will be sent to the Contractor, the Regional Engineer, and the Resident Engineer.

This order does not constitute authority for expenditure until approved by the Assistant State Highway Engineer or State Highway Engineer.

Project authorization	$1,453,146.30	
Present estimate of project cost, including $ - 550.00 for work under this order	$1,453,146.30	
Expected under-run over-run (amount)	$ None	
Expected under-run over-run (per cent)	None	

Space to right of this line is for use of Salem Office

Signed Jess Fitzhugh President
Contractor

Submitted by:
Project Manager XXXXXXXXXX

Approval Recommended:
Division Engineer

Approval Recommended:
Construction Engineer or Bridge Engineer

Approved:
Deputy State Highway Engineer
Assistant State Highway Engineer or Office Engineer

SP*70656-734
Form 734-1169 (Rev. 3-79)

9369 9

STATE OF OREGON

Highway - Traffic

INTEROFFICE MEMO

LOC 3

TO: J. H. Versteeg
Road Design Engineer

DATE: October 5, 1981

FROM: L. E. George
Traffic Engineer

SUBJECT: Bicycle Lanes
Burnt Hill-Thomas Creek Section
Oregon Coast Highway No. 9
M.P. 340.90 to M.P. 347.69

The bicycle lanes requested on the Burnt Hill-Thomas Creek Section by Donald Shaffer's letter of September 14, 1981 have been reviewed by the Traffic Engineering Section. This office has no objections to the signing and striping of the bicycle lanes.

The project has gone to bid already so the striping and signing could wait until the contractor is finished with his portion of the work. According to the plans we received, there is no permanent signing on the project. Two State Force Orders may be all that is necessary to create the bike lanes.

L E George
L. E. George
Traffic Engineer

OG:ds

1 Versteeg ✓
Anderson
3 Christensen
2 Olson
4 Sullivan
Terpin
1 Trout
Wakerlig

RECEIVED
OCT 7 1981
ROAD DESIGN SECTION

Do Not File ☐
Return To
Bring Up / /
Action

9369

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

9-2-81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. F-2-1(11)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Curry

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 10173

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 9/2/81

8. FEDERAL ROUTE NUMBER Primary 2

9. STATE ROUTE NUMBER Primary 9

10. GENERAL LOCATION:
Burnt Hill - Thomas Creek Section

11. GENERAL DESCRIPTION OF WORK
High type pavement

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☒ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)*
Permenent Pavement Striping and Markers
S. F. $8,300
Roadside Seeding and Mulching S.F $250
Asphalt Cement Adjustment $65,000

13. REMARKS

After concurrence in award you are authorized to proceed with those items listed above as shown in your Estimate.

Mr. Swan's August 31, 1981 request and certifying statements are accepted.

PS&E documents for the subject project have been reviewed and are approved at a total estimated cost of $1,837,458 Federal Funds $1,620,270.

A signed copy of the Title Sheet is returned herewith.

(This is a 20% limitation project)

Orig w/att.
9-3-81

RECEIVED
STATE HWY ENGR
SEP 3 '81
REFER TO
Mailing
FOR

14. DATE 9/2/81

15. SIGNATURE OF APPROVING OFFICIAL G. K.

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9369

9

ENVIRONMENTAL REVIEW CHECKLIST

ALL CLEAR 7/28/81
Donald L [illegible]

1/2

Sept. 3, 1981 Bid Letting ________ All Clear Deadline

SECTION Burnt Hill-Thomas Creek
Highway Oregon Coast
County ________ Region ________
Type of Work Overlay-Gr Funds FA
State ___ Consultant ___ Plans Avail. ___ Yes ___ No

DOCUMENTS:	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR	2 Exc
EIS	☒	☐	☐	☐	☐	
Negative Declaration	☒	☐	☐	☐	☐	
Project Assessment	☒	☐	☐	☐	☐	
Write-off Letter	☒	☐	☐	☐	☐	

PERMITS:	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR	
Division of State Lands	☒	☐	☐	☐	☐	
D.O.G.M.I.	☒	☐	☐	☐	☐	
Corps of Engineers	☒	☐	☐	☐	☐	
Coast Guard	☒	☐	☐	☐	☐	
Co. Conditional Use	☒	☐	☐	☐	☐	
NPS Air Pollution	☒	☐	☐	☐	☐	
NPS Water Pollution	☒	☐	☐	☐	☐	
	☐	☐	☐	☐	☐	
	☐	☐	☐	☐	☐	

CULTURAL:	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR	
Cultural Survey	☐	☒	☐	☐	☒	
Cultural Salvage	☒	☐	☐	☐	☐	

NOISE:	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR	
Noise Study	☒	☐	☐	☐	☐	

9369

L

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

July 15, 1981

In Reply Refer to
File No.:

RECEIVED
STATE HWY ENGR
JUL 15 '81
REFER TO
FOR

Mr. Dale E. Wilken
Division Administrator
Federal Highway Administration
The Equitable Center, Suite 100
530 Center Street N.E.
Salem, OR 97301

Attention: Glenn K. Hossner

Dear Sir:

Burnt Hill-Thomas Creek Section
Oregon Coast Highway (M.P. 340.90-347.69)
Curry County

The purpose of this Federal Aid project is to extend the roadway service life, restore the pavement section and surface skid resistance with a 2½-inch Class "B" asphaltic concrete overlay. This section is 6.79 miles in length and has a daily traffic count of 2,400.

The present roadway horizontal alignment generally has curves of 6 degrees or less, except for 8 degree curves at M.P. 346.86 and M.P. 347.01. The vertical alignment has a maximum grade of 6 per cent. The lane widths are 11 feet and shoulder widths four feet adjacent to climbing lanes and eight feet elsewhere. Operating speeds with optimum conditions are presently in the 50 to 55 M.P.H. range.

The proposed construction will not change the horizontal or vertical alignment, present operating speeds or existing roadway width. It is proposed to change the 11-foot travel lane and eight-foot shoulder widths to 12 and seven. The typical section varies from two lanes to two lanes with climbing lane. The total length of the two-lane section is 4.34 miles and three-lane section is 2.45 miles.

The typical sections proposed are compatible with adjacent sections of the highway and will adequately serve the traveling public for the foreseeable future.

There is about 28,000 feet of guardrail on the project, on 12-foot six-inch spacing and not blocked. We will upgrade the guardrail to current standards, adding blocks and guardrail flares (four-foot minimum offset) with anchors and end pieces.

NOTED
H.S. COULTER

7/16
EdA

Form 734-3122

This letter is submitted as documentation on the exception to minimum design criteria as set forth in the "Geometric Design Standards for Highways Other Than Freeways, AASHTO 1969".

This project is presently sechduled for the August 20, 1981 contract letting.

Very truly yours,

J. H. Versteeg
Road Design Engineer

Lyle Watson
by
Lyle Watson
Acting Final Design Engineer

LW:ge

bc H. S. Coulter
E. S. Hunter
D. H. Moehring
F. E. Terpin
Alfred Shirley
Fred Eriksen

9369

L.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.: PRO 6-2

July 14, 1981

TO: Dale E. Wilken
Division Administrator
Federal Highway Administration

Original Signed By
D. E. Swan

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 10173
Project No. F-2-1 (11)
Burnt Hill-Thomas Creek Section
Curry County

Attached support data consists of PR-1 forms and project maps for the subject project.

This project is expected to be funded from the 20% of the FY'81 limitation withheld from distribution until after August 1.

JLG/lms
Attachments

cc: Alfred Shirley, Jr. (Region 3)
General Files

Form 734-3122

No 9

STATE OF OREGON

INTEROFFICE MEMO

TO: D. O. Christensen
Acting Road Design Engineer

DATE: June 11, 1981 CON 19-1

FROM: J. E. Backstrand
Supervising Structural Design Engineer

SUBJECT: Thomas Creek Bridge
M.P. 340.90 to M.P. 347.65
Burnt Hill-Thomas Creek Section
Oregon Coast Highway
Curry County

Versteeg DO
Anderson JW
1 Chri
cy Sullivan
RECE
JUN 12 1981
ROAD DESIG
S

No work on the deck of the Thomas Creek Bridge is anticipated. No overlay should be allowed to run onto the bridge deck.

JEB:jrb

cc: C. T. Keasey
Alfred Shirley, Jr.
Jack Sullivan

REFERRED TO
Beard Stoudenmeyer
Cole Mann
I Eriksen F.E. Watson
Hager Dorn Leu
[✓ Return] Discuss Do File Copy Due
BY FINAL DESIGN ENGINEER

Versteeg
Anderson
Chris
Sullivan
RECEIVED
JUN 16 1981
ROAD DESIGN

Contains Recycled Materials
81-125-1387

SP*75683-125

9369

No. 9

ROAD DESIGN SECTION

Leonard L. Wallace
Asst. Bridge Engineer

June 10, 1981

Fred Eriksen
Fred Eriksen
Design Engineer Supervisor

M.P. 340-90 to M.P. 347.65
Burnt Hill-Thomas Creek Section
Oregon Coast Highway
Curry County

We are preparing contract plans for an asphalt concrete pavement overlay project on this section. The overlay thickness will be about 3 inches.

The south end of the project is at Thomas Creek Bridge, a 30'-0" roadway, 956-foot long structure. The Region has recommended the overlay be tapered to zero thickness at the bridge end.

Please review and give us your recommendation for handling the overlay at the structure.

FE:ja

cc Alfred Shirley
Bob Gettis

1 Versteeg
Anderson
2 Christensen
Olson
Sullivan
Terpin
Trout
Wakerlig

RECEIVED
JUN 10 1981
ROAD DESIGN
SECTION

Do Not File ☐
Return To
Bring Up __/__/__
Action

DATE: June 3, 1981 PRO

TO: OREGON TRANSPORTATION COMMISSION

FROM: H.S. Coulter
State Highway Engineer

SUBJECT: Finance Approval
5 Overlay Projects

On the consent calendar for the June 18 meeting will be a request to add 5 overlay projects to our construction program:

1. Reedsport - Dean Creek Section, Umpqua Highway, Douglas County, estimated cost $1,773,000.

2. Golf Club Rd. - E. Stayton Interchange Section, N. Santiam Highway, Marion County, estimated cost $1,521,000.

3. Weston - Weston Mountain Section, Weston-Elgin Highway, Umatilla County, estimated cost $2,217,000.

4. Burnt Hill - Thomas Creek Section, Oregon Coast Highway, Curry County, estimated cost $2,869,000.

5. Geary Ranch - Green Springs Interchange Section, Lake of the Woods Highway, Klamath County, estimated cost $2,090,000.

These projects, for the most part, are fairly high on the current State priority listing. They are needed to fill out our obligation request to the FHWA for the "20%" money that will become available August 1st.

NOTED
W. H. TENEAU

M

Dml

The total estimated cost of $10,470,000 would be financed from Federal Aid Primary funds with State match of $1,238,000. I recommend your approval and request authorization to sign the necessary agreements for and on your behalf.

KO:bkc

bc: F.B. Klaboe
R.W. Gormsen
D.G. Talbot
E.S. Hunter
R.N. Bothman
D.H. Moehring
C.T. Keasey
M.J. Hart
J.H. Versteeg
V.E. Skoog
E.L. Johnsen
Carl Nelson

225 RESURF

OREGON STATE HIGHWAY DIVISION
PROJECT REQUEST

Date: March 17, 1981

A. IDENTIFICATION:

Proposed Section: Burnt Hill - Thomas Creek Region: 3
Highway: Oregon Coast St. Hwy. No. 9 M.P. 340.9 to M.P. 347.8 Length: 6.9 mi.
County(s): Curry (Attach Sketch Map)
Recommended Construction Date: ____ Proposed 6 YP ____
Method of Doing Work: Contract X St. Force ____ Other ____

B. FINANCING

	Section		Year	Funds Available
Postpone ☐		Current 6 YP		
		Recommend		
Cancel ☐		Current 6 YP		
		Recommend		

If not one of the above - Recommended Financing: ____

FAI ☐ , FAP ☒ , FAS ☐ , ST. CONST. ☐ , OTHER ☐ ____

C. ROADWAY & TRAFFIC

	Width				Structures		Extg. Traffic (Year 1979)		Proj. Traffic (Year)	
	No. Lanes	Pvmt.	Shldrs.	Walks	No.	Tot. Lng.	ADT	Service Level	ADT	Service Level
Existing Facility:	2	24'	7'				2,400	C		
Proposed Facility:	2	24'	7'							

D. DEFINE THE PROBLEM: Deteriorated pavement.

E. PROPOSED SOLUTION: Overlay with A.C.

F. REASON FOR REQUEST AT THIS TIME: Consideration for inclusion in Six-Year Plan update so highway will be preserved.

G. COST ESTIMATE

Roadway Work	$ 2,819,000
R/W (Approx: No. of Parcels ____, Acres ____, Any Reloc. ____).	N/A
Structures	N/A
Other (Define) ____	N/A
Preliminary Engineering (By Whom) State	50,000
TOTAL	$ 2,869,000

H. REQUESTED BY: Alfred Sherly Jr
Region Engineer or Section Head

Approval/~~Disapproval~~ ____ 6/4/81
State Highway Engineer Date

Remarks & Action Taken:
For Development

Approval/Disapproval ____
Asst. Director for Operations Date

Oregon Transportation Commission

Approval Date ____

Form 734-1386 (3-78)

1981 Reedsport-Dean Ck. Sec. of 9370
the Umpqua Hwy.
(Paving)

9370

r11

cc: OSHD (Coult

STATE COPY

U.S. DEPARTMENT OF TRANSPORTATION
FEDE . HIGHWAY ADMINISTRATION

FINAL ACCEPTANCE REPORT

4-25-83

REGION NO. 10	REPORT NO. 2	COUNTY Douglas	DIVISION Oregon
DATE OF REPORT 4/25/83	REPORT MADE BY W. N. Bryant, Area Engineer		PROJECT NO. F-20(7)
COMPLETION DATE 7/26/82	ACCEPTANCE DATE BY CONTRACT AGENCY 12/22/82	TIME ELAPSED 67 %	CONTRACT TIME 275 calendar days
APPROVED EXTENSIONS NONE	LOCATION SR-38, Water Ave. (Reedsport), E. 5.16 mi.		

*The PR-47, Statement of Materials and Labor Used by Contractors on Highway Construction Involving Federal Funds, has been submitted.

*A copy of the State's materials certificate is attached to the Division office copy of this report.
There is compliance with section 1.23 of the Regulations pertaining to encroachments on the right-of-way.

REMARKS: *The project has been completed in reasonably close conformity with the approved plans and specifications including authorized changes and extra work.*

RECEIVED
STATE HWY E
MAY 2 '83
REFER TO
Keasey
cy
5/3
FOR

Info	Inves	R/D	D/R	Sign	Act	File

REEDSPORT - DEAN CREEK
UMPQUA HIGHWAY
Paving

This project provided for the construction of a four inch thick asphaltic concrete pavement and the upgrading of guardrail on a 5.16 mile section of the Umpqua Highway.

A contract in the amount of $1,019,138.95 was awarded Angell Asphalt and Aggregate Inc., Eastside, Oregon on 9/29/81. Work began on 3/8/82 and was completed in reasonable close conformance with the approved plans and specifications, including approved changes, on 7/26/83 at a final cost of $1,270,588.38 which includes $1,148,678.93 for bid items, $610.75 for price agreements, $15,716.09 force account work, $5,382,61 for State force orders, and $100,200 for engineering.

NOTED
W. E. SCHWART

Project records indicate that all materials incorporated into the completed work were tested and found to be in reasonable close conformance with specification requirements.

*NOTE: Not applicable for direct federal projects.

ACCEPTANCE OF PROJECT IS RECOMMENDED		ACCEPTED BY FEDERAL HIGHWAY ADMINISTRATION	
SIGNATURE W. N. Bryant W. N. Bryant Area Engineer		SIGNATURE G. K. Hossner Original Signed By G. K. HOSSNER Field Operations Engineer	
TITLE Area Engineer	DATE 4/25/83	TITLE Field Operations Engineer	DATE 4/29/83

FORM FHWA-1446 B (12-73) FORMERLY PR-33E

Previous Editions of PR-33E Will Not Be Used.

9370

STATE COPY B

TO BE COMPLETED BY FHWA

MONTHLY TRANSACTION NUMBER 2-76

PROJECT REPORT NUMBER

MODIFICATION NUMBER 2

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT

2-11-83

State: Oregon

County: Douglas

Project Number: F-20(7)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 9, 19 81, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,265,581	$ 1,270,869
Federal funds	$ 1,115,989	$ 1,120,652'
Other revisions		

This modification is made for the following reasons: to include increase in construction costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 11 th day of February, 19 83.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By D Swan

Acting Program Section Manager
(Title)

XXXX By For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen. File

Oregon State Highway Division
Salem, Oregon February 3, 1983

Federal-Aid Project
No. F-20(7)

Reedsport-Dean Creek Section
Umpqua Highway
Douglas County

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6201
Roadway (M.P. 0.55 to M.P. 5.71)

Subtotal of previous estimate of October 5, 1981 $1,130,238.95

Previous Estimate

Flagman	1,250 Hr.	22.50	$ 28,125.00
			$ 28,125.00

Revised Estimate

Flagman	1,485 Hr.	22.50	$ 33,412.50
			$ 33,412.50

Increase	$ 5,287.50
SUBTOTAL	$1,135,526.45
Engineering	135,342.55
TOTAL	$1,270,869.00

Length of Roadway ------------- 5.16 miles
Cost of Roadway Per Mile-------$246,292.44

Federal Funds -----------------$1,120,652.00
State Funds ------------------- 150,217.00
TOTAL $1,270,869.00

Group 1 100%
Contract No. 9370
Prefix: 10-1007

1370

STATE COPY

P

TO BE COMPLETED BY FHWA MONTHLY TRANSACTION NUMBER 10-197	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION 10-25-82	State OREGON
PROJECT REPORT NUMBER	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	County Douglas
MODIFICATION NUMBER 1		Project Number F-20(7)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 9, 1981, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,218,081	$ 1,265,581
Federal funds	$ 1,074,103	$ 1,115,989
Other revisions		

This modification is made for the following reasons: To include increase in construction costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 25th day of October, 1982.

Oregon State Highway Division
(Official name of Highway Agency)

By

Program Management Engineer
(Title)

~~By~~ FOR: H. S. Coulter

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

FOR: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen File

Oregon State Highway Division
Salem, Oregon

Federal-Aid Project
No. F-20(7)

Reedsport-Dean Creek Section
Umpqua Highway
Douglas County

Revised Project Agreement Estimate

Type Code 6201
Roadway (M.P. 0.55 to M.P. 5.71)

Subtotal of previous estimate of October 5, 1981			$1,082,738.95
Previous Estimate			
Asphalt Cement in Mixture	1,720 Ton	190.00	326,800.00
			326,800.00
Revised Estimate			
Alphalt Cement in Mixture	1,970 Ton	190.00	374,300.00
			374,300.00
		Increase	47,500.00
		Subtotal	$1,130,238.95
		Engineering	135,342.05
		Total	$1,265,581.00

Length of Roadway	5.16 miles
Cost of Roadway per mile	$ 245,267.64
Federal Funds	$1,115,989.00
State Funds	149,592.00
Total	$1,265,581.00

Group 1	100%
Contract No.	9370
Prefix	10-1007

9310

STATE COPY ~~DIVISION FILE COPY~~

TO BE COMPLETED BY FHWA 10 - 102	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL-AID PROJECT AGREEMENT 10/9/81	STATE Oregon COUNTY Douglas PROJECT NO. F-20(7)

The State, through its Highway Agency, having complied, or hereby agreeing to comply, with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) the Regulations issued pursuant thereto and, (3) the policies and procedures promulgated by the Federal Highway Administrator relative to the above designated project, and the Federal Highway Administration having authorized certain work to proceed as evidenced by the date entered opposite the specific item of work, Federal funds are obligated for the project not to exceed the amount shown herein, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends only to project costs incurred by the State after the Federal Highway Administration authorization to proceed with the project involving such costs.

PROJECT TERMINI

Reedsport - Dean Creek

PROJECT CLASSIFICATION OR PHASE OF WORK	EFFECTIVE DATE OF AUTHORIZATION	APPROXIMATE LENGTH *(Miles)*
HIGHWAY PLANNING AND RESEARCH (HP & R)		
PRELIMINARY ENGINEERING		
RIGHTS-OF-WAY		
CONSTRUCTION	9-2-81	5.16

OTHER *(Specify)*

FUNDS PRO RATA 88.18%

ESTIMATED TOTAL COST OF PROJECT $ 1,218,081.00	FEDERAL FUNDS $ 1,074,103.00

The State further stipulates that as a condition to payment of the Federal funds obligated, it accepts and will comply with the applicable provisions set forth on the reverse hereof.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Exec. Asst. to State Hwy. Engr.
(Title)

XBy For: H.S. Coulter

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Date executed by Division Administrator OCT 8 1981

FORM PR-2 (REV. 10-75) PREVIOUS EDITIONS ARE OBSOLETE

AGREEMENT PROVISIONS

1. RESPONSIBILITY FOR WORK

a. Except for projects constructed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in compliance with the approved plans and specifications or project proposal which, by reference, are made a part hereof.

b. With regard to projects performed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in accordance with the terms of its approved Certification, or exceptions thereto as may have been approved by the Federal Highway Administration.

2. HIGHWAY PLANNING AND RESEARCH (HP&R) PROJECT. The State highway agency will (a) conduct or cause to be conducted, under its direct control, engineering and economic investigations of projects for future construction, together with highway research necessary in connection therewith, pursuant to the work program approved by the Federal Highway Administration and (b) prepare reports suitable for publication of the result of such investigations and research, but no report will be published without the prior approval of the Federal Highway Administration.

3. PROJECT FOR ADVANCE ACQUISITION OF RIGHTS-OF-WAY. In the event that actual construction of a road on this right-of-way is not undertaken by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

4. PRELIMINARY ENGINEERING PROJECT FOR PREPARATION OF RIGHT-OF-WAY PLANS OR FOR PREPARATION OF CONSTRUCTION PLANS, SPECIFICATIONS AND ESTIMATES. In the event that right-of-way acquisition for, or actual construction of the road for which this preliminary engineering is undertaken is not started by the close of the fifth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

5. INTERSTATE SYSTEM PROJECT. (a) The State highway agency will not add or permit to be added, without the prior approval of the Federal Highway Administration any points of access to, or exit from, the project in addition to those approved in the plans and specifications for the project. (b) The State highway agency will not permit automotive service stations, or other commercial establishments for serving motor vehicle users, to be constructed or located on the right-of-way of the interstate system. (c) The State highway agency will not after June 30, 1968, permit the construction of any portion of the Interstate Route on which this project is located, including spurs and loops, as a toll road without the written concurrence of the Secretary of Transportation or his officially designated representative. The term 'toll road' does not include toll bridges or toll tunnels.

6. PROJECT FOR CONSTRUCTION IN ADVANCE OF APPORTIONMENT. (a) This project authorized pursuant to 23 U.S.C. 115 as amended, will be subject to all procedures and requirements, and conform to the standards applicable to projects on the system on which located, financed with the aid of Federal funds. (b) No obligation of previously apportioned Federal funds is created by this agreement, its purpose and intent being to provide that, upon application by the State highway agency, and approval thereof by the Federal Highway Administration, any Federal-aid funds of the class designated by the project number prefix, apportioned to the State under 23 U.S.C. 104 subsequent to the date of this agreement, may be used to reimburse the State for the Federal share of the cost of work done on the project.

7. STAGE CONSTRUCTION. The State highway agency agrees that all stages of construction necessary to provide the initially planned complete facility, within the limits of this project, will conform to at least the minimum values set by approved AASHTO design standards applicable to this class of highways, even though such additional work is financed without Federal-aid participation..

8. BOND ISSUE PROJECT. Construction, inspection and maintenance of the project will be accomplished in the same manner as for regular Federal-aid projects. No present or immediate obligation is created by this Agreement against Federal funds, its purpose and intent being to provide aid to the State, as authorized by 23 U.S.C. 122, for retiring maturities of the principal indebtednesss of the bonds referred to below. When the State requests Federal reimbursement to aid in the retirement of such bonds, the request will be supported by the appropriate certification required by 23 CFR Part 140, Subpart F, and Volume 1, Chapter 4, Section 8 of the Federal-Aid Highway Program Manual or the alternative State procedure set forth in the State's Certificate, and payment of the authorized Federal share will be made from appropriate funds available. If in any year there is no unobligated balance of any apportioned Federal funds available from which payments hereunder may be made, there will be no obligation on the part of the Federal Government on account of bond maturities for that year. Funds available to the highway agency for this project are the proceeds of bonds issued by the governmental unit indicated on the attached tabulation, pursuant to the authority and in the amounts by date of issue and beginning date of maturities set forth therein.

9. SPECIAL HIGHWAY PLANNING AND RESEARCH PROJECT. The State Highway agency hereby authorizes the Federal Highway Administration to charge the State's pro rata share of costs incurred against funds apportioned to the State under 23 U.S.C. 307 (c), as amended. In the event a project is financed with both Federal-aid funds and State matching funds, the State agrees to advance to The Federal Highway Administration the State matching funds for its share of the estimated cost. For a National Pooled Fund study, the State hereby assigns its responsibility for the work to the Federal Highway Administration. For an Intra-Regional Cooperative Study, the State hereby assigns its responsibility for the work to the lead State for the study.

10. PARKING REGULATION AND TRAFFIC CONTROL. The State highway agency will not permit any changes to be made in the provisions for parking regulations and traffic control as contained in the agreement between the State and the local unit of Government referred to in the paragraph on "Additional Provisions," without the prior approval of the Federal Highway Administration, unless the State determines, and the Division Administrator concurs, that the local unit of Government has a functioning traffic engineering unit with the demonstrated ability to apply and maintain sound traffic operations and control.

Oregon State Highway Division
Salem, Oregon October 5, 1981

Federal Aid Project
No. F-20(7)

Reedsport - Dean Creek Section
Umpqua Highway
Douglas County

PROJECT AGREEMENT ESTIMATE

Type Code 6201
Roadway (M.P. 0.55 to M.P. 5.71)

Furnishing Field Laboratory	1 Each	1,500.00	$ 1,500.00
Mobilization		All Required	85,717.45
Temporary Protection and Direction of Traffic		All Required	6,000.00
Temporary Signs	292 Sq. Ft.	4.50	1,314.00
Temporary Barricades	2 Each	90.00	180.00
Flagmen	1,250 Hour	22.50	28,125.00
Pilot Car	250 Hour	25.00	6,250.00
Removal of Structures and Obstructions		All Required	6,000.00
Embankment in Place	400 Cu. Yd.	8.00	3,200.00
Watering	80 M-Gal.	12.00	960.00
Aggregate Shoulders	6,850 Ton	6.90	47,265.00
Class "B" Asphalt Concrete Mixture	30,135 Ton	10.00	301,350.00
Asphalt Cement in Mixture	1,720 Ton	190.00	326,800.00
Asphalt Tack Coat	60 Ton	280.00	16,800.00
Guard Rail, Type 2A	19,350 Lin. Ft.	9.00	174,150.00
Extra for 9-Foot Posts	232 Each	10.00	2,320.00
Guard Rail Anchors, Type 1	15 Each	2.50	37.50
Guard Rail Anchors, Type 2	2 Each	300.00	600.00
Rail End Piece, Type B	4 Each	50.00	200.00
Rail End Pieces, Type C	12 Each	70.00	840.00
Extra for Asphalt Approaches	14 Each	200.00	2,800.00
Drainage Curbs	1,460 Lin. Ft.	1.75	2,555.00
Delineators, Type 2	90 Each	25.00	2,250.00
Delineators, Type 3	15 Each	25.00	375.00
Delineators, Type 4	50 Each	15.00	750.00
Adjusting Inlets	4 Each	200.00	800.00
			$1,019,138.95

Anticpated Items		
Permanent Pavement Striping	All Required	$ 4,300.00
Temporary Pavement Striping	All Required	1,500.00
Asphalt Cement Adjustment	All Required	54,000.00
On-the-Job Trainees (1000 hr. X $0.80)	All Required	800.00
		$ 63,600.00
	SUBTOTAL	$1,082,738.95
	Engineering	135,342.05
	TOTAL	$1,218,081.00

Length of Roadway ------------- 5.16 miles
Cost of Roadway Per Mile ------$236,062.20

Federal Funds (88.18%)---------	$1,074,103.00
State Funds ------------------	143,978.00
TOTAL FUNDS	$1,218,081.00

Group 1	100%	
Contract No.	9370	
Prefix	10-1402	(PE)
Prefix	10-1007	(Constr.)

Reedsport - Dean Creek Section
Umpqua Highway
Douglas County

State Responsibility (Nonparticipating Items)

State Responsibility for Damages	All Required	$	2,500.00

9370

B

bc: Secretary of State - Please advise us of your filing number and date of the attached claim on the enclosed copy of the letter. The claim was filed directly by AGC.

January 21, 1983

AGC-Operating Engineers Trust Funds
P. O. Box 4668
Portland, OR 97208

CON 5
#9370

Attention: Barbara J. Winchester
Delinquency Coordinator

Gentlemen or Ladies:

This will acknowledge a copy of a letter addressed to United Pacific/Reliance Insurance Companies dated January 4, 1983, with attached Notice of Claim concerning the following Highway Division contract:

FILED BY:	AGC-Operating Engineers Local 701 Trust Funds
AMOUNT:	$11,104.51 together with liquidated damages of $1,113 plus interest
FOR:	Fringe benefits due employees of Angell Asphalt & Aggregate, Inc.
AGAINST (Prime Contractor)	Angell Asphalt & Aggregate, Inc.
CONTRACT NO.	9370
PROJECT:	Reedsport-Dean Creek Section, Umpqua Highway, Douglas County
SURETY:	United Pacific Insurance Co.
AGENT:	Hilary L. Kennedy

We note that you have advised the contractor of this claim and filed it with the Secretary of State.

Please advise this office when the claim has been paid.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

NOTED
1/21/83 JS

FKN:js
cc: Angell Asphalt & Aggregate, Inc.
P. O. Box 4318
Eastside, OR 97420
United Pacific Insurance Co., 921 S.W. Washington, #333, Portland, OR 97205
United Pacific Insurance Co., 33405 8th Ave. So. C-3000, Federal Way, WA 98003

AGC-OPERATING ENGINEERS TRUST FUNDS
ADMINISTERED BY: ASSOCIATED ADMINISTRATORS, INC.
GARY HARRISON, ADMINISTRATOR

CERTIFIED MAIL RRR#P 336 011 648

January 4, 1983

United Pacific/Reliance Insurance Companies
33405 8th Ave. S. C-3000
Federal Way, Wash. 98003

Re: Project: OSHD #9370, Reedsport-Dean Creek Section:
Umpqua Hwy, Douglas County, Oregon
General: Angell Asphalt & Aggregate, Inc.
Surety: United Pacific/Reliance Insurance Companies

Gentlemen:

Enclosed you will find a Notice of Claim regarding the above project. Copies of the Claim have been mailed to the Secretary of State, Oregon Department of Transportation and Angell Asphalt & Aggregate, Inc.

This claim is subject to revision upon verification that all certified payrolls for this project on Angell Asphalt & Aggregate, Inc., have been submitted to the Oregon Department of Transportation.

Very truly yours,

OPERATING ENGINEERS TRUST FUNDS

B J Winchester

Barbara J. Winchester
Delinquency Coordinator

RECEIVED
JAN 5 1983
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

BJW:lkp
Enclosures
cc: Delinquency Committee
Jerome B. Buckley, Jr.
United Pacific Insurance Co. (Portland) RRR#P 336 011 649
Secretary of State RRR#P 336 011 650
Oregon Dept. of Transportation RRR#P 336 011 651
Angell Asphalt & Aggregate, Inc. RRR#P 336 011 652

AGC - INTERNATIONAL UNION OF OPERATING ENGINEERS LOCAL 701
HEALTH & WELFARE FUND, PENSION TRUST FUND AND VACATION FUND

Employer Trustees
W. RAY ROGERS, *Chairman*
FRANK HASTIE, *Vice Chairman*
LLOYD BABLER, JR
WILLIAM D. ROBERTSON

Union Trustees
DEAN WEAR, *Secretary*
LAMONTE MORGAN
JIM RIDDERBUSCH
FRANCIS WICKLANDER

I.U.O.E.
Local 701

AGC
Oregon-Columbia
Chapter

1208 S.W. 13th AVE. • SUITE B210 • PORTLAND, OR 97205 • (503) 223-3185 • MAILING ADDRESS: P.O. BOX 4668, PORTLAND, OR 97208

CERTIFIED MAIL

RRR# P 336 011 651

RECEIVED
JAN 5 1983
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

NOTICE OF CLAIM
ON
PUBLIC WORKS BOND

TO: Dept. of Transportation
121 Transportation Building
Salem, Oregon 97310

Notice is hereby given that AGC - OPERATING ENGINEERS LOCAL 701 TRUST FUNDS has a claim for fringe benefits due to the employees of ANGELL ASPHALT & AGGREGATE, INC., working under the jurisdiction of the INTERNATIONAL UNION OF OPERATING ENGINEERS, LOCAL 701, in the amount of $11,104.51* contributions, together with liquidated damages of $1,113.00 and interest at the rate of twelve percent (12%) per annum from date of delinquency until paid, against the bond issued on or about _______________, bond no._______, on which ANGELL ASPHALT & AGGREGATES, INC., is the principal, STATE OF OREGON, DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION, is the owner, and UNITED PACIFIC INSURANCE CO., is the surety, for that project known as CONTRACT NO. 9370 - REEDSPORT-DEAN CREEK SECTION: UMPQUA HWY, Douglas County, Oregon.

DATED: January ____, 1983.

G & B Management Services, Inc.

Gary Harrison

Gary Harrison, Secty/Treas.
Administrator, AGC - Operating
Engineers Trust Funds
PO Box 4668
Portland, Oregon 97208

*Subject to revision

SCHEDULE 1-A

OPERATING ENGINEERS - EMPLOYERS TRUST FUNDS
SCHEDULE OF UNREPORTED HOURS FROM CERTIFIED PAYROLLS

OSHD NO. 9370 - Reedsport-Deans Creek

Angell Asphalt & Aggregate, Inc.
Employer No. 208

Certified Payroll period May 1, 1982 - June 26, 1982

RECEIVED
JAN 7 1983
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

	May	R/Chg	June	Total
Emerson, Dennis R. 541-58-3064	269.5		28.5	298.0
Cotton, Randy 541-72-6978	255.0		40.0	295.0
Finney, Steve S. 226-62-1393	265.0		67.5	332.5
Jarvis, Norman T. 543-56-3430	98.5		26.0	124.5
Kirkendall, Lonnie 510-64-5392	256.5		46.0	302.5
Lindstrom, Michael E. 573-66-5214	215.0		48.0	263.0
Prescott, Stephen V. 542-54-5994	179.0		10.5	189.5
Grant, Alan M. 534-46-6889	191.0		44.0	235.0
Hemple, Gerald Jr. 542-60-0319	40.0			40.0
King, Loren D. 542-62-9020	277.0		48.0	325.0

SCHEDULE 1-B

OPERATING ENGINEERS - EMPLOYERS TRUST FUNDS
SCHEDULE OF UNREPORTED HOURS FROM CERTIFIED PAYROLLS

OSHD NO. 9370 - Reedsport-Deans Creek

Angell Asphalt & Aggregates, Inc.
Employer No. 208

Certified Payroll period May 1, 1982 - June 26, 1982

		May	R/Chg	June	Total
Bales, Richard 542-62-9076		52.0		4.0	56.0
Griggs, Leroy 541-22-6275		5.0		11.5	16.5
Angell, Gary 542-54-9918		200.0		120.0	320.0
Total Def. Hours		2303.5		494.0	2797.5
Contributions:					
H & W	@$1.30	$2994.55	@$1.58	$780.52	$ 3,775.07
Pension	@ 1.47	3386.14	@ 1.47	726.18	4,112.32
Training	@ .10	230.35	@ .10	49.40	279.75
CIAF	@ .05	115.17	@ .05	24.70	139.87
Vacation	@ 1.00	2303.50	@ 1.00	494.00	2,797.50
Sub Total		$ 9029.71		$2074.80	$11,104.51
Liquidated Damages		902.99		210.01	1,113.00
*Interest		534.90		102.50	637.40
Total		$10,467.60		$2387.31	$12,854.91

*Interest was calculated at 12% per annum from due date of each delinquency.

RECEIVED
JAN 5 1983
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

9370

b

January 12, 1983

United Pacific Insurance Company
Bond Department
33405 - 8th Avenue So. C-3000
Federal Way, WA 98003

CON 5
#9370

Gentlemen or Ladies:

On December 28, 1982, we wrote to you concerning release of final payment on Contract No. 9370 awarded to Angell Asphalt & Aggregate, Inc., for paving on the Reedsport-Dean Creek Section of the Umpqua Highway in Douglas County.

The total contract amount is $1,165,005.77 including $15,716.09 for work performed under force account.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

dc

cc: Angell Asphalt & Aggregate, Inc.
P. O. Box 4318
Eastside, OR 97420

United Pacific Insurance Co.
921 S.W. Washington, Suite 333
Portland, OR 97205

bc: C. T. Keasey
Walt Hart
James Gix

9370 1-3-83 file D

REPORT OF ACTION UNDER DELEGATED AUTHORITY BY
ASSISTANT STATE HIGHWAY ENGINEER

On behalf of the Commission and under delegated authority, the following contracts were accepted as being completed according to specifications:

Contractor and Contract No.	Section and County	Acceptance Date
Cascade Const. Co., Inc. No. 9308	W. Fork Dairy Cr.-Tillamook Jct. Washington County	December 3, 1982
Nelson-Deppe, Inc. No. 9302	Austin Jct. Project Grant County	December 3, 1982
Ontario Asphalt Paving Co. No. 9265	Central Ore. Hwy. @ Succor Cr. Hwy. (Nyssa) Malheur County	December 7, 1982
Ajax Elec. Co., Inc. No. 9409	Pac. Hwy. W. @ SW 78th Ave. (Tigard) Washington County	December 7, 1982
Eucon Corp. of Idaho No. 9434	Juniper Canyon Rd.-Lexington/Echo Hwy. Morrow County	December 8, 1982
Hamilton Electric, Inc. No. 9336	Center St. @ Lancaster Dr. (Salem) & Lancaster Dr. @ Market St. (Salem) Marion County	December 8, 1982
Bracelin-Yeager Excavating No. 9261	Powers Wayside Coos County	December 8, 1982
JAL Construction, Inc. No. 9479	Ochoco Cr.-Barnes Butte Rd. Crook County	December 10, 1982
Suomi Enterprises, Inc. No. 9425	Baldock Safety Rest Area Clackamas County	December 17, 1982
Select Contractors, Inc. No. 9473	Region 3 (6 cities Pavement Marking Project) Douglas & Jackson Counties	December 17, 1982
Howard Logsdon Logging No. 9478	Ukiah Rock Production Umatilla County	December 17, 1982

Contractor and Contract No.	Section and County	Acceptance Date
R.J. Taggard Const., Inc. No. 9471	Canyonville Rock Production Douglas County	December 17, 1982
Kniestadt & Sons No. 9433	Blackhorse Cr. (Lexington) Br. Morrow County	December 20, 1982
R. A. Hatch Co. No. 9355	NE 112th Ave.-NE 148th Ave. Multnomah County	December 20, 1982
Swanston Equipment Co. No. 9426	Col. Co. Pavement Marking #2 Columbia County	December 22, 1982
Angell Asphalt & Aggregate, Inc. No. 9370	Reedsport-Dean Creek Douglas County	December 22, 1982
Select Contractors, Inc. No. 9428	Marion Co. Pavement Marking #2 Marion County	December 22, 1982
Eugene Sand & Gravel,Inc. No. 9475	Poterf Cr.-Poodle Cr. Lane County	December 22, 1982
Bayview Transit Mix,Inc. No. 9494	19th St.-Astor Column (Astoria) Clatsop County	December 23, 1982
Morse Bros., Inc. No. 9411	SPRR X'ing.-Lebanon Ditch Linn County	December 23, 1982
H2O Blasters, Inc./H2O Contractors, Inc. No. 9463	Willamette River (Oregon City Arch) Bridge Clackamas County	December 28, 1982
A & R Const., Inc. dba Laco Const. Co. No. 9398	Willow Creek Bridges Malheur County	December 28, 1982
Hyland Bros. Const., Inc. No. 9417	Springfield Downtown Transit Station Lane County	December 29, 1982
Hamilton Electric, Inc. No. 9129	Division St. NE-Trade St. SE (Salem) Marion County	December 29, 1982
Halcyon Painting No. 9496	SPRR O'Xing (Albany) Linn County	December 29, 1982

Contractor and Contract No.	Section and County	Acceptance Date
Douglas S. Coats, Inc. No. 9325	NW 2nd St.-Old Oregon Trail Hwy. Malheur County	December 30, 1982
Sims Electric, Inc. No. 9408	E. 1st St. @ E. Revere St. (Bend) Deschutes County	December 30, 1982

January 3, 1983

W. E. Schwartz, P.E.
Asst. State Highway Engineer

9370

REPORT NO. 27

L

FORM 734-3001

OREGON STATE HIGHWAY DIVISION

FIELD ENGINEER'S WEEKLY REPORT

FOR CONSTRUCTION PROJECTS ONLY
CONSTRUCTION AND BRIDGE SECTION

SECTION: REEDSPORT - DEAN CREEK

WEEK ENDING: 11 SEPTEMBER 1982

SECTION PREFIX: 10-1007

HIGHWAY: UMPQUA

COUNTY: DOUGLAS

NAME OF JOB: REEDSPORT-DEAN CREEK

KIND OF WORK: PAVING

CONTRACTOR: ANGELL ASPHALT & AGGREGATES

CONTRACT NUMBER: 9370

FEDERAL AID PROJECT NUMBER: F-20(7)

DATE OF CONTRACT: 29 SEPTEMBER 1981

DATE WORK STARTED: 8 MARCH 1982

ESTIMATED COMPLETION DATE:

AVERAGE FORCE ON PROJECT FOR THE WEEK: 0

MEN: 0 SUPERVISION: 0

SPECIFIED WORK DAYS: ~~275 CWD~~

WORK DAYS USED: ~~201~~

SPECIFIED CALENDAR DAYS:

CALENDAR DAYS USED:

SPECIFIED COMPLETION DATE:

PERCENT OF TIME ELAPSED: 73.1%

PROJECT AUTHORIZATION: $ 1222018.82

EXCLUSIVE OF ENGINEERING: $ 1135119.70

ESTIMATED COST OF COMPLETED PROJECT, EXCLUSIVE OF ENGINEERING: $ 1172454.00

ESTIMATED PERCENT: OVERRU 3.3 %

ENGINEERING AUTHORIZATION: $ 86899.12

ENGINEERING COST TO DATE: $ 89380.69

THIS WEEK: 0.0

PERCENT OF AUTHORIZATION: 102.9 %

PERCENT OF CONTRACT COMPLETED BASED ON ESTIMATED COST: 100.0%

PERCENT OF CONTRACT COMPLETED BASED ON TOTAL AUTHORIZATION: 103.3%

DATE PROJECT WAS COMPLETED: 26 JULY 1982

ESTIMATED PERCENT COMPLETE (ROADWORK)

CLEARING	DRAINAGE	GRADING	BASE	OIL AND/OR PAVE.	MAT'L. PROD.	GUARDRAIL	
		100.%	100.%	100.%		100.%	

	GRADING	SURFACING	MAINTENANCE MATERIALS	OIL & BITUMINOUS MACADAM	PAVING
	5.16	5.16			5.16
MILES IN PROJECT					
MILES PARTIALLY COMPLETED					
MILES COMPLETED	400.0 CY	6850.0 TN			30135.0 TN
TOTAL ESTIMATED QUANTITIES (CONTRACT)	510.0 CY	7197.4 TN			33301.8 TN
TOTAL QUANTITIES CORRECTED TO DATE	510.0 CY	7197.4 TN			33301.8 TN
ESTIMATED QUANTITIES MOVED OR PLACED TO DATE					
AVERAGE DAILY QUANTITIES					
AVERAGE DAILY QUANTITIES NECESSARY TO COMPLETE PROJECT ON TIME					
NUMBER OF SHIFTS PER DAY					

HOURS PER SHIFT

EQUIPMENT USED DURING THE WEEK:

ESTIMATED PERCENT COMPLETE (STRUCTURES)

BRIDGE NO.								
PERCENT								

	WEATHER	WORK DAYS CHARGED	HOURS DELAY	CAUSE OF DELAY
SUNDAY		0		
MONDAY	CLEAR	0		
TUESDAY	CLEAR	0		
WEDNESDAY	CLEAR	0		
THURSDAY	RAIN	0		
FRIDAY	PARTLY CLOUDY	0		
SATURDAY		0		

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SEP 13 1982
CONSTRUCTION SECTION
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GENERAL DESCRIPTION OF ACTIVITIES FOR THE WEEK

SUNDAY	Reedsport-Dean Creek - for week of Sept 5 thru 11, 1982.
MONDAY	No project activity this week.
TUESDAY	
WEDNESDAY	
THURSDAY	
FRIDAY	
SATURDAY	

REMARKS

This week: No activity.

Next week: No activity planned.

NOTE: Project work completed. Semi-final to be submitted by 15 September 1982.

SIGNED Ellis H Jones LOCATION Eugene

Ellis H. Jones, Project Manager

PRIME RESIDENT SUBMIT 2 COPIES WHEN BRIDGES AND GRADING BOTH ARE INVOLVED. SUBMIT 3 COPIES.

SP-F216

9379

L.

U. S. DEPARTMENT OF TRANSP ATION
FEDERAL HIGHWAY ADMINISTRATION

9 - 2 - 81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. F-20(7)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Douglas

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 10174

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 9/2/81

8. FEDERAL ROUTE NUMBER Primary 20

9. STATE ROUTE NUMBER Primary 45

10. GENERAL LOCATION:
Reedsport - Dean Creek Section

11. GENERAL DESCRIPTION OF WORK
High type pavement

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☒ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)*
Temp. & Perm. Pavement Striping S.F $5,800
Pavement Markers S.F $3,000
on the job training $800
Asphalt Cement Adjustment $54,000

13. REMARKS

After concurrence in award you are authorized to proceed with those items listed above as shown in your Estimate.

Mr. Swan's August 31, 1981 request and certifying statements are accepted.

PS&E documents for the subject project have been reviewed and are approved at a total estimated cost of $1,479,193 Federal Funds $1,304,352.

A signed copy of the Title Sheet is returned herewith.

(This is a 20% limitation project)

orig w/att
9-3-81

RECEIVED
STATE HWY ENGR
SEP 3'81
REFER TO [illegible]
FOR

14. DATE 9/2/81

15. SIGNATURE OF APPROVING OFFICIAL

16. TITLE for Division Administrator

FHWA PR-1240 (12-79) PREVIOUS EDITIONS MAY BE USED

9370

L.

U.S. Department
of Transportation
**Federal Highway
Administration**

Memorandum

THE OREGON DIVISION - SALEM

Subject: Oregon Project F-20(7)
Reedsport-Dean Creek Section
Umpqua Highway, Douglas County

Date: July 27, 1981

From: Division Administrator

Reply to Attn. of: HFO.3-OR

To: Mr. H. S. Coulter, State Highway Engineer, ODOT

Based on the information contained in Mr. Watson's July 20 letter, I concur that the concrete posts to be removed from the subject project have no salvage value.

G. K.
for Dale E. Wilken

cc:
OSHD (J H Versteeg, Rd Desgn)

RECEIVED
STATE HWY ENGR
JUL 28 '81
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

9370

L.

U.S. Department
of Transportation

**Federal Highway
Administration**

Memorandum

THE OREGON DIVISION - SALEM

Subject: Oregon Project F-178(-)
Reedsport - Dean Creek Section
Umpqua Highway (M.P. 0.55-5.71)
Douglas County

Date: July 21, 1981

From: Division Administrator

Reply to Attn. of: HFO.3-OR

To: Mr. H. S. Coulter, State Highway Engineer, ODOT

The proposed design criteria outlined in Mr. Watson's July 17, 1981 letter is considered acceptable for the subject section of the Umpqua Highway.

G. K. Hossner
for Dale E. Wilken

cc:
OSHD (J H Versteeg, Rd Dsgn)

RECEIVED
STATE HWY ENGR
JUL 22 '81
REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

9370

L.

VICTOR ATIYEH
GOVERNOR

Oregon State Highway Division

TRANSPORTATION BUILDING, SALEM, OREGON 97310

July 20, 1981

Mr. Dale E. Wilken
Division Administrator
Federal Highway Administration
The Equitable Center, Suite 100
530 Center Street, N.E.
Salem, OR 97301

NOTED
H.S. COULTER

Attn. Glenn K. Hossner

Gentlemen:

Reedsport-Dean Creek Section
Umpqua Highway
Douglas County

It is proposed to replace approximately 7,500 feet of existing guardrail and hardware on the project. Most of the guardrail has been in service for 25 years or more and is an obsolete design. Part of the rail is half-round shape, some is the old W-beam with flanges, all on concrete posts.

The State Parks Division has indicated they could make good use of the concrete posts. We estimate there could be about 570 concrete posts. We believe it is in the public interest to salvage this material and make it available for use by the State.

We propose to specify the existing guardrail and hardware will become the contractor's property. The concrete posts are to be salvaged and stockpiled by the contractor at a location within the project limits at the direction of the Engineer. The Engineer will notify the Region 3 Parks Supervisor when the posts are available.

The concrete posts are assumed to have no salvage value since they are an obsolete design. Therefore, we propose there be no credit to the project for salvaged material.

We solicit your concurrence that it is in the public interest to salvage this material.

RECEIVED
STATE HWY ENGR
JUL 21 '81
REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

A DIVISION OF THE DEPARTMENT OF TRANSPORTATION

This was discussed with and tentatively approved by Mr. Glenn Hossner of the FHWA.

Very truly yours,

J. H. Versteeg
Road Design Engineer

By Lyle K. Watson
Lyle K. Watson
Acting Final Design Engineer

bc H. S. Coulter
E. S. Hunter
D. H. Moehring
D. E. Swan
Alfred Shirley
Jack Sullivan
Fred Eriksen

FE:ja

9370.

VICTOR ATIYEH
GOVERNOR

Oregon State Highway Division

TRANSPORTATION BUILDING, SALEM, OREGON 97310

July 17, 1981

RECEIVED
STATE HWY ENGR
JUL 17 '81
REFER TO
FOR

Info	Invest	R/D	D/R	Sign	Act	File

NOTED
H.S. COULTER

Mr. Dale E. Wilken
Division Administrator
Federal Highway Administration
The Equitable Center, Suite 100
530 Center Street, N.E.
Salem, OR 97301

Attn. Glenn K. Hossner

Dear Sir:

Reedsport-Dean Creek Section
Umpqua Highway (M.P. 0.55-5.71)
Douglas County

The purpose of this Federal-Aid project is to extend the service life and restore the pavement section and skid resistance with a 4-inch Class "B" asphaltic concrete overlay. This section is 5.16 miles in length and has a daily traffic count varying from 3,000 to 5,000.

The horizontal alignment has a maximum curvature of 6 degrees. The vertical alignment has maximum grades of 6 percent. The existing paved roadway width averages 32 feet. Operating speeds are presently in the 50 MPH range.

The proposed project will not change the horizontal and vertical alignment or roadway width. Operating speeds are not expected to increase.

The typical section is 4.54 miles of two-lane roadway and 0.62 miles of two-lane with a climbing lane. Vehicle turnouts at six locations, used for viewing the elk herd in this area, will be paved. Roadway widths on this section are compatible with adjacent sections of the highway.

There is about 7,900 feet of guardrail on the project, mostly non-standard. It will be removed and approximately 19,300 feet of new guardrail installed to current standards. Guardrail flares will normally be 8 feet, although a few will vary between 4 and 8 feet.

This letter is submitted as documentation on the exception to minimum design criteria as set forth in the "Geometric Design Standards for Highways Other Than Freeways, AASHTO 1969".

This project is presently scheduled for the August 20, 1981 contract letting.

Very truly yours,

J. H. Versteeg
Road Design Engineer

By Lyle K. Watson
Lyle K. Watson
Acting Final Design Engineer

bc H. S. Coulter
E. S. Hunter
D. H. Moehring
F. E. Terpin
Alfred Shirley
Fred Eriksen

FE:ja

9370 L.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No. PRO 6-2

July 17, 1981

TO: Dale E. Wilken
Division Administrator
Federal Highway Administration

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 10174
Project No. F-20 (7)
Reedsport - Dean Creek Section
Douglas County

Attached support data consists of PR-1 forms and project maps for the subject project.

This project is expected to be funded from the 20% of the FY'81 limitation withheld from distribution until after August 1.

JLG/lms
Attachments

cc: Alfred Shirley, Jr. (Region 3)
General Files

9370

PRO

DATE: June 3, 1981

TO: OREGON TRANSPORTATION COMMISSION

FROM: H.S. Coulter
State Highway Engineer

SUBJECT: Finance Approval
5 Overlay Projects

On the consent calendar for the June 18 meeting will be a request to add 5 overlay projects to our construction program:

1. Reedsport - Dean Creek Section, Umpqua Highway, Douglas County, estimated cost $1,773,000.
2. Golf Club Rd. - E. Stayton Interchange Section, N. Santiam Highway, Marion County, estimated cost $1,521,000.
3. Weston - Weston Mountain Section, Weston-Elgin Highway, Umatilla County, estimated cost $2,217,000.
4. Burnt Hill - Thomas Creek Section, Oregon Coast Highway, Curry County, estimated cost $2,869,000.
5. Geary Ranch - Green Springs Interchange Section, Lake of the Woods Highway, Klamath County, estimated cost $2,090,000.

These projects, for the most part, are fairly high on the current State priority listing. They are needed to fill out our obligation request to the FHWA for the "20%" money that will become available August 1st.

NOTED
W. H. TEBEAU

The total estimated cost of $10,470,000 would be financed from Federal Aid Primary funds with State match of $1,238,000. I recommend your approval and request authorization to sign the necessary agreements for and on your behalf.

KO:bkc

bc: F.B. Klaboe
R.W. Gormsen
D.G. Talbot
E.S. Hunter
R.N. Bothman
D.H. Moehring
C.T. Keasey
W.J. Hart
J.H. Versteeg
V.E. Skoog
E.L. Johnson
Carl Nelson

RESURF

OREGON STATE HIGHWAY DIVISION
PROJECT REQUEST

Date: March 17, 1981

A. IDENTIFICATION:

Proposed Section: Reedsport - Dean Creek
Region: 3
Highway: Umpqua
St. Hwy. No. 45 M.P. 0.5 to M.P. 5.6 Length: 5.1 mi.
(Attach Sketch Map)
County(s): Douglas
Proposed 6 YP
Recommended Construction Date: 1984
Other
Method of Doing Work: Contract X St. Force

B. FINANCING

	Section		Year	Funds Available
Postpone ☐		Current 6 YP		
		Recommend		
Cancel ☐		Current 6 YP		
		Recommend		

If not one of the above - Recommended Financing:

FAI ☐, FAP ☒, FAS ☐, ST. CONST. ☐, OTHER ☐

C. ROADWAY & TRAFFIC

	Width: No. Lanes	Width: Pvmt.	Width: Shldrs.	Width: Walks	Structures: No.	Structures: Tot. Lng.	Extg. Traffic (Year 1979): ADT	Extg. Traffic (Year 1979): Service Level	Proj. Traffic (Year): ADT	Proj. Traffic (Year): Service Level
Existing Facility:	2	24'	4'				4,200	B		
Proposed Facility:	2	24'	4'							

D. DEFINE THE PROBLEM: Extremely deteriorated pavement, non-standard guardrail.

E. PROPOSED SOLUTION: Asphaltic concrete overlay with paved shoulders, install guardrail where required.

F. REASON FOR REQUEST AT THIS TIME: Preserve the road.

G. COST ESTIMATE

Roadway Work	$ 1,748,000
R/W (Approx: No. of Parcels ____, Acres ____, Any Reloc. ____).	N/A
Structures	N/A
Other (Define)	
Preliminary Engineering (By Whom) State	25,000
TOTAL	$ 1,773,000

H. REQUESTED BY: Alfred Shirley J
Region Engineer or Section Head

Approval/~~Disapproval~~ State Highway Engineer Date 6/9/81

Remarks & Action Taken: for development

Approval/Disapproval Asst. Director for Operations Date

Oregon Transportation Commission

Approval Date

Form 734-1386 (3-78)

1981 Manzanita Safety Rest Area 9371
on the Pac. Hwy.
(Sanitary Sewer)

CAG 7196 2-5-80
7500 7-9-81

9371

STATE OF OREGON
HIGHWAY DIVISION

INTEROFFICE MEMO
PRO

DATE: January 16, 1984

TO: Walt Hart
Bridge Engineer

ORIGINAL SIGNED BY
GARY A. POTTER

FROM: Gary A. Potter, Manager
Program Section

SUBJECT: Sewage Treatment Plant
Manzanita Safety Rest Area

Copy — SAR 8-1 Manzanita

The attached memo to the file from Gordon Ballard was taken to project Contract Schedule Committee for review and approval to work up a contract for removal of the remaining equipment at the subject plant.

The committee did not approve the request. Instead, they want answers to more questions, such as Ed indicated on the attached letter.

Would you please research this matter further and get back to me with more information so that I can take to the Contract Schedule Committee.

Thank You!

GAP:pf
Attachment

cc: R. N. Bothman
Ed Hunter

R. N. BOTHMAN

RECEIVED
ASST STATE HWY ENGR
JAN 16 '84
REFER TO
FOR

Info	Invest	R/D	D/R	Sign	Act	File

81-125-1307

STATE OF OREGON **INTEROFFICE MEMO**

TO: MEMO TO FILE

DATE: November 23, 1983 CON 5

ORIGINAL SIGNED
G.J. BALLARD

FROM: Gordon J. Ballard, P.E.
Principal Structural Design Engineer

SUBJECT: Storage Plan - Sewage Treatment Plant
Manzanita Safety Rest Area

I inspected the sewage treatment plant at Manzanita Safety Rest Area on November 16 with M. Laylor, G. Thornton, J. King, and A. Jacobsen. This inspection was conducted so that a plan for decontaminating the plant and a plan for salvage could be developed.

J. King and G. Thornton will provide a list of equipment that the Highway Division intends to salvage. This equipment list will then be submitted by us to the FHWA so that they can approve the salvage and determine the reimbursement they will require. Once this is completed, State Forces will decontaminate the plant according to M. Laylor's Memo of November 18 and remove any equipment that the Department has need of. A contract can then be let for a contractor to remove the remaining tanks and equipment. The building is to remain in tact.

The Program Management Section should program a contract for execution of removal of the remaining equipment after approval by the FHWA. ✓

1-11-83
Walt Hart

GJB:jrb

cc: E. S. Hunter
✓Gary Potter
Jim Gix
George Thornton

Why pay feds?
Salvage what?
Why not contract
and give the goods
bonus to the contractor
ESH

COST ESTIMATE: ∠\$100,000

- eligible for 4(R) -
- may require some salvage credit to FHWA
-

PROGRAM SECTION
MANAGER ___ PROJECT UNIT S/
NOV 25 1983
MAN. ASSIST. ___ PROGRAM UNIT K
REFER TO fed aid - File
FOR ___

pls. discuss

81-125-1387

9371

rll

cc: OSHD (Coulter)

STATE COPY

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

FINAL ACCEPTANCE REPORT

4-25 83

REGION NO. 10	REPORT NO. 2	COUNTY Josephine	DIVISION Oregon
DATE OF REPORT 4/25/83	REPORT MADE BY W. N. Bryant, Area Engineer		PROJECT NO. I-5-2(93)64
COMPLETION DATE 5/11/82	ACCEPTANCE DATE BY CONTRACT AGENCY 8/11/82	TIME ELAPSED 148 %	CONTRACT TIME 75 calendar days
APPROVED EXTENSIONS 2 calendar days	LOCATION I-5, 2.6 mi. N. of Grants Pass		

*The PR-47, Statement of Materials and Labor Used by Contractors on Highway Construction Involving Federal Funds, has been submitted.

*A copy of the State's materials certificate is attached to the Division office copy of this report.

There is compliance with section 1.23 of the Regulations pertaining to encroachments on the right-of-way.

REMARKS: *The project has been completed in reasonably close conformity with the approved plans and specifications including authorized changes and extra work.*

MANZANITA SAFETY REST AREA
PACIFIC HIGHWAY
Sanitary Sewer System

This project provided for the installation of a sanitary sewer line with related appurtenances connected into the North Valley High School sewage system (replaces the "Wasteco System" previously installed as an experimental project).

A contract in the amount of $27,972 was awarded Ausland Construction Inc. Grants Pass, Oregon on 9/29/81. Work began on 11/9/81 and was completed in reasonable close conformance with the approved plans and specifications on 5/11/82 at a final cost of $30,725.68 which includes $26,620.39 for original bid items, $2,340 credit for liquidated damages, $145.29 for force account work, and $6,300 for engineering.

A total of 113 calendar days were used as compared to the 75 calendar days allowed under the contract. A 2 calendar day time extension was approved on 4/12/82 leaving 36 calendar days for which liquidated damages in the amount of $2,340 was assessed.

RECEIVED
STATE HWY ENGR
MAY 2 '83
REFER TO Keasey
FOR

Info	Inves	R/D	D/R	Sign	Act	File

cy
$3

NOTED
W. E. SCHWARTZ

*NOTE: Not applicable for direct federal projects.

ACCEPTANCE OF PROJECT IS RECOMMENDED		ACCEPTED BY FEDERAL HIGHWAY ADMINISTRATION	
SIGNATURE W. N. Bryant Area Engineer W. N. Bryant		SIGNATURE Original Signed By G. K. HOSSNER Field Operations Engineer G. K. Hossner	
TITLE Area Engineer	DATE 4/25/83	TITLE Field Operations Engineer	DATE 4/29/83

FORM FHWA-1448 B (12-73) FORMERLY PR-33E

Previous Editions of PR-33E Will Not Be Used.

9371

L,

September 30, 1982

Employers Insurance of Wausau
9400 S.W. Beaverton Highway, Suite 300
Beaverton, OR 97005

CON 5
#9371

Gentlemen or Ladies:

On August 13, 1982, we wrote to you concerning release of final payment on Contract No. 9371 awarded to Ausland Construction, Inc. for work on the Manzanita Safety Rest Area on the Pacific Highway in Josephine County.

Final payment on this contract is $1,000.00 and the total contract amount is $24,425.68 including $145.29 for work performed under force account.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

js
cc: Ausland Construction, Inc.
P. O. Box 437
Grants Pass, OR 97526

Employers Insurance of Wausau
2000 Westwood Drive
Wausau, WI 54401

bc: C. T. Keasey
Walt Hart
A. Shirley

9371

L.

9-9-82

REPORT OF ACTION UNDER DELEGATED AUTHORITY BY ASSISTANT STATE HIGHWAY ENGINEER

On behalf of the Commission and under delegated authority, the following contracts were accepted as being completed according to specifications:

Contractor and Contract No.	Section and County	Acceptance Date
Hansen Electric Co. No. 9332	Pendleton/John Day Hwy. @ SW 20th St. (Pendleton) Umatilla County	August 4, 1982
Electric Corp. No. 9365	Pacific Hwy. E. @ Lana Ave. NE (Salem) Marion County	August 9, 1982
Ausland Construction, Inc. No. 9371	Manzanita Safety Rest Area Josephine County	August 11, 1982
Hamilton Electric, Inc. No. 9282	Beaverton/Tualatin Hwy. @ SW Locust St. Washington County	August 16, 1982
Weaver Construction Co. No. 9422	South Pine Creek Bridge Harney County	August 18, 1982
Douglas S. Coats, Inc. No. 9278	Dewey Ave.-UPRR U-X'ing (Baker) Baker County	August 18, 1982
Sims Electric, Inc. No. 9390	SE King Rd. @ SE Price Fuller Rd. Clackamas County	August 19, 1982
Holst Construction Co. No. 9421	Scappoose Creek Bridge Columbia County	August 25, 1982
Michael A Becker, Gen. Contractor No. 9405	Whitney Sand Storage Shed Baker County	August 31, 1982
Steeck Electric Co. No. 9281	Wallowa Lake Hwy. @ Monroe Ave. (LaGrande) Union County	August 31, 1982

Orig [illegible]
in [illegible] files

September 9, 1982

W. E. Schwartz, P.E.
Asst. State Highway Engineer

9371

L.

U.S. Department
of Transportation
**Federal Highway
Administration**

Memorandum

THE OREGON DIVISION - SALEM

Subject: Oregon Project I-5-2(93)64
Manzanita Safety Rest Area
Sewage Disposal Facility
Disposal of Surplus Equipment

Date: August 9, 1982

From: Division Administrator

Reply to Attn. of: HFO.3-OR

To: Mr. H. S. Coulter, State Highway Engineer
Oregon State Highway Division

NOTED
H.S. COULTER

The procedures proposed in Mr. Hunter's August 6, 1982 letter relative to disposal and salvage value determination for the physical-chemical sewage treatment plant and equipment originally constructed as an experimental project are considered appropriate and are approved.

G. K. Hossner
for Dale E. Wilken

cc:
OSHD (E. S. Hunter, Tech Serv)

RECEIVED
STATE HWY ENGR
AUG 16 '82
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

9371 7-1-82 F-5

MANZANITA SRA
CONTRACT 9371
NARRATIVE REPORT

This work consisted of modifying the existing 25,000 gallon reservoir and installing 1,380 lineal feet of 6-inch asbestos cement sewer pipe with three concrete manholes to divert raw sewage from the Manzanita Safety Rest Area past the existing treatment plant and connecting it to the North Valley High School sewage lagoon system.

The contract was let on September 24,1981 and awarded to Ausland Const. on September 29,1981. The contract amount was $27,972.00. There were 75 calendar days allowed to complete the project. The calendar day count started on October 12,1981. The preconstruction conference was held on October 23,1981 and the contractor started work on November 6,1981.

Even though there was twice as much rainfall as normal for this area, the contractor was able to finish the pipe and manhole installation within the allowed time. However, they did have problems receiving the aerator control panel from the supplier, due to only having 75 days for the submittals, approvals, ordering, delivery and installation. The panel arrived nineteen days after the time ran out and I could not justify recommending a time extension due to the supplier not being able to supply material on time.

The contractor requested 37 days time extension and we could only recommend two days. This two days were for final clean up.

There was only one area on the project that created problems for us. That was the existing two inch diameter parallel vertical guide rails in the 25,000 gallon reservoir. The aerator guides shown on the approved submittals were 20½" wide and the guide rails were only 19" apart, so one of the rails had to be adjusted under an extra work order.

On this type of work, the supplier wants eight weeks for fabrication of the items. If you take eight weeks away from the 75 days allowed to do the work, they have less that three weeks/for the submittals, approvals, ordering, delivery and installation.

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RECEIVED
JUL 1 1982
ROAD DESIGN SECTION

Do Not File ☐
Return To
Bring Up
Action

It would be very helpful if we could have an extra twenty five or thirty days for this type of project.

The final cleanup was completed on May 10 and 11ths and the second notification was submitted on May 11,1982.

STATEMENT OF OVERRUNS&UNDERRUNS

PROJECT:MANZANITA SRA	CONTRACT:9371
HIGHWAY:PACIFIC	PREFIX:617-1008
COUNTY:JOSEPHINE	FA NO:I-5-2(93)64

****

SUMMARY

ITEM	UNIT	ORIGINAL	SEMIFINAL	+OR-
Bid Items	$	27,972.00	26,620.39	-5
Adjustments				
(Liquidated Damages)	$		-2,340.00	
EWO's(Unanticipated)	$		145.29	
Anticipated Items	$	500.00	500.00	
Contingincies	$	1,281.24		
Engineering	$	2,847.20	5,532.00	+94
Total Costs	$	32,600.44	30,457.68	-7

****

All substantial changes were evaluated and none were found to meaningfully affect the total project cost.

9371

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FORM 734-3001

FIELD ENGINEER'S WEEKLY REPORT

OREGON STATE HIGHWAY DIVISION

FOR CONSTRUCTION PROJECTS ONLY
CONSTRUCTION AND BRIDGE SECTION

SECTION: Manzanita SRA

WEEK ENDING: June 5,1982

SECTION PREFIX: 617-1008

HIGHWAY: Pacific

COUNTY: Josephine

NAME OF JOB: Manzanita SRA

KIND OF WORK: Sewer Line

CONTRACTOR: Ausland Construction

CONTRACT NUMBER: 9371

FEDERAL AID PROJECT NUMBER: I-5-2(93)64

DATE OF CONTRACT: September 29,1981

DATE WORK STARTED: November 9,1981

ESTIMATED COMPLETION DATE:

AVERAGE FORCE ON PROJECT FOR THE WEEK: MEN: 0 SUPERVISION: 0

SPECIFIED WORK DAYS:

WORK DAYS USED:

SPECIFIED CALENDAR DAYS: 77

CALENDAR DAYS USED: 113

SPECIFIED COMPLETION DATE:

PERCENT OF TIME ELAPSED: 148

PROJECT AUTHORIZATION: $ 32,600.44

EXCLUSIVE OF ENGINEERING: $ 29,753.24

ENGINEERING AUTHORIZATION: $ 2,847.20

PERCENT OF CONTRACT COMPLETED BASED ON ESTIMATED COST: 100

ESTIMATED COST OF COMPLETED PROJECT, EXCLUSIVE OF ENGINEERING: $ 24,925.68

ENGINEERING COST TO DATE: $ 5,532.00

PERCENT OF CONTRACT COMPLETED BASED ON TOTAL AUTHORIZATION: 100

ESTIMATED PERCENT: OVERRUN / UNDERRUN: -12 %

PERCENT OF AUTHORIZATION: 194 %

DATE PROJECT WAS COMPLETED: May 11,1982

ESTIMATED PERCENT COMPLETE (ROADWORK)

CLEARING	DRAINAGE	GRADING	BASE	OIL AND/OR PAVE.	MAT'L. PROD.		

	GRADING	SURFACING	MAINTENANCE MATERIALS	OIL & BITUMINOUS MACADAM	PAVING
MILES IN PROJECT					
MILES PARTIALLY COMPLETED					
MILES COMPLETED					
TOTAL ESTIMATED QUANTITIES (CONTRACT)					
TOTAL QUANTITIES CORRECTED TO DATE					
ESTIMATED QUANTITIES MOVED OR PLACED TO DATE					
AVERAGE DAILY QUANTITIES					
AVERAGE DAILY QUANTITIES NECESSARY TO COMPLETE PROJECT ON TIME					
NUMBER OF SHIFTS PER DAY					
HOURS PER SHIFT					

EQUIPMENT USED DURING THE WEEK:

NONE

ESTIMATED PERCENT COMPLETE (STRUCTURES)

BRIDGE NO.								
PERCENT								

	WEATHER	WORK DAYS CHARGED	HOURS DELAY	CAUSE OF DELAY
SUNDAY	NA			
MONDAY				
TUESDAY				
WEDNESDAY				
THURSDAY				
FRIDAY				
SATURDAY				

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JUN 7 1982
CONSTRUCTION SECTION
TC
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CP

GENERAL DESCRIPTION OF ACTIVITIES FOR THE WEEK

SUNDAY	
MONDAY	
TUESDAY	
WEDNESDAY	
THURSDAY	
FRIDAY	
SATURDAY	

REMARKS

The contractor will submit the final paperwork next week and the semi-final estimate will be submitted. No further reports will be submitted.

SIGNED for Maude LOCATION Medford

PRIME RESIDENT SUBMIT 2 COPIES WHEN BRIDGES AND GRADING BOTH ARE INVOLVED, SUBMIT 3 COPIES

SP*F216

9371

4-23-82

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. I-5-2(93)64

2. STATE PROJECT NO. See below

2A. COUNTY NAME Josephine

3. FROM
Dale E. Wilken, Division Administrator
FHWA Oregon Division
Salem, Oregon

4. PROGRAM NO.

5. ITEM NO. 10181

6. TO
Mr. H. S. Coulter, State Highway Engineer
Oregon State Highway Division
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 4-1-82	8. FEDERAL ROUTE NUMBER Interstate 5	9. STATE ROUTE NUMBER Primary 1

10. GENERAL LOCATION:

MANZANITA SAFETY REST AREA

11. GENERAL DESCRIPTION OF WORK

Roadside Seeding and Mulching

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED ON ~~AN AGREED PRICE AND/OR~~ FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

I approve the advance authorization date of April 1, 1982, as requested in Mr. Keasey's April 20, 1982 letter as being in the public interest for the use of State Forces to proceed with the above work. State Force Order No. 1 is approved for a total estimated cost of $500; Federal funds $461.

RECEIVED
STATE HWY ENGR
APR 28 '82
REFER TO Moehring
FOR
Info Inves R/D O/R Sign Act File

Orig to 4/28/82

14. DATE 4-23-82	15. SIGNATURE OF APPROVING OFFICIAL G. K. Hassner	16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9371

L.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION

IN REPLY REFER TO
FILE NO.:

April 12, 1982

CON 5 #9371

Ausland Construction Co.
P.O. Box 437
Grants Pass, OR 97526

RE: Time Extension Request
Manzanita Safety Rest Area
Contract No. 9371

Gentlemen:

Your request for additional contract time in which to complete the above project has been carefully considered. A time extension of two (2) calendar days is granted for remaining cleanup and paving work. The project is currently under a suspension of work pending suitable weather to perform the cleanup and paving and contract time is not currently being charged. The two calendar day extension granted will provide sufficient time for performance of the cleanup and paving work.

The delays encountered in delivery and wiring of the control panel are the responsibility of the contractor and are not valid reasons for additional contract time.

If you wish to submit additional data or to review this matter further, please contact Project Manager Maude.

Sincerely,

C. T. Keasey, P.E., P.L.S.
Construction Engineer

CTK:cb

bc: H. S. Coulter (att. 1 ltr.) ✓
Al Shirley, Jr. "
Wm. Maude "
FHWA "
Bob Church

NOTED
W. SCHWARTZ

RECEIVED
STATE HWY ENGR

APR 12 '82

REFER TO
Schwartz

FOR

Info	Immed	R/D	D/R	Sign	Act	File
X						

Form 734-3123

CON 5

STATE OF OREGON **INTEROFFICE MEMO**

Highway Division - Region 3 440-3399

TO: O.B. Jackmond, P.E.
Contract Administration Engineer

DATE: April 5, 1982

FROM: James Gix, P.E.
Region Construction Engineer

SUBJECT: Time Extension Request
Manzanita SRA
Contract 9371

RECEIVED
APR 8 1982
CONSTRUCTION
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Herewith are two copies of the subject time extension request together with the Assistant Project Manager's analysis and recommendation. A subsequent conference with Vern brought out the fact that it was the contractor's responsibility to provide the two cabinets that had to be mounted back to back according to the plans.

Although I can appreciate that every effort was made to install the aerator equipment on time and the workday count did not allow enough time for any delays, it was as specified in the contract and the mixup on the panels was not the fault of the state's. I do feel that if the electrical equipment was installed on time we would have issued a stop work order to complete the cleanup on the sewer line. A time extension of two days to cover this work is reasonable. This time is not charged, as the project is currently under stop work order since the functional completion. In short, Region and the Project Manager recommend an extension of two days only.

4-9-82

cTK -

I concur with Region and recommend a time extension of 2 calender days to provide suitable weather (later this spring) for paving and cleanup.

OBJ

jjg/cp
attach.
cc: Wm. Maude

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erials
S-1387

9371 STATE COPY L.

TO BE COMPLETED BY FHWA	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	STATE Oregon
10-83	FEDERAL-AID PROJECT AGREEMENT 10-9-81	COUNTY Josephine PROJECT NO. I-5-2(93)64

The State, through its Highway Agency, having complied, or hereby agreeing to comply, with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) the Regulations issued pursuant thereto and, (3) the policies and procedures promulgated by the Federal Highway Administrator relative to the above designated project, and the Federal Highway Administration having authorized certain work to proceed as evidenced by the date entered opposite the specific item of work, Federal funds are obligated for the project not to exceed the amount shown herein, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends only to project costs incurred by the State after the Federal Highway Administration authorization to proceed with the project involving such costs.

PROJECT TERMINI

Manzanita Safety Rest Area

PROJECT CLASSIFICATION OR PHASE OF WORK	EFFECTIVE DATE OF AUTHORIZATION	APPROXIMATE LENGTH *(Miles)*
HIGHWAY PLANNING AND RESEARCH (HP & R)		
PRELIMINARY ENGINEERING		
RIGHTS-OF-WAY		
CONSTRUCTION	9-2-81	0.00
OTHER *(Specify)*		

FUNDS PRO RATA 92.22%

ESTIMATED TOTAL COST OF PROJECT	FEDERAL FUNDS
$ 32,600.00	$ 30,063.00

The State further stipulates that as a condition to payment of the Federal funds obligated, it accepts and will comply with the applicable provisions set forth on the reverse hereof.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Exec. Asst. to State Hwy. Engr.
(Title)

~~By~~ For: H.S. Coulter
State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)
For: Dale E. Wilken

Date executed by Division Administrator OCT 9 1981

FORM PR-2 (REV. 10-75) PREVIOUS EDITIONS ARE OBSOLETE

AGREEMENT PROVISIONS

1. RESPONSIBILITY FOR WORK

a. Except for projects constructed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in compliance with the approved plans and specifications or project proposal which, by reference, are made a part hereof.

b. With regard to projects performed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in accordance with the terms of its approved Certification, or exceptions thereto as may have been approved by the Federal Highway Administration.

2. HIGHWAY PLANNING AND RESEARCH (HP&R) PROJECT. The State highway agency will (a) conduct or cause to be conducted, under its direct control, engineering and economic investigations of projects for future construction, together with highway research necessary in connection therewith, pursuant to the work program approved by the Federal Highway Administration and (b) prepare reports suitable for publication of the result of such investigations and research, but no report will be published without the prior approval of the Federal Highway Administration.

3. PROJECT FOR ADVANCE ACQUISITION OF RIGHTS-OF-WAY. In the event that actual construction of a road on this right-of-way is not undertaken by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

4. PRELIMINARY ENGINEERING PROJECT FOR PREPARATION OF RIGHT-OF-WAY PLANS OR FOR PREPARATION OF CONSTRUCTION PLANS, SPECIFICATIONS AND ESTIMATES. In the event that right-of-way acquisition for, or actual construction of the road for which this preliminary engineering is undertaken is not started by the close of the fifth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

5. INTERSTATE SYSTEM PROJECT. (a) The State highway agency will not add or permit to be added, without the prior approval of the Federal Highway Administration any points of access to, or exit from, the project in addition to those approved in the plans and specifications for the project. (b) The State highway agency will not permit automotive service stations, or other commercial establishments for serving motor vehicle users, to be constructed or located on the right-of-way of the interstate system. (c) The State highway agency will not after June 30, 1968, permit the construction of any portion of the Interstate Route on which this project is located, including spurs and loops, as a toll road without the written concurrence of the Secretary of Transportation or his officially designated representative. The term 'toll road' does not include toll bridges or toll tunnels.

6. PROJECT FOR CONSTRUCTION IN ADVANCE OF APPORTIONMENT. (a) This project authorized pursuant to 23 U.S.C. 115 as amended, will be subject to all procedures and requirements, and conform to the standards applicable to projects on the system on which located, financed with the aid of Federal funds. (b) No obligation of previously apportioned Federal funds is created by this agreement, its purpose and intent being to provide that, upon application by the State highway agency, and approval thereof by the Federal Highway Administration, any Federal-aid funds of the class designated by the project number prefix, apportioned to the State under 23 U.S.C. 104 subsequent to the date of this agreement, may be used to reimburse the State for the Federal share of the cost of work done on the project.

7. STAGE CONSTRUCTION. The State highway agency agrees that all stages of construction necessary to provide the initially planned complete facility, within the limits of this project, will conform to at least the minimum values set by approved AASHTO design standards applicable to this class of highways, even though such additional work is financed without Federal-aid participation..

8. BOND ISSUE PROJECT. Construction, inspection and maintenance of the project will be accomplished in the same manner as for regular Federal-aid projects. No present or immediate obligation is created by this Agreement against Federal funds, its purpose and intent being to provide aid to the State, as authorized by 23 U.S.C. 122, for retiring maturities of the principal indebtedness of the bonds referred to below. When the State requests Federal reimbursement to aid in the retirement of such bonds, the request will be supported by the appropriate certification required by 23 CFR Part 140, Subpart F, and Volume 1, Chapter 4, Section 8 of the Federal-Aid Highway Program Manual or the alternative State procedure set forth in the State's Certificate, and payment of the authorized Federal share will be made from appropriate funds available. If in any year there is no unobligated balance of any apportioned Federal funds available from which payments hereunder may be made, there will be no obligation on the part of the Federal Government on account of bond maturities for that year. Funds available to the highway agency for this project are the proceeds of bonds issued by the governmental unit indicated on the attached tabulation, pursuant to the authority and in the amounts by date of issue and beginning date of maturities set forth therein.

9. SPECIAL HIGHWAY PLANNING AND RESEARCH PROJECT. The State Highway agency hereby authorizes the Federal Highway Administration to charge the State's pro rata share of costs incurred against funds apportioned to the State under 23 U.S.C. 307 (c), as amended. In the event a project is financed with both Federal-aid funds and State matching funds, the State agrees to advance to The Federal Highway Administration the State matching funds for its share of the estimated cost. For a National Pooled Fund study, the State hereby assigns its responsibility for the work to the Federal Highway Administration. For an Intra-Regional Cooperative Study, the State hereby assigns its responsibility for the work to the lead State for the study.

10. PARKING REGULATION AND TRAFFIC CONTROL. The State highway agency will not permit any changes to be made in the provisions for parking regulations and traffic control as contained in the agreement between the State and the local unit of Government referred to in the paragraph on "Additional Provisions," without the prior approval of the Federal Highway Administration, unless the State determines, and the Division Administrator concurs, that the local unit of Government has a functioning traffic engineering unit with the demonstrated ability to apply and maintain sound traffic operations and control.

Gen File

Oregon State Highway Division
Salem, Oregon October 6, 1981

Federal Aid Project
No. I-5-2(93)64

Manzanita Safety Rest Area
Josephine County

PROJECT AGREEMENT ESTIMATE

Type Code Y022
Sanitary Sewer

Mobilization		All Required	$ 2,100.00
Trench Excavation	820 Cu. Yd.	7.00	5,740.00
6-inch Asbestos-Cement Sewer Pipe	1,380 Lin. Ft.	5.05	6,969.00
Extra for Pipe Under Pavement	90 Lin. Ft.	7.50	675.00
Bedding Material	115 Cu. Yd.	11.20	1,288.00
Concrete Manholes	3 Each	900.00	2,700.00
Modify 25,000 Gallon Reservoir		All Required	6,760.00
Electrical Distribution System		All Required	1,740.00
			$27,972.00

Anticipated Items

Roadside Seeding & Mulching	All Required	$ 500.00
		$28,472.00
	Engineering	4,128.00
	TOTAL	$32,600.00

Federal Funds (92.22%) --------------	$30,063.00
State Funds -------------------------	2,537.00
TOTAL	$32,600.00

Group 1 100
Contract No. 9371
Prefix: 617-1926 (PE)
617-1088 (Constr.)

9371

L

U. S. DEPARTMENT OF TRANSPO TATION
~~FEDE~~RAL HIGHWAY ADMINIS RATION
9-2-81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. I-5-2-(93)64
2. STATE PROJECT NO. See below
2A. COUNTY NAME Josephine

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.
5. ITEM NO. 10181

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 9/2/81
8. FEDERAL ROUTE NUMBER Interstate 5
9. STATE ROUTE NUMBER Primary 1

10. GENERAL LOCATION:
Manzanita Safety Rest Area

11. GENERAL DESCRIPTION OF WORK
Comfort and convenience facilities

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☒ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

Mr. Swan's August 31, 1981 request and certifying statements are accepted.

PS&E documents for the subject project have been reviewed and are approved at a total estimated cost of $44,912 Federal Funds $41,418.

A signed copy of the Title Sheet is returned herewith.

(This is a 20% limitation project)

orig w/all 9-4-81

Planning

14. DATE 9/2/81
15. SIGNATURE OF APPROVING OFFICIAL G. K.
16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9371

I-5

ROAD DESIGN SECTION 378-6558

ROW 3-1

J. B. Boyd, Manager
Right of Way Section

August 26, 1981

J. H. Versteeg.
Road Design Engineer

File 52338
Manzanita Safety Rest Area
Pacific Highway
Josephine County

Attached is a description (1 file), an authorization, right of way prints and miscellaneous data covering right of way required for the subject project, scheduled for September 24, 1981.

By: R.

Robert R. Rounds
R/W Descriptions Supervisor

RRR:rlr
Attachments

cc: Gordon Ballard

9371

I 5

ENVIRONMENTAL REVIEW CHECKLIST

ALL CLEAR 7/28 81
Donald L

Sept. 3, 1981 Bid Letting ________ All Clear Deadline

SECTION Manzanita Safety Rest Area
Highway Pacific
County Josephine Region III
Type of Work Sewer Impr. Funds FAI
State ___ Consultant ___ Plans Avail. ___ Yes ___ No

Z Exc

	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR
DOCUMENTS:					
EIS	☒	☐	☐	☐	☐
Negative Declaration	☒	☐	☐	☐	☐
Project Assessment	☒	☐	☐	☐	☐
Write-off Letter	☒	☐	☐	☐	☐
PERMITS:					
Division of State Lands	☒	☐	☐	☐	☐
D.O.G.M.I.	☒	☐	☐	☐	☐
Corps of Engineers	☒	☐	☐	☐	☐
Coast Guard	☒	☐	☐	☐	☐
Co. Conditional Use	☒	☐	☐	☐	☐
NPS Air Pollution	☒	☐	☐	☐	☐
NPS Water Pollution	☒	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
CULTURAL:					
Cultural Survey	☐	☒	☐	☐	☒
Cultural Salvage	☒	☐	☐	☐	☐
NOISE:					
Noise Study	☒	☐	☐	☐	☐

9371

L.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6-2

July 23, 1981

TO: Dale E. Wilken
Division Administrator
Federal Highway Administration

Original Signed By
D. E. Swan

FROM: D.E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 10181
Project No. I-5-2(93)64
Manzanita Safety Rest Area
Josephine County

Attached support data consists of PR-1 forms with project maps for the subject project.

This project is expected to be funded from the 20% of the Yr. '81 limitation withheld from distribution until after August 1.

JLG:bkc
Attachments

cc: Alfred Shirley, Jr. (Region 3)
General Files

Form 734-3122

9371

July 9, 1981

Josephine County School District
706 N.W. "A" Street
Grants Pass, OR 97526

AGR

Attention: Lee E. Baldwin
Superintendent

MISC. CONTRACTS and
AGREEMENTS No. 7500

Gentlemen:

Attached for your records is a fully executed copy of a letter-form agreement for improvement of the sanitary sewer system serving the Manzanita Safety Rest Area.

We have retained a fully executed copy of this agreement for the Transportation Commission's files.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

fkn

Att.

bc Don Harwell (agree. att.)

9371

2.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
Region 3
P.O. BOX 1128, ROSEBURG, OREGON 97470 PHONE 440-3399

Mr. Lee E. Baldwin, Superintendent
Josephine County School District
706 N.W. "A" Street
Grants Pass, OR 97526

June 16, 1981

In Reply Refer to File No.: LOC 17

Dear Mr. Baldwin:

Attached for your review and signature are three copies of revised Misc. Contract and Agreement No. 7500 for the proposed sewage disposal facilities connection to the North Valley High School sewage lagoon system.

After your review and appropriate signatures, please return the three copies of this agreement to this office.

Cordially,

ALFRED SHIRLEY, JR.
Regional Engineer

ORIGINAL SIGNED BY JACK AYRES
REGIONAL FEDERAL AID ENGINEER

By JACK AYRES
Regional Federal-Aid Engineer

ja/cp
attach.
cc: D.H. Moehring
G. Thornton
Wm. Maude

Form 734-3122

ADDENDUM TO MAY 5, 1981 LETTER TO LEE E. BALDWIN, SUPERINTENDENT, JOSEPHINE COUNTY SCHOOL DISTRICT, FROM STATE OF OREGON, BY AND THROUGH ITS DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION, "MISC. CONTRACTS & AGREEMENTS, NO. 7500"

The following is added to the subject letter as amendments thereto:

1. The initial per-gallon treatment charge has been established at $0.001 per gallon and will be reviewed not less than semi-annually to see if said charge reflects the proportionate cost of the actual cost of treatment, and if it does not so reflect such actual cost then said charge shall be adjusted by the parties within 30 days after any such semi-annual review.

2. If the effluent from the Manzanita Safety Rest Area should prove to be of a nature detrimental to the sewage lagoon system, by appropriate testing and in the sole opinion of the District, then the District shall have the right to terminate this agreement forthwith. Detrimental effluent may include but is not limited to the presence of toxic chemicals and other substances or liquids within said effluent. The State shall be fully responsible for and shall reimburse the District for any damage caused to the sewage lagoon system of the District, including but not limited to all lines, equipment, pumps, filters, berms, grasses, and the like, without limitation, caused by any such effluent at any time or times. The amount to be paid by the State to the District if such damage occurs shall be that reasonably necessary to repair such damage and in the event the parties hereto cannot agree upon the amount of such damages to be so paid, then such shall be determined by arbitration in which the two parties shall select one arbitrator, and upon the failure of the two parties to so agree within ten days after one party requests such arbitration, then each party within five days after the expiration of said ten-day period shall choose one arbitrator and the two arbitrators will choose a third arbitrator within five days after the expiration of said five-day period and the three arbitrators by majority vote will decide the amount of actual damages to be paid by the State to the District within thirty days after the selection of the third arbitrator. Said arbitration shall be governed by the arbitration and award provision of ORS 33.210 through 33.340 as now written or hereafter amended.

3. The easement shall remain in effect so long as the District employs the sewage lagoon system at North Valley High School for said school. Upon connection by the District to any other sewage disposal system, operated by any sewage district or municipality of any kind, the School District will allow the State to continue to use the easement described herein for transmission of effluent from the Manzanita Safety Rest Area across School District property and into such new sewage disposal system.

9371

LOC 17 2.

STATE OF OREGON **INTEROFFICE MEMO**

Highway Division - Region 3 440-3399

TO: Jack Sollis
Asst. Attorney General & Chief Counsel

DATE: May 26, 1981

FROM: Jack Ayres JA
Regional Federal-Aid Engineer

SUBJECT: Manzanita Safety Rest Area

RECEIVED
MAY 27 1981
LEGAL

Attached for your review and advisory comments is a signed as amended copy of a proposed agreement with the Josephine County School District. We are asking for your opinion on those changes requested by the school district on page 2 of the agreement as modified by the attached addendum.

Their concern lies mainly with the fact that we have a trailer dump station at the rest area site. We are however, not allowing trailer dump refuse to be transferred to the school district sewage lagoon. We will be transmitting only grey water and human refuse. We would like to see the trailer dump facility completely abandoned from the Manzanita Rest Area.

We would appreciate your review as expeditiously as possible since we wish to go to contract with this project this summer.

MAINOR

JLS

ja/cp
attach.
cc: W. Hart
D.H. Moehring

Contains
Recycled
Materials
81-125-1387

9371

2.

STATE OF OREGON
HIGHWAY DIVISION - REGION 3

INTEROFFICE MEMO

TO: Walt Hart
Bridge Engineer

DATE: February 12, 1981

FROM: JAMES J. GIX
Region Construction Engineer

SUBJECT: Manzanita S.R.A.
Josephine County
School District
Josephine County

Herewith letter from the Josephine County School District which sets forth their requirements for a joint use of their sewage lagoons. At our present use, the annual fee would be less than we spend on a single monthly maintenance fee.

They do not demand any capital repayment. I recommend we work up a project to connect to the district as an alternate to the connection in Grants Pass.

jjg/cw
Encl.

cc Keith Martin
George Thornton
City of Grants Pass

RECEIVED
FEB 18 1981
BRIDGE SECTION

NOTED
G. J. BALLARD

NOTED
W.J. HART

Contains Recycled

Josephine County School District

OFFICE OF THE SUPERINTENDENT

706 N.W. "A" STREET
GRANTS PASS, OREGON 97526
TELEPHONE (503) 476-7721

February 10, 1981

ROSEBURG REGION
RECEIVED
FEB 11 1981

RE	RME	CE	ROE	TE
RUE	DES	RSR	RPR	RLE
GEO.	FAE	RBI	AA	

James J. Gix
Regional Construction Engineer
Department of Transportation
Highway Division
P.O. Box 1128
Roseburg, Oregon 97470

Dear Mr. Gix:

The following is our proposal for Manzanita Safety Rest Area-North Valley High School sewage intertie:

Construction conditions:

1. ✓ District to grant MSRA easement across school property for construction of sewer line connecting MSRA to NVHS sewage lagoon system. Easement to be revocable only in event of state's abandonment of MSRA and connecting intertie.

2. ✓ MSRA to design and construct and maintain all facilities to accommodate their connection to school system at state cost. ✓State to hold district harmless from any liability arising therefrom.

3. ✓In return for easement, state agrees to grant district easement to connect to MSRA water system for fire protection or water shortage back-up at such time as district can fund construction of such facility.

Operation conditions:

1. MSRA to pretreat all their effluent prior to its entry into school's system. Such pretreatment to consist of:

   a. Aeration of all sewage for a minimum detention time of 48 hours prior to discharging to school system.

   b. Screening and degritting of all sewage to prevent large objects and gravel from entering school's system.

   c. Prevention of any toxic chemicals from trailer dump station from entering school's system.

2. MSRA to pay district base operating charge of $75.00 per month (in lieu of one-time hook-up fee), plus a per-gallon treatment charge on effluent flow as metered at pump discharge. Per-gallon treatment charge will be adjusted from time to time to reflect the proportionate share of the actual cost of treatment, with the initial charge established at $.001 per gallon. The charge will be reviewed at least annually, perhaps semi-annually, for adjustment.

RECEIVED
FEB 20 1981
BRIDGE SECTION

NOTED
W.J. HART

If suggested conditions seem acceptable to State Highway Division, we would further propose to have an agreement drawn by our attorney in legal language and containing all the mutual protection clauses deemed advisable.

Sincerely yours,

Lee E Baldwin

Lee E. Baldwin
Superintendent
Josephine County School District

LEB:hc

cc: School board members
Phil Nelson, attorney

9371

1-5

VICTOR ATIYEH
GOVERNOR

Department of Environmental Quality

522 S.W. 5th AVENUE, BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229- 5325

June 24, 1980

State of Oregon
Department of Transportation
Highway Division
Transportation Bldg.
Salem, OR 97310

Re: Permit No. 2268
File No. 64730
Manzanita Rest Area

Gentlemen:

Our records indicate that your present Water Pollution Control Facilities Permit expired on 4-30-80.

Please complete the enclosed application form. It must be signed by your responsible official and returned to the Department of Environmental Quality as soon as possible.

A filing fee of $25 and a processing fee of $100 are required to accompany this application for renewal of a Water Pollution Control Facilities Permit. No action can be taken on the application until the fees have been paid.

If you have any questions regarding the permit renewal application or the associated fees, please contact this office. An invoice for the amount of the fees will be sent to you upon request. Copies of the permit fee regulations are attached.

Very truly yours,

Charles K. Ashbaker
Supervisor
Source Control Section
Water Quality Division

1 Versteeg ✓
3 Anderson
Christensen
Olson
Sullivan
Terpin
1 Trout
Wakerlig

RECEIVED
JUN 27 1980
ROAD DESIGN SECTION

Do Not File
Return To
Bring Up / /
Action

Info Copy to Reg 3

CKA:pn
Enclosures (2)

cc: Southwest Region, DEQ

9371

L.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
Region 3
P.O. BOX 1128, ROSEBURG, OREGON 97470 PHONE ~~[illegible]~~ 440-3399

April 25, 1980

Josephine County Board of Commissioners
Josephine County Courthouse
Grants Pass OR 97526

In Reply Refer to
File No.: TRA 7

RECEIVED
STATE HWY ENGR
APR 28 '80
REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

Gentlemen:

At a meeting a month or so ago, we discussed the possibility of some sort of cooperative effort whereby the Manzanita Safety Rest Area on I-5 and other properties in the area could be provided sewer service by some means or another, whether it be a new treatment plant or an increased sewer line size, from the rest area into the City of Grants Pass. It was indicated at that time that the State Highway Division would need an answer from you by May 1.

We have had a funding ceiling for federal aid placed upon the state for the period of March 15 to October 1, which is the beginning date for the federal fiscal period. As a result of that ceiling, it has been necessary to delay the proposed sewer line contract between the rest area and the city until sometime after October.

noted
H. S. COULTER

It would seem appropriate that I should advise you of this as this will provide you with additional time to study the matter further.

Cordially,

ORIGINAL SIGNED BY ALFRED SHIRLEY, JR.
ALFRED SHIRLEY, JR.
Regional Engineer

as/cw

bc: Coulter ✓

ROSEBURG REGION
RECEIVED
APR 25 1980

[✓ RE]	[✓ RME]	[✓ RCE]	ROE	TE
RUE	DES	RSR	RPR	RLE
ENV	[✓ FAE]	RBI	SEC	

Form 734-8132

9371

2

February 5, 1980

City of Grants Pass
101 N. W. "A" Street
Grants Pass, OR 97526

AGR 4

Attention: Allan H. Coon
City Attorney

MISC. CONTRACTS and
AGREEMENTS No. 7196

Gentlemen:

Attached for your records is a fully executed copy of an agreement for a sewage disposal system in Manzanita Safety Rest Area.

We have retained a fully executed copy of this agreement for the Transportation Commission's files.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

fkm

Att.

bc Don Harwell
Walt Hart
James Gix

9371

DATE: January 3, 1980 CON 21

TO: Oregon Transportation Commission

FROM:
H. S. Coulter
State Highway Engineer

SUBJECT: Manzanita Safety Rest Area
Sewage Connection Agreement

The Manzanita Safety Rest Area located on Interstate 5, approximately five miles north of Grants Pass, has an inadequate sewage disposal system.

The City of Grants Pass has a sewage disposal system which is capable of treating additional sewage from this rest area. The City has agreed to sewage treatment for the rest area for a one-time connection fee of $17,589 and a monthly charge of approximately $130. The State will construct the connection line and be responsible for its maintenance.

This matter will be on the consent calendar for the January 15 meeting and I recommend your approval and authority to sign for and on your behalf.

ESH:ja jh
bc: F. B. Klaboe
R. L. Schroeder
E. S. Hunter
Vern Skoog
Jack Sollis
Walt Hart
Alfred Shirley, Jr.
George Bell
Bob Gormsen

9371

2

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

July 5, 1979

Mr. Richard P. Reiter
Regional Manager
Department of Environmental Quality
1937 W. Harvard Blvd.
Roseburg, Oregon 97470

NOTED
F. S. HUNTER

Manzanita Safety Rest Area
Sewage Disposal Facility
Josephine County
Replacement Facility

On January 5, 1979, we forwarded to you a schedule of events which would result in a revised facility capable of producing effluent in compliance with DEQ permit requirements. Since that time, we have reviewed Boatwright Engineering's report, "Evaluation of the Wastewater Treatment Facilities of the Highway Manzanita Safety Rest Area", our own records of operational and maintenance costs, and the monthly test results which show the poor quality of effluent. From this review, it is evident that the high cost of operation and consistently poor results justify consideration of alternate methods of sewage disposal.

A study of the alternates shows that pumping treated effluent to the City of Grants Pass for disposal in the municipal facility to be the most economical solution. This is one of the alternate methods suggested in Barbara Burton's letter of August 29, 1978. We have elected to convert to this alternate.

The City of Grants Pass has approved our application to hook into their system and the State's crew is making the location survey of the route from Manzanita SRA to Grants Pass. We hope to award a contract for construction in January, 1980, and plan to be pumping effluent about one year later.

RECEIVED
TECHNICAL SERVICES
JUL 6 '79
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Form 734-3122 (Rev. 7-77)

Attached is a schematic of our proposed pumped effluent sewer line to the City of Grants Pass. We plan to use our existing 25,000 gallon sump and storage tank for primary treatment by aeration and settling. The treated sewage, sans settleable solids, will be chlorinated and pumped approximately five miles to the Grants Pass system. The proposed line will be located along the shoulder of I-5 to the North Grants Pass Interchange and discharge into a city manhole on Sixth Street.

We have previous experience with this type of installation and do not anticipate any extraordinary design problems. A single high capacity pump station located near the sump tank will provide sufficient head to boost the effluent to the summit. The pump station design will include both high volume and low volume pumps. The low volume pumps will essentially operate continuously. The last 8,000 feet of the proposed line will be a gravity sewer constructed of concrete pipe with manholes at specified intervals.

Specific design details have not yet been developed. We will proceed as described above and submit a preliminary engineering report with appropriate alternates about the first of October.

Walter J. Hart
Bridge Engineer

Attachment

cc: Ed Hunter
Al Shirley w/attachment
Keith Martin w/attachment

9371

2

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

6-26-79

LETTER OF APPROVAL A /OR AUTHORIZATION

FEDERAL AID PROJECT NO. [illegible]-2(57)59

STAT PROJECT NO. See below

COUNTY NAME Josephine

PROGRAM STAGE (Check) ☐ 1. ☐ 2.

FROM:
G. L. Green, Division Administrator
Salem, Oregon

PROGRAM NO.

ITEM NO. I-499

TO:
Mr. H. S. Coulter
State Highway Engineer, ODOT
Salem, Oregon

RECEIVED
STATE HWY ENGR
JUN 22 '79
REFER TO
FOR
Info | Inves | R/D | D/R | Sign | Act | File

6-22
orig
410

DATE PS & E APPROVED

DATE AUTHORIZATION EFFECTIVE 6-20-79

FEDERAL ROUTE NUMBER Interstate 5

STATE ROUTE NUMBER Primary 1

GENERAL LOCATION:

Jumpoff Joe Creek - Grants Pass Section

GENERAL DESCRIPTION OF WORK:

Program Change

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

PRELIMINARY ENGINEERING TO DETERMINE
☐ LOCATION ONLY
PRLIMINARY ENGINEERING FOR SURVEY AND PLAN
☐ PREPARATION
☒ OTHER (Specify) Program Change - See below

☐ ACQUISITION OF RIGHT-OF-WAY
CONTRUCTION - ADVERTISE FOR RECEIPT
☐ OF BIDS
☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of 6-7-79 I concur that it is in the public interest to add to the character of work on the subject project all phases of preliminary engineering necessary for study and design of a sewer pipe line for the Manzanita Safety Rest Area. You are authorized to proceed with this work for a TEC of $21,900 with Federal participation limited to $20,204.

DATE 6-20-79

SIGNATURE OF APPROVING OFFICIAL G. K. Hossner

TITLE for Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U.S. GOVERNMENT PRINTING OFFICE: 1976—626-787

9371

2.

Department of Transportation

TRANSPORTATION BUILDING, SALEM, OREGON 97310

June 7, 1979

TO G. L. Green, Division Administrator
Federal Highway Administration

FROM D. E. Swan
Federal Aid Engineer

SUBJECT Minor Program Change
Project No. I-5-2(57)59
Jumpoff Joe Creek-N. Grants
Pass Section
Josephine County

I hereby request your approval of a minor program change on the subject project to include in the character of proposed work preliminary engineering necessary for study and design of a sewer pipe line to connect the Manzanita Safety Rest Area with the Grants Pass sewage treatment facility. Your letter of May 29, 1979 on project I-5-2(73)64 approved this concept.

I further request authorization to proceed with all phases of preliminary engineering for this additional work at an estimated increase in total cost of $21,900 with an additional obligation of $20,204 in federal funds.

CL:dmc
cc: H. S. Coulter
C. T. Keasey
A. Shirley
G. Ballard

RECEIVED
STATE HWY ENGR
JUN 8 '79
REFER TO
FOR
Info Invest R/O D/R Sign Act File

9371.

L.

JAMES A. REDDEN
ATTORNEY GENERAL

DEPARTMENT OF JUSTICE
STATE OFFICE BUILDING
SALEM, OREGON 97310
TELEPHONE: (503) 378-4400

OFFICE OF THE
GENERAL COUNSEL
PORTLAND, OREG

February 21, 1979

Robert M. Simmons
Attorney at Law
United States Department of
Agriculture
Office of General Counsel
1734 Federal Building
1220 SW Third Avenue
Portland, Oregon 97204

Re: Indemnification Language in Contracts Between the State of Oregon and the Federal Government

Dear Mr. Simmons:

I would approve the following indemnification clause which is a combination of language proposed and reviewed:

"To the extent permitted by Article XI, Sec-
tion 7 of the Oregon Constitution and by the STATE
DISTRICT Oregon Tort Claims Act, the ~~permittee~~ shall performing any obligations
~~Indemnify the United States~~ against any lia-
bility for damage to life or property arising PERFORMING
from the ~~permittee's~~ ~~occupancy or~~ ~~use of National~~ ANY OBLIGATIONS
STATE'S Forest lands under this ~~permit~~, provided, however,
the ~~permittee~~ shall not be required to indemnify AGREEMENT
STATE the ~~United Stat~~es for any such liability arising agreement
out of the wrongful acts of employes or agents
DISTRICT of the ~~United State~~s. Provided further, that
the agreement to indemnify does not limit any
DISTRICT separate legal right or remedy which the ~~United~~ DISTRICT
~~States~~ has against the ~~permittee~~." STATE

I believe that this clause would satisfy the needs of both the State and the United States.

Very truly yours,

James A. Redden
Attorney General

JAR:cm

1981 Willamette Hwy. @ Cloverdale Rd. Sec. of the Willamette Hwy. 9372
(Grading, Paving & Structure Widen.)

9372

STATE COPY

SC cc: OSHD (ulter)

US Department of Transportation
Federal Highway Administration

FINAL ACCEPTANCE REPORT

8-17-84

REGION NO. 10	**REPORT NO.** 2	**COUNTY** Lane	**DIVISION** Oregon
DATE OF REPORT 8-17-84	**REPORT MADE BY** W. N. Bryant, Area Engineer		**PROJECT NO.** F-29(6)
COMPLETION DATE (Actual) 9/28/82	**ACCEPTANCE DATE BY CONRTACT AGENCY** 2-15-83	**TIME ELAPSED** 99.7 %	**CONTRACT TIME** 315 C.D.
LOCATION S.R. 58, 1 mile NW of Pleasant Hill			

The FHWA-47, Statement of Materials and Labor Used by Contractors on Highway Construction Involving Federal Funds, has been submitted. (Projects over $500,000)
A copy of the State's materials certificate is attached to the Division office copy of this report.
There is compliance with section 1.23 of the Regulations pertaining to encroachments on the right-of-way.

REMARKS: *The project has been completed in reasonably close conformity with the approved plans and specifications including authorized changes and extra work.*

WILLAMETTE HIGHWAY AT CLOVERDALE RD.
WILLAMETTE HIGHWAY
Grading, Paving, and Structure Widening

This project provided for the construction of left turn bays which include the construction of roadbed embankment, cement treated base, and asphaltic concrete pavement on a 0.40 mile section of existing highway. The project also included the widening of an existing 105 foot long structure 7.2 feet on each side.

A contract in the amount of $318,821.25 was awarded Eugene Sand and Gravel Inc., on 9/30/81. Work began on 10/2/81 and was completed in reasonable close conformance with the plans and specifications, including approved changes, on 9/28/82 at a final cost of $404,943.84 which includes $339,244.20 for original bid item work, $16,087.28 for work completed under approved price agreements, $568.16 for extra work ordered, $7,544.20 for State Force work, and $41,500.00 for construction engineering.

There were no major significant overrun or underruns involved on this project.

NOTED
W. E. SCHWARTZ

8/28

RECEIVED
STATE HWY ENGR
AUG 27 '84
REFER TO
Fredrickson
FOR
Info Inves R/D D/R Sign Act File

ACCEPTANCE OF PROJECT IS RECOMMENDED		**ACCEPTED BY FEDERAL HIGHWAY ADMINISTRATION**	
SIGNATURE W. N. Bryant W. N. Bryant Area Engineer		**SIGNATURE** G. K. Hossner Original Signed by G. K. HOSSNER Field Operations Engineer	
TITLE Area Engineer	**DATE** 8/23/84	**TITLE** Field Operations Engineer	**DATE** 8/24/84

FORM FHWA 1446B PREVIOUS EDITIONS MAY BE USED.

-9372

STATE COPY

TO BE COMPLETED BY FHWA	U.S. Department of Transportation **Federal Highway Administration**	Form Approved; O M B No. 04-R2089
MONTHLY TRANSACTION NUMBER 7-74	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	State Oregon
PROJECT REPORT NUMBER	7-12-84	County Lane
MODIFICATION NUMBER 2		Project Number F-29(6)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15, 19 81, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 400,349.00	$ 403,349.00
Federal funds	$ 353,027.00	$ 355,672.00
Other revisions		

This modification is made for the following reasons: to include increased construction engineering costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 12th day of July, 1984.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

for Manager, Program Section
(Title)

XXX For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By
(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)
For: Dale E. Wilken

Form PR-2A
(Rev. 7-83)

Previous editions are obsolete

Gen File

Oregon State Highway Division
Salem, Oregon July 10, 1984

Federal-Aid Project No. F-29(6)

Willamette Hwy. @ Cloverdale Rd. Section
Willamette Highway
Lane County

PROJECT AGREEMENT ESTIMATE

Type Code Y008
Roadway (Sta. 195+18.5 to Sta. 205+54.74 and Sta. 206+59.13 to Sta. 210+25)

Subtotal of previous estimate of September 14, 1982		$ 281,462.50
	Subtotal	$ 281,462.50
	Engineering	36,000.50
	Total	$ 317,463.00

Type Code X080
Structure (Sta. 205+54.74 to Sta. 206+59.13)

Total the same as previous estimate of September 14, 1982	$ 85,886.00
Length of Project	0.0 mi.

SUMMARY OF FUNDS (88.18%)

Description	Total Cost	Federal Funds	State Funds
Roadway	$ 317,463.00	$ 279,938.00	$ 37,525.00
Structure	85,886.00	75,734.00	10,152.00
Total	$ 403,349.00	$ 355,672.00	$ 47,677.00

Group 1	100%
Contract No.	9372
Prefix:	20-1978
Prefix:	20-1049

WH:bkb

9372

STATE COPY 2.

TO BE COMPLETED BY FHWA MONTHLY TRANSACTION NUMBER 9-157	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State Oregon
PROJECT REPORT NUMBER	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	County Lane
MODIFICATION NUMBER 1	9/23/82	Project Number F-29(6)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15 , 19 81 , is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 363,337.00	$ 400,349.00
Federal funds	$ 320,390.00	$ 353,027.00
Other revisions		

This modification is made for the following reasons: to include increase in construction costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 23rd day of September , 19 82 .

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By ______________________

Program Management Engineer
(Title)

XXXBy For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By ______________________

____
(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By ______________________
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen File

Oregon State Highway Division
Salem, Oregon September 14, 1982

Federal-Aid Project
No. F-29(6)

Willamette Hwy. @ Cloverdale Rd. Section
Willamette Hwy. in Lane County

REVISED PROJECT AGREEMENT ESTIMATE

Type Code Y008
Roadway (Sta. 195+18.5 to Sta. 205+54.74 and Sta. 206+59.13 to Sta. 210+25)

Subtotal of previous estimate of October 8, 1981	$244,450.25

Previous Estimate

Flagman	430 Hour	24.00	$ 10,320.00
Embankment in Place	4,675 Cu. Yd.	6.75	31,556.25
			$ 41,876.25

Revised Estimate

Flagmen	800 Hour	24.00	$ 19,200.00
Embankment in Place	7,093 Cu. Yd.	6.75	47,877.75
Class "C" Mix in Leveling Course (PA #1)	397 Ton	29.75	11,810.75
			$ 78,888.50

Increase	$ 37,012.25
SUBTOTAL	$281,462.50
Engineering	33,000.50
TOTAL	$314,463.00

Type Code X080
Structure (Sta. 205+54.74 to Sta. 206+59.13)

Total the same as previous estimate of October 8, 1981	$ 85,886.00

Length of Project -------------- 0.00 miles

SUMMARY OF FUNDS (88.18%)

Description	Total Cost	Federal Funds	State Funds
Roadway	$314,463.00	$277,293.00	$ 37,170.00
Structure	85,886.00	75,734.00	10,152.00
TOTAL	$400,349.00	$353,027.00	$ 47,322.00

Group 1 100%
Contract No. 9372
Prefix: 20-1978
Prefix: 20-1049

9372 .

STATE COPY

L,

TO BE COMPLETED BY FHWA 10 - 92	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL-AID PROJECT AGREEMENT 10/15/81	STATE Oregon COUNTY Lane PROJECT NO. F-29(6)

The State, through its Highway Agency, having complied, or hereby agreeing to comply, with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) the Regulations issued pursuant thereto and, (3) the policies and procedures promulgated by the Federal Highway Administrator relative to the above designated project, and the Federal Highway Administration having authorized certain work to proceed as evidenced by the date entered opposite the specific item of work, Federal funds are obligated for the project not to exceed the amount shown herein, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends only to project costs incurred by the State after the Federal Highway Administration authorization to proceed with the project involving such costs.

PROJECT TERMINI

Willamette Hwy. at Cloverdale Rd.

PROJECT CLASSIFICATION OR PHASE OF WORK	EFFECTIVE DATE OF AUTHORIZATION	APPROXIMATE LENGTH *(Miles)*
HIGHWAY PLANNING AND RESEARCH (HP & R)		
PRELIMINARY ENGINEERING		
RIGHTS-OF-WAY		
CONSTRUCTION	9-2-81	0.00

OTHER *(Specify)*

FUNDS PRO RATA 88.18%

ESTIMATED TOTAL COST OF PROJECT	FEDERAL FUNDS
$ 363,337.00	$ 320,390.00

The State further stipulates that as a condition to payment of the Federal funds obligated, it accepts and will comply with the applicable provisions set forth on the reverse hereof.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Exec. Asst. to State Hwy. Engr.
(Title)

XXX For: H.S. Coulter

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Date executed by Division Administrator OCT 15 1981

FORM PR-2 (REV. 10-75) PREVIOUS EDITIONS ARE OBSOLETE

AGREEMENT PROVISIONS

1. RESPONSIBILITY FOR WORK

a. Except for projects constructed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in compliance with the approved plans and specifications or project proposal which, by reference, are made a part hereof.

b. With regard to projects performed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in accordance with the terms of its approved Certification, or exceptions thereto as may have been approved by the Federal Highway Administration.

2. HIGHWAY PLANNING AND RESEARCH (HP&R) PROJECT. The State highway agency will (a) conduct or cause to be conducted, under its direct control, engineering and economic investigations of projects for future construction, together with highway research necessary in connection therewith, pursuant to the work program approved by the Federal Highway Administration and (b) prepare reports suitable for publication of the result of such investigations and research, but no report will be published without the prior approval of the Federal Highway Administration.

3. PROJECT FOR ADVANCE ACQUISITION OF RIGHTS-OF-WAY. In the event that actual construction of a road on this right-of-way is not undertaken by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

4. PRELIMINARY ENGINEERING PROJECT FOR PREPARATION OF RIGHT-OF-WAY PLANS OR FOR PREPARATION OF CONSTRUCTION PLANS, SPECIFICATIONS AND ESTIMATES. In the event that right-of-way acquisition for, or actual construction of the road for which this preliminary engineering is undertaken is not started by the close of the fifth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

5. INTERSTATE SYSTEM PROJECT. (a) The State highway agency will not add or permit to be added, without the prior approval of the Federal Highway Administration any points of access to, or exit from, the project in addition to those approved in the plans and specifications for the project. (b) The State highway agency will not permit automotive service stations, or other commercial establishments for serving motor vehicle users, to be constructed or located on the right-of-way of the interstate system. (c) The State highway agency will not after June 30, 1968, permit the construction of any portion of the Interstate Route on which this project is located, including spurs and loops, as a toll road without the written concurrence of the Secretary of Transportation or his officially designated representative. The term 'toll road' does not include toll bridges or toll tunnels.

6. PROJECT FOR CONSTRUCTION IN ADVANCE OF APPORTIONMENT. (a) This project authorized pursuant to 23 U.S.C. 115 as amended, will be subject to all procedures and requirements, and conform to the standards applicable to projects on the system on which located, financed with the aid of Federal funds. (b) No obligation of previously apportioned Federal funds is created by this agreement, its purpose and intent being to provide that, upon application by the State highway agency, and approval thereof by the Federal Highway Administration, any Federal-aid funds of the class designated by the project number prefix, apportioned to the State under 23 U.S.C. 104 subsequent to the date of this agreement, may be used to reimburse the State for the Federal share of the cost of work done on the project.

7. STAGE CONSTRUCTION. The State highway agency agrees that all stages of construction necessary to provide the initially planned complete facility, within the limits of this project, will conform to at least the minimum values set by approved AASHTO design standards applicable to this class of highways, even though such additional work is financed without Federal-aid participation..

8. BOND ISSUE PROJECT. Construction, inspection and maintenance of the project will be accomplished in the same manner as for regular Federal-aid projects. No present or immediate obligation is created by this Agreement against Federal funds, its purpose and intent being to provide aid to the State, as authorized by 23 U.S.C. 122, for retiring maturities of the principal indebtedness of the bonds referred to below. When the State requests Federal reimbursement to aid in the retirement of such bonds, the request will be supported by the appropriate certification required by 23 CFR Part 140, Subpart F, and Volume 1, Chapter 4, Section 8 of the Federal-Aid Highway Program Manual or the alternative State procedure set forth in the State's Certificate, and payment of the authorized Federal share will be made from appropriate funds available. If in any year there is no unobligated balance of any apportioned Federal funds available from which payments hereunder may be made, there will be no obligation on the part of the Federal Government on account of bond maturities for that year. Funds available to the highway agency for this project are the proceeds of bonds issued by the governmental unit indicated on the attached tabulation, pursuant to the authority and in the amounts by date of issue and beginning date of maturities set forth therein.

9. SPECIAL HIGHWAY PLANNING AND RESEARCH PROJECT. The State Highway agency hereby authorizes the Federal Highway Administration to charge the State's pro rata share of costs incurred against funds apportioned to the State under 23 U.S.C. 307 (c), as amended. In the event a project is financed with both Federal-aid funds and State matching funds, the State agrees to advance to The Federal Highway Administration the State matching funds for its share of the estimated cost. For a National Pooled Fund study, the State hereby assigns its responsibility for the work to the Federal Highway Administration. For an Intra-Regional Cooperative Study, the State hereby assigns its responsibility for the work to the lead State for the study.

10. PARKING REGULATION AND TRAFFIC CONTROL. The State highway agency will not permit any changes to be made in the provisions for parking regulations and traffic control as contained in the agreement between the State and the local unit of Government referred to in the paragraph on "Additional Provisions," without the prior approval of the Federal Highway Administration, unless the State determines, and the Division Administrator concurs, that the local unit of Government has a functioning traffic engineering unit with the demonstrated ability to apply and maintain sound traffic operations and control.

6-File

Oregon State Highway Division
Salem, Oregon October 8, 1981

Federal Aid Project
No. F-29(6)

Willamette Hwy. at Cloverdale Rd.
Willamette Highway
Lane County

PROJECT AGREEMENT ESTIMATE

Type Code Y008
Roadway (Sta. 195+18.5 to Sta. 205+54.74 and Sta. 206+59.13 to Sta. 210+25)

Mobilization	(74%)	All Required	$ 21,534.00
Temporary Protection and Direction of Traffic	(74%)	All Required	2,590.00
Temporary Signs	218 Sq. Ft.	3.75	817.50
Temporary Barricades	6 Each	45.00	270.00
Temporary Continuous Rail Traffic Barriers, Reflectorized	400 Lin. Ft.	4.00	1,600.00
Temporary Guard Rail, Type 1A Modified	200 Lin. Ft.	20.00	4,000.00
Temporary Plastic Safety Markers	23 Each	60.00	1,380.00
Flagmen	430 Hour	24.00	10,320.00
Removal of Structures and Obstructions		All Required	10,000.00
Embankment in Place	4,675 Cu. Yd.	6.75	31,556.25
Finishing Roadbed and Slopes		All Required	1,000.00
Aggregate Shoulders	1,150 Ton	8.70	10,005.00
Cement Treated Base Mixture	3,500 Ton	9.75	34,125.00
Portland Cement in CTB Mixture	200 Ton	85.00	17,000.00
Asphalt in Seal	5 Ton	425.00	2,125.00
Class "B" Asphalt Concrete	2,050 Ton	29.75	60,987.50
Guard Rail, Type 2A	1,900 Lin. Ft.	10.00	19,000.00
Guard Rail, Type 3	200 Lin. Ft.	20.00	4,000.00
Guard Rail Anchors, Type 1	3 Each	462.00	1,386.00
Guard Rail Anchors, Type 2	5 Each	400.00	2,000.00
Extra for Guard Rail Bridge Connections	4 Each	300.00	1,200.00
Rail End Pieces, Type C	8 Each	80.00	640.00
Type 2 Fence	580 Lin. Ft.	4.00	2,320.00
Extra for Asphalt Approaches	3 Each	250.00	750.00
Delineators, Type 2	2 Each	20.00	40.00

Anticipated Items

Permanent Pavement Striping		All Required	1,300.00
		SUBTOTAL	$244,450.25
		Engineering	33,000.75
		TOTAL	$277,451.00

Type Code X080
Structure (Sta. 205+54.74 to Sta. 206+59.13)

Mobilization	(26%)	All Required	$ 7,566.00
Temporary Protection and Direction of Traffic	(26%)	All Required	910.00
Alterations to Existing Structure		All Required	8,100.00
Furnish Pile Driving Equipment		All Required	6,200.00
Furnish Treated Timber Piling	720 Lin. Ft.	8.00	5,760.00
Drive Timber Piles	600 Lin. Ft.	2.00	1,200.00
Pile Caps		All Required	5,300.00
Structural Concrete, Class 3300	(25 C.Y.)	All Required	6,500.00
4'x15'/20' Prestressed Slabs	16 Each	1,350.00	21,600.00
4'x20'/25' Prestressed Slabs	4 Each	1,550.00	6,200.00
Reinforcement (2,600 lbs.)		All Required	1,000.00
Lumber and Timber, Treated	1.0 MBM	2,500.00	2,500.00
Membrane Waterproofing	630 Sq. Yd.	4.50	2,835.00
		SUBTOTAL	$ 75,671.00
		Engineering	10,215.00
		TOTAL	$ 85,886.00

Length of Project ------------- 0.00 miles

Work Retained in Program Status

Permanent Signing	All Required	$ 2,000.00
Replace 4 Piles (State Forces)	All Required	5,000.00

SUMMARY OF FUNDS (88.18%)

Description	Total Funds	Federal Funds	State Funds
Roadway	$277,451.00	$244,656.00	$32,795.00
Structure	85,886.00	75,734.00	10,152.00
TOTAL	$363,337.00	$320,390.00	$42,947.00

Group 1	100%	
Contract No.	9372	
Prefix:	20-1978	(PE)
	20-1049	(Constr.)

9372

B

March 22, 1983

The Travelers Indemnity Co.
Surety Department
707 S.W. Washington Street
Portland, OR 97205

CON 5
#9372

Gentlemen or Ladies:

On February 18, 1983, we wrote to you concerning release of final payment on Contract No. 9372 awarded to Eugene Sand & Gravel, Inc., for work on the Willamette Highway at Cloverdale Road in Lane County.

Final payment on this contract is $9,724.30 and the total contract amount is $355,899.64 including $568.16 for work performed under force account.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

dc

cc: Eugene Sand & Gravel, Inc.
P. O. Box 1067
Eugene, OR 97440

Corroon & Black of Oregon
P. O. Box 8699
Portland, OR 97207

bc: C. T. Keasey
Walt Hart
James Gix

9372

B

3-1-83

REPORT OF ACTION UNDER DELEGATED AUTHORITY BY

ASSISTANT STATE HIGHWAY ENGINEER

On behalf of the Commission and under delegated authority, the following contracts were accepted as being completed according to specifications:

Contractor and Contract No.	Section and County	Acceptance Date
Weaver Const. Co. No. 9501	McKay Cr. (Sumac) Bridge Umatilla County	Feb. 1, 1983
Ross Bros. Const., Inc. No. 9414	Fifteenmile Cr. Br. No. 15711A Wasco County	Feb. 2, 1983
Serenity Builders, Inc. No. 9440	Santiam & Oak Grove SRAs Marion & Linn Counties	Feb. 2, 1983
Ameada Mining & Construction Co., Inc. No. 9532	Celilo Rock Production Wasco County	Feb. 2, 1983
Joe Preso Const., Inc. No. 9454	Big Creek Bridge Union County	Feb. 2, 1983
Cascade Const. Co., Inc. No. 9167	NE Col. Blvd.-NE Weidler St. (Unit 3) Multnomah County	Feb. 3, 1983
Schoolhouse R Electric No. 9520	Crater Lake Hwy.@ Fred Meyer Access (Medford) Jackson County	Feb. 8, 1983
Salem Sand & Gravel Co. No. 9467	Willamette River (Marion Street) Bridge Marion County	Feb. 8, 1983
Harry B. Stanley No. 9176	Sunset Hills Memorial Park (Cemetery) Access Washington County	Feb. 11, 1983
Eugene Sand & Gravel,Inc. No. 9372	Willamette Hwy.@ Cloverdale Rd. Lane County	Feb. 15, 1983
Bracelin-Yeager Excavating & Trucking,Inc. No. 9495	Arizona Inn Slide Curry County	Feb. 23, 1983

RECEIVED
STATE HWY ENGR
MAR 15 '83
REFER TO
FOR
Info Inves R/D D/R Sign Act File

NOTED
W. E. SCHWARTZ

Contractor and Contract No.	Section and County	Acceptance Date
Oregon Asphaltic Paving Co. No. 9344	UPRR Crossing to Birch Ave. Multnomah County	Feb. 24, 1983
Phil Howell Const. No. 9466	Starvation Creek, Koberg Beach and Memaloose Safety Rest Areas Hood River & Wasco Counties	Feb. 28, 1983
S. J. Groves & Sons Co. & Guy F. Atkinson Co., J.V. No. 8905	Columbia River Bridge (N. Channel Superstructure) Multnomah, OR & Clark, WA Counties	Feb. 28, 1983

March 1, 1983

W. E. Schwartz, P.E.
Asst. State Highway Engineer

9372

REPORT NO. 59

B

FORM 734-3001

OREGON STATE HIGHWAY DIVISION

FIELD ENGINEER'S WEEKLY REPORT

FOR CONSTRUCTION PROJECTS ONLY
CONSTRUCTION AND BRIDGE SECTION

SECTION: WILLAMETTE HIGHWAY AT CLOVERDALE ROAD

WEEK ENDING: 4 DECEMBER 1982

SECTION PREFIX: 20-1049

HIGHWAY: WILLAMETTE

COUNTY: LANE

NAME OF JOB: WILLAMETTE HWY @ CLOVERDALE RD

KIND OF WORK: GRADING,PAVING,STRUCTURE WIDENING

CONTRACTOR: EUGENE SAND AND GRAVEL

CONTRACT NUMBER: 9372

FEDERAL AID PROJECT NUMBER: F-29(6)

DATE OF CONTRACT: 30 SEPTEMBER 1981

DATE WORK STARTED: 21 OCTOBER 1981

ESTIMATED COMPLETION DATE:

AVERAGE FORCE ON PROJECT FOR THE WEEK: 0

MEN: 0

SUPERVISION: 0

SPECIFIED WORK DAYS:

SPECIFIED CALENDAR DAYS: 315 CD

SPECIFIED COMPLETION DATE:

WORK DAYS USED:

CALENDAR DAYS USED: 314

PERCENT OF TIME ELAPSED: 99.7%

PROJECT AUTHORIZATION: $ 397706.00

EXCLUSIVE OF ENGINEERING: $ 360706.00

ESTIMATED COST OF COMPLETED PROJECT, EXCLUSIVE OF ENGINEERING: $ 364439.62

ESTIMATED PERCENT: OVERRUN 1.0 %

ENGINEERING AUTHORIZATION: $ 37000.00

ENGINEERING COST TO DATE: $ 40825.57

THIS WEEK 0.0

PERCENT OF AUTHORIZATION: 110.3 %

PERCENT OF CONTRACT COMPLETED BASED ON ESTIMATED COST: 100.0%

PERCENT OF CONTRACT COMPLETED BASED ON TOTAL AUTHORIZATION: 101.0%

DATE PROJECT WAS COMPLETED: 28 SEPT 1982

ESTIMATED PERCENT COMPLETE (ROADWORK)

CLEARING	DRAINAGE	GRADING	BASE	OIL AND/OR PAVE.	MAT'L. PROD.	GUARDRAIL	FENCE
		100.%	100.%	100.%		100.%	100.%

	GRADING	SURFACING	MAINTENANCE MATERIALS	OIL & BITUMINOUS MACADAM	PAVING
MILES IN PROJECT	0.4	0.4			0.4
MILES PARTIALLY COMPLETED					
MILES COMPLETED					
TOTAL ESTIMATED QUANTITIES (CONTRACT)	4675.0 CY	3500.0 TN			2050.0 TN
TOTAL QUANTITIES CORRECTED TO DATE	7093.2 CY	3076.2 TN			2643.4 TN
ESTIMATED QUANTITIES MOVED OR PLACED TO DATE	7093.2 CY	3076.2 TN			2643.4 TN
AVERAGE DAILY QUANTITIES					
AVERAGE DAILY QUANTITIES NECESSARY TO COMPLETE PROJECT ON TIME					
NUMBER OF SHIFTS PER DAY					
HOURS PER SHIFT					

EQUIPMENT USED DURING THE WEEK:

ESTIMATED PERCENT COMPLETE (STRUCTURES)

~~BRIDGE NO.~~	SEED & MULCH			BRIDGE WORK				
PERCENT	100.%			100.%				

	WEATHER	WORK DAYS CHARGED	HOURS DELAY	CAUSE OF DELAY
SUNDAY		0		
MONDAY	RAIN	0		
TUESDAY	RAIN	0		
WEDNESDAY	SHOWERS	0		
THURSDAY	RAIN	0		
FRIDAY	RAIN	0		
SATURDAY		0		

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GENERAL DESCRIPTION OF ACTIVITIES FOR THE WEEK

SUNDAY	Willamette Hwy at Cloverdale Rd - for week of Nov 28 thru Dec 4, 1982.
MONDAY	No project activity this week.
TUESDAY	
WEDNESDAY	
THURSDAY	
FRIDAY	
SATURDAY	

REMARKS

This week: No project activity.

Next week: No activity planned.

NOTE: Project work complete. Semi-final to be submitted by 15 December 1982.

SIGNED Ellis H Jones LOCATION Eugene

Ellis H. Jones, Project Manager

PRIME RESIDENT SUBMIT 2 COPIES WHEN BRIDGES AND GRADING BOTH ARE INVOLVED. SUBMIT 3 COPIES

SP-F216

9372

B

VICTOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION

IN REPLY REFER TO
FILE NO.: CON

AGENDA
NOV 16 1982

1A-5 (e)

DATE: November 8, 1982

TO: Oregon Transportation Commission

FROM: H. S. Coulter
State Highway Engineer

SUBJECT: Request for Increase in Project
Authorization, Willamette Hwy @ Cloverdale
Road Section, Willamette Highway,
Lane County
Contract No. 9372

This Federal-aid Primary project was completed on September 28 and it now appears that the final cost will exceed the project authorization by $26,423.38 or 7.1 percent.

Construction of the roadway fill to the typical section shown on the plans required more Embankment in Place than was estimated and added $16,400 to the cost of the project. Unanticipated erosion caused by high water necessitated placement of riprap in order to protect the fill, adding $3,700 to the cost. An additional amount of paving material was required in order to correct deficiencies in the profile of the old pavement, to improve the riding qualities and to make proper connection at the intersections. This work added $5,800 to the cost. Flagging on the project overran the planned amount by $8,900 due to extremely heavy traffic volume in the area and the placing of the additional embankment and paving materials.

There are sufficient funds available in the category of work and all the increase is eligible for federal participation.

I recommend that the authorization be increased by $26,423.38 to a new total of $397,706.00. This matter will be on the consent calendar for the November 16 meeting.

OBJ:mk st

bc Fred D. Miller George Bell
R. W. Gormsen
C. T. Keasey
V. E. Skoog
Alfred Shirley, Jr.

Form 734-3123

STATE OF OREGON
Highway Construction

INTEROFFICE MEMO

378-6318

FILE: CON 5

TO: W. E. Schwartz, P.E., P.L.S.
Ass't. State Highway Engineer

DATE: October 20, 1982

O. B. Jackmond

FROM: O. B. Jackmond, P.E., P.L.S.
Contract Administration Engineer

SUBJECT: Request for Increase in Project Authorization
Willamette Hwy. @ Cloverdale Road Section
Willamette Highway, Lane County
Contract No. 9372

This Federal-aid Primary project was completed on September 28, 1982 and it now appears that the final cost will exceed the project authorization by $26,423.38 or 7.1 percent.

Construction of the roadway fill to the typical section shown on the plans required more Embankment in Place than was estimated and added $16,400 to the cost of the project. Unanticipated erosion caused by high water necessitated placement of riprap in order to protect the fill, adding $3,700 to the cost. An additional amount of paving material was required in order to correct deficiencies in the profile of the old pavement, to improve the riding qualities and to make proper connection at the intersections. This work added $5,800 to the cost. Flagging on the project overran the planned amount by $8,900 due to extremely heavy traffic volume in the area and the placing of the additional embankment and paving materials.

There are sufficient funds available in the category of work and all the increase is eligible for federal participation. PCRB approval is not required.

Attached is a rough draft letter to the Transportation Commission requesting an increase of $26,423.38. Also attached is a copy of the Expected Overrun of Project Authorization form.

OBJ:HHP:mk

Attach.

cc: Alfred Shirley, Jr.
Ellis Jones
R. D. Church
D. E. Swan

NOTED
W. E. SCHWARTZ

RECEIVED
STATE HWY ENGR
NOV 3 '82
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Contains Recycled Materials

10-15-82

9372

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. F-29(6)
2. STATE PROJECT NO. See below
2A. COUNTY NAME Lane

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.
5. ITEM NO. 10069

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 8/26/82	8. FEDERAL ROUTE NUMBER Primary 29	9. STATE ROUTE NUMBER Primary 18

10. GENERAL LOCATION:
Willamette Highway at Cloverdale Road Section

11. GENERAL DESCRIPTION OF WORK
Replace 3 each piles at Coast Fork Willamette River overflow structure

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☒ XX CONSTRUCTION PROCEED ON ~~[illegible]~~ FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

Contingent upon modification of project agreement if additional funds are required, I approve the advance authorization date of 8/26/82 as requested in Mr. Keasey's letter of 10/8/82 as being in the public interest for the use of State Forces to proceed with the above work State Force Order No. 3 is approved for a TEC of $5,000 Federal Funds $4,409.

RECEIVED
STATE HWY ENGR
OCT 21 '82
REFER TO Moehring
FOR

Info	Inves	R/D	O/R	Sign	Act	File

RECEIVED
OCT 22 1982
CONSTRUCTION SECTION
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NOTED
W E SCHWARTZ
10/22
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14. DATE 10/15/82
15. SIGNATURE OF APPROVING OFFICIAL
16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9372 1-P L

Form 81-734-3300

Order for Extra Work

OREGON STATE HIGHWAY DIVISION

TO BE PERFORMED ON FORCE ACCOUNT BASIS

Date 13 July, 19 82

Project Name Willamette Hwy at Cloverdale Road

Contract No. 9372

Highway Willamette

Prefix 20-1049

County Lane

F. A. Project No. F-29(6)

Contractor Eugene Sand and Gravel, Inc.

Order No. 1

Address P.O. Box 1067, Eugene, Oregon 97401

The following work is hereby classified as "Extra Work", to be performed and paid for in accordance with the terms of contract.

Description of work to be done: Temporary striping w/beads and removal of striping by burning.

Location by station numbers:

Throughout project.

Estimate of quantities and cost:

801	Burning existing/&Temporary Striping----	Move-In, Lump Sum	$ 75.00
		Burning, $0.35/L.F. x 2000 L.F.	700.00
	Striping----------------------------	Move-In, Lump Sum	98.00
		Skip Striping, $0.04/L.F. x 2000 L.F.	80.00
		Solid Striping,$0.046/L.F. x 4000 LF.	184.00
			$1137.00

Explanation: (Explain here the conditions which cause this work to be classed as "extra work") In accordance with section 111.01 of Special Provisions installation of temporary striping and removal of existing and temporary striping, as required by written order of the engineer shall be done as extra work.

All work will be field measured to verify lineal feet of work performed of each type operation and dates of move-in.

INSTRUCTIONS: A single order should not cover more than one class of work or more than one extra work job.

Submit five copies of the order to Salem. After final approval of the order, the Salem office will send one copy to the contractor, one to the Regional Engineer and one to the Resident Engineer.

Project authorization	$371,282.62
Present estimate of project costs, including $ 1137.00 for work under this order	$ 372,641.47
Expected over-run amount	$ 1,358.85
Expected over-run per cent	0.4%

Space to right of this line is for use of Salem Office

Submitted by: Resident Engineer

Approval Recommended: For: Construction Engineer or Bridge Engineer

Approval Recommended: Regional Engineer

Approved 7-16-82 Construction Engineer

SP*70975-734

DS 7-22-82

9372

L

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

5-18-82

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. F-29(6)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Lane

3. FROM
Dale E. Wilken, Division Administrator
FHWA - ORegon Division

4. PROGRAM NO.

5. ITEM NO. 10069

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 3/26/82

8. FEDERAL ROUTE NUMBER Primary 29

9. STATE ROUTE NUMBER Primary 18

10. GENERAL LOCATION:
Willamette Highway at Cloverdale Road Section

11. GENERAL DESCRIPTION OF WORK
Permanent Signing

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED ON XXXXXXXXXXXXXXXXXX FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

I approve the advance authorization date of 3/26/82 as requested in Mr. Keasey's letter of 5/5/82 as being in the public interest for the use of State Forces to proceed with the above work. State Force Order No. 2 is approved for a TEC of $900 Federal Funds $794.

RECEIVED
STATE HWY ENGR
MAY 21 '82
REFER TO. [illegible]
FOR
Info | Inves | R/D | D R | Sign | Act | File

ON 5-21-82

14. DATE 5/18/82

15. SIGNATURE OF APPROVING OFFICIAL

16. TITLE for Division Administrator

PREVIOUS EDITIONS MAY BE USED

9322

L

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

9-2-81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO.
F-29(6)

2. STATE PROJECT NO.
See below

2A. COUNTY NAME
Lane

3. FROM
Dale E. Wilken, Administrator
FHWA - Oregon Division - Salem

4. PROGRAM NO.

5. ITEM NO.
10069

6. TO
H. S. Coulter
State Highway Engineer
Oregon State Highway Division
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE
9-2-81

8. FEDERAL ROUTE NUMBER
Primary 29

9. STATE ROUTE NUMBER
Primary 18

10. GENERAL LOCATION:
Willamette Highway at Cloverdale Road Section

11. GENERAL DESCRIPTION OF WORK
Grading, paving, and
structure widening

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☒ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)*
Permanent Pavement Striping
S.F. $1,300

13. REMARKS

After concurrence in award, you are authorized to proceed with those items listed above as shown in your estimate.

Mr. Swan's August 31, 1981 request and certifying statements are accepted.

PS&E documents for the subject project have been reviewed and are approved at a total estimated cost of $385,330, Federal Funds $339,784.

A signed copy of the Title Sheet is returned herewith.

(This is a 20% limitation project.)

RECEIVED
STATE HWY ENGR
SEP 3 '81
REFER TO
Moehring

Original
9-3-81

14. DATE
9-2-81

15. SIGNATURE OF APPROVING OFFICIAL
G. K. Hossner

16. TITLE
for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9372

2.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:

PRO 6-2

July 27, 1981

TO: Dale E. Wilken
Division Administrator
Federal Highway Administration

FROM: D.E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 10069
Project No. F-29(6)
Willamette Hwy. @ Cloverdale Rd. Section
Lane County

Attached data consists of PR-1 form with project maps.

This project is expected to be funded from the 20% of the FY '81 limitation withheld from distribution until after August 1.

DRH:bkc
Attachment

cc: Alfred Shirley (Region 3)
General Files

Form 734-3122

9372

L.

U.S. Department
of Transportation
**Federal Highway
Administration**

Memorandum

THE OREGON DIVISION - SALEM

Subject: Oregon Project F-29(-)
Willamette River Relief Opening
Lane County

Date: June 26, 1981

From: Division Administrator

Reply to Attn. of: HBR-OR

To: Mr. H. S. Coulter, State Highway Engineer, ODOT

We have reviewed Mr. Wallace's preliminary plan submittal of June 5, 1981, on the Willamette River Relief Opening of the Willamette Highway at Cloverdale. The preliminary plans are approved. Please be sure the slab connections to the old structure are torqued sufficiently to ensure a uniform action between segments. Also, please place a waterproof membrane on the bridge.

For Dale E. Wilken

cc:
OSHD (L L Wallace, Br)

RECEIVED
STATE HWY ENGR
JUN 29'81
REFER TO
FOR

Info	Answer	R/D	D/R	Sign	Act	File

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

DES 23
5287B

In Reply Refer to
File No.:

June 5, 1981

Mr. Dale E. Wilken
Division Administrator
Federal Highway Administration
The Equitable Center, Suite 100
530 Center St.
Salem, OR 97301

Duncan
Ira 7-8

Willamette Riv. Relief Opening, Br. 5287B
Willamette Hwy. @ Cloverdale Rd.
Willamette Highway
Lane County

Enclosed are two reduced prints of Drawings 36046 and 35827 which are the preliminary plan and elevation and vicinity map for this structure. Also enclosed are two copies of the foundation report.

The alignment and roadway width are in accordance with the standards governing the project. The added roadway width is desired to provide a left turn refuge for Cloverdale Road.

Widening under traffic will require attention to traffic staging and control. Existing bridge is in good condition, so widening is a practical and recommended way of providing additional roadway width.

The estimated cost of this structure, including an allowance for engineering and contingencies, is $68,250.

We request your approval of our preliminary plan and your concurrence that this project is eligible for FA funding.

Walter J. Hart
Bridge Engineer

L. L. Wallace
L. L. Wallace
Assistant Bridge Engineer

Enclosures

cc E. S. Hunter
D. H. Moehring
Final Design /w/ 1 set encls.
Alfred Shirley /w/ 1 set encls.
Gary Potter /w/ 1 set encls.

RECEIVED
JUN 10 1981
OREGON DIVISION

Form 734-3122

9372

L.

U. S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

12-4-80

FEDERAL AID PROJECT NO.
29(4)

STATE PROJECT NO.
See below

COUNTY NAME
Lane

PROGRAM STAGE (Check)
☐ 1. ☐ 2.

FROM:
G. L. Green, Division Administrator
FHWA - Oregon Division

PROGRAM NO.

ITEM NO.
10069

TO:

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

12-15
orig

RECEIVED
STATE HWY ENGR
DEC 15 '80
REFER TO [illegible]
FOR

Info	Inves	R/O	O/R	Sign	Act	File

DATE PS&E APPROVED

DATE AUTHORIZATION EFFECTIVE
12/4/80

FEDERAL ROUTE NUMBER
Primary 29

STATE ROUTE NUMBER
Primary 18

GENERAL LOCATION:
Willamette Highway at Cloverdale Road

Lt. Turn Lane

GENERAL DESCRIPTION OF WORK:
Preliminary Engineering

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

PRELIMINARY ENGINEERING TO DETERMINE
☐ LOCATION ONLY
PRELIMINARY ENGINEERING FOR SURVEY AND PLAN
☒ PREPARATION Including utility preparatory work
TEC $21,400 - F.F. $18,864
☐ OTHER *(Specify)*

☐ ACQUISITION OF RIGHT-OF-WAY
CONSTRUCTION - ADVERTISE FOR RECEIPT
☐ OF BIDS
☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested by Mr. Swan's PEA dated 11/24/80.

DATE
12/4/80

SIGNATURE OF APPROVING OFFICIAL
G K

TITLE
for Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U.S. GOVERNMENT PRINTING OFFICE: 1978-631-[illegible]

9372

18

NOTE: SHADED AREAS TO BE COMPLETED IN SALEM OFFICE

LOCATION PROSPECTUS
ORE ON DEPARTMENT OF TRANSPOR TION
LOCATION UNIT

8-6-80

DATE
PREFIX

1 - IDENTIFICATION

PROJECT NAME: Willamette Highway @ Cloverdale Road
HIGHWAY NAME: Willamette
HIGHWAY NUMBER: 18
REGION: 3
ADMINISTRATIVE DISTRICT: 5
COUNTY: Lane
CITY: N/A
LENGTH: 0.4
MILEPOST NUMBER: 2.46 TO 2.86
☒ RURAL ☐ URBAN
LOCAL GOVERNMENT PROJECT? ☐ YES ☒ NO
IF YES, UNIT OF GOVERNMENT
TYPE OF FUNDS: ☐ FAI ☒ FAP ☐ FAS ☐ STATE ☐ FAUS ☐ OTHER
METHOD OF CONSTRUCTION: ☒ CONTRACT ☐ STATE FORCE ☐ OTHER
TYPE OF WORK: ☒ GRADING ☒ PAVING ☒ STRUCTURE ☐ SIGN ☐ SIGNAL ☐ ILLUMINATION ☐ ROADSIDE IMPROVEMENT ☐ OTHER

PROJECT DESCRIPTION

Complete field survey, prepare plans and estimate of cost for construction of a left-turn refuge at the intersection of the Willamette Highway and Cloverdale Road. Widening of the Willamette River Relief opening structure just east of the intersection is anticipated.

REFERRED TO
Beard
Staudenmeyer
Cole ✓
Mann
Watson
Erikson
Dorn
Lou
Hager
Discuss
Do File Copy
Due
turn
NAL DESIGN ENGINEER

1 Versteeg ✓
Anderson
3 Christensen
3 Olson
Sullivan
Terpin
Trout
4 Wakerlig

RECEIVED
AUG 17 1980
ROAD DESIGN SECTION
Do Not File ☐
Return To
Bring Up / /
Action

2 - TRAFFIC DATA

EXISTING AVERAGE DAILY TRAFFIC (YEAR-VOLUME): 1978 8,300
PROJECTED AVERAGE DAILY TRAFFIC (YEAR-VOLUME):

LEVEL OF SERVICE	A	B	C	D	E	F
EXISTING	☐	☐	☐	☐	☐	☐
PROPOSED	☐	☐	☐	☐	☐	☐

DESIGN SPEED (MPH): 55
DESIGN STANDARDS: AASHTO
TRAFFIC ANALYSIS: ☒ LIGHT ☐ MEDIUM ☐ HEAVY

REFERRED TO
By Location Engineer

APPROVED
Frank E. Terpin
Location Engineer
Date 8/6/80

3 - FEATURES

	EXISTING NUMBER AND WIDTH	PROPOSED NUMBER AND WIDTH
TRAVEL LANES	two - 12	Two - 12'
SHOULDERS	two - 4'-6'	Two - 6' *
MEDIANS	none	One - 16'
PARKING LANES	none	none
SIDEWALKS	none	none
BIKEWAYS	none	Shoulder Bikeways-Sign & Stripe
INTERCHANGES	none	none
OTHER:		

* AASHTO minimum - 8"

	YES	NO	MAYBE
Channelization	☒	☐	☐
Frontage Roads	☐	☒	☐
Traffic Signals	☐	☒	☐
Signing	☒	☐	☐
Illumination	☐	☒	☐
Structures	☒	☐	☐
Stage Construction	☐	☒	☐
Pedestrian Crossing	☐	☒	☐
Rest Area	☐	☒	☐
Truck Scale Site	☐	☒	☐
Landscaping	☐	☒	☐
Drainage	☐	☒	☐
River ______	☐	☒	☐
Stream Willamette (O'flow)	☒	☐	☐
Storm Sewer	☐	☒	☐
Sanitary Sewer	☐	☒	☐
Right of Way	☐	☐	☒
Simple Acquisition	☒	☐	☐
Complex Acquisition	☐	☒	☐
Relocations	☐	☒	☐

	YES	NO	MAYBE
Right of Way (cont.) Improvements	☐	☒	☐
Access Control	☐	☐	☒
Railroad Crossing	☐	☒	☐
At Grade	☐	☒	☐
Separated	☐	☒	☐
Railroad Encroachment	☐	☒	☐
Permits	☒	☐	☐
Conditional Use	☐	☒	☐
Flood Plain	☐	☐	☒
Irrigation District	☐	☒	☐
Water District	☐	☒	☐
Drainage District	☐	☒	☐
Div. of State Lands	☐	☐	☒
Dept. of Geology & Min. Ind.	☐	☐	☒
Corps of Engineers	☒	☐	☐
Coast Guard	☐	☒	☐
DEQ NPS Air Pollution	☐	☒	☐
DEQ NPS Water Pollution	☐	☒	☐
Building	☐	☒	☐
Fish & Wildlife Approval	☐	☒	☐

3 - FEATURES (cont.)

	YES	NO	MAYBE
Agreements (City-County Etc.)	☐	☐	☒
Environmental Assessment	☒	☐	☐
Statewide Assessment	☐	☐	☒
Negative Declaration	☐	☒	☐
Environmental Impact Statement	☐	☒	☐
4-F Statement	☐	☒	☐
Citizen Advisory Committee	☐	☒	☐
Public Hearing	☐	☒	☐
Borrow Source	☐	☒	☐
Material Source	☐	☒	☐
Utilities	☒	☐	☐

Type Phone & Electricity

	YES	NO	MAYBE
Hydraulics Study	☒	☐	☐
Soils Investigation	☐	☐	☒
Airport Clearance	☐	☒	☐
Economic Analysis	☐	☒	☐
Requires Field Survey	☒	☐	☐
Old Survey Available	☒	☐	☐
Requires Vicinity Map	☒	☐	☐
Requires Photogrammetry	☐	☒	☐
Requires Reconnaissance Survey	☐	☒	☐
Reconnaissance Available	☐	☒	☐
Design Review	☐	☒	☐

4 - WORK ITEMS

	TO BE PERFORMED BY APPLICANT	STATE	CONSULTANT
PRELIMINARY ENGINEERING	☐	☒	☐
RIGHT-OF-WAY	☐	☒	☐
CONSTRUCTION ENGINEERING	☐	☒	☐

5 - DURATION TIMES (MONTHS)

	FLOAT	ACTIVE
RECONNAISSANCE SURVEY	( )	N/A
DRAFT ENVIRONMENTAL IMPACT STATEMENT	( )	N/A
CORRIDOR APPROVAL	( )	N/A
FIELD SURVEY	(6)	1 1/2
PRELIMINARY DESIGN	( )	N/A
DESIGN APPROVAL/FINAL EIS	( )	N/A
RIGHT-OF-WAY DESCRIPTIONS	( )	1.0
RIGHT-OF-WAY ACQUISITION	( )	5
P.S. & E. DOCUMENTS	( )	4

RECOMMENDED CONSTRUCTION DATE	(Region)	F 4Q '81 (Salem)

6 - SUGGESTED BASE DESIGN

ITEM	NEW WORK	OVER EXISTING
1-inch - 0 Base	16"	---
Class B - AC	6"	4"

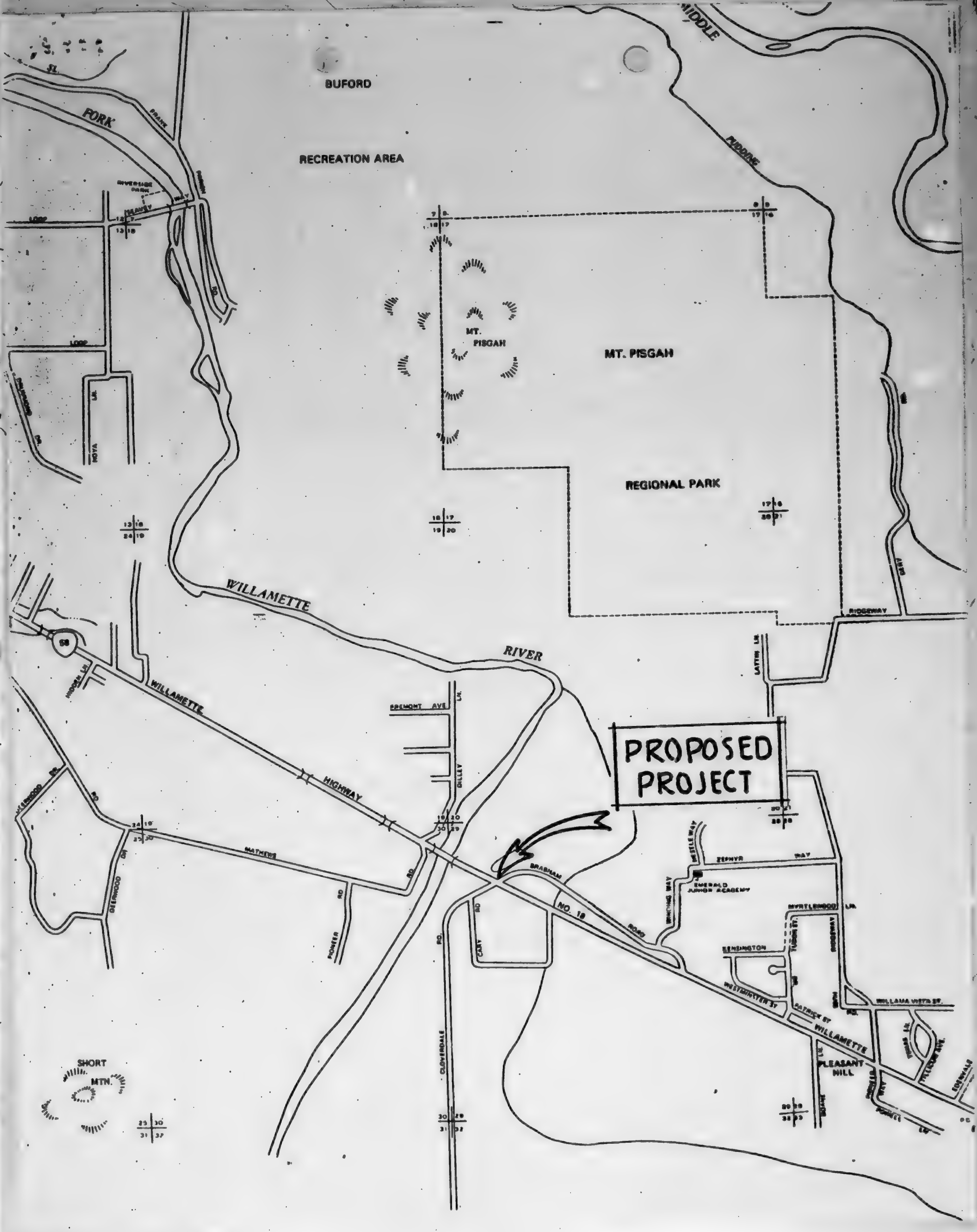
7 - TYPICAL SECTION AND LOCATION

Attach 8½ x 11 inch sheets for general location map and typical section (roadway & structure).

8 - PROJECT COST ESTIMATES

	REGION	SALEM
PRELIMINARY ENGINEERING	$ 15,000	$ 21,400
RIGHT OF WAY	1,000	1,000
TRAFFIC CONTROL	2,000	20,000
ILLUMINATION	-	-
STRUCTURES	150,000	92,000
RAILROAD	-	-
ROADWAY	150,000	180,000
OTHER ______	-	-
ENGINEERING & CONTINGENCIES	63,600	incl. above
PROJECT TOTAL	$ 381,600	$ 314,400

SUBMITTED BY ______________________


BUFORD
RECREATION AREA
MIDDLE
PUDDING
FORK
SL.
LOOP
LOOP
NOVA
LN.
WAY
RD
MT. PISGAH
MT. PISGAH
REGIONAL PARK
WILLAMETTE
RIVER
RIDGEWAY
LAYTIN LN.
WILLAMETTE
HIGHWAY
HIDDEN LN.
58
FREMONT AVE
LN.
DILLEY
MATHEWS
RD
PIONEER
RD
DEERWOOD
DR
BRABHAM
CARY
RD
RD
CLOVERDALE
NO. 18
ROAD
PROPOSED PROJECT
ZEPHYR
WAY
NESTLE WAY
BRANCHING WAY
EMERALD JUNIOR ACADEMY
MYRTLEWOOD LN.
KENSINGTON
WESTMINSTER ST
PATRICK ST
WILLAMETTE
PLEASANT HILL
WILLAMA VISTA ST.
RD.
FORREST
LN
EDENVALE
SHORT MTN.

9372

18

ENVIRONMENTAL REVIEW CHECKLIST

SEPT. 3
~~June 18,~~ 1981 Bid Letting ________ All Clear Deadline

ALL CLEAR 7/28/81
Donald L Trout
~~[illegible]~~ ~~[illegible]~~
1/2

SECTION Willamette Hwy @ Cloverdale Road
Highway Willamette
County Lane Region 3
Type of Work Lt. turn lane Funds FA
State___ Consultant ___ Plans Avail.___Yes ___No

Const Noise ✓

	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR	
DOCUMENTS:						2 EXC
EIS	✓					
Negative Declaration	✓					
Project Assessment	✓					
Write-off Letter	✓					

PERMITS:						
Division of State Lands	☒					O'flow only
D.O.G.M.I.	☒					
Corps of Engineers	☒					
Coast Guard	☒					
Co. Conditional Use	☒					
NPS Air Pollution	☒					
NPS Water Pollution	☒					

CULTURAL:						
Cultural Survey		☒			☒	
Cultural Salvage	☒					

NOISE:						
Noise Study		☒			☒	

9372

December 18, 1978

Ms. Rose Bauske
84980 Tillicum Avenue
Pleasant Hill, OR 97401

Dear Ms. Bauske:

This acknowledges your letter of November 23 concerning traffic conditions on the Willamette Highway (ORE58) between Eugene and Lowell.

Through the years, the Highway Division has conducted many investigations of ORE58, particularly in the area of Pleasant Hill. We have investigated the need for a project to provide a left-turn refuge at Cloverdale Road, however, at this time no funds are available for such construction.

Establishment of a 45 MPH speed zone on such a long section of rural highway would be impractical as only a massive enforcement effort would reduce traffic speed. Such effort would be impractical from a police manpower standpoint.

The accident history on this section of highway has been below the statewide average for comparable sections of rural primary state highways for the last five years. For example, the accident rate for 1977 from I-5 to Lowell Junction was 1.12 accidents per million miles. The statewide average for such state facilities was 1.63 accidents of million miles traveled.

Presently there is a project under way to provide a left-turn refuge at the Lowell-Jasper Road connection to ORE58. This project is in conjunction with the replacement of the covered bridge in the vicinity by Lane County.

See #7621

Other than a short section of resurfacing, there are no other projects scheduled in our Six-Year Improvement Program for this highway.

Sincerely,

H. S. Coulter
State Highway Engineer

bc F. B. Klaboe
Alfred Shirley, Jr.
L. E. George

RECEIVED
STATE HWY ENGR
DEC-1 '78
REFERRED TO Bud Hoge
FOR
Info
Inves
R/D
D/R
Sig
Act
File

84980 Tillicum Ave.
Pleasant Hill, OR 97401
Nov. 25, 1978

State Highway Engineers
130 Transportation Building
Salem, OR 97310

Gentlemen:

I am writing as a concerned citizen about the traffic dangers of Highway 58 near my home.

I live in Pleasant Hill and the stretch of highway between Eugene and Lowell, is sometimes referred to as "Blood Alley", especially after an accident. Three deaths occurred Labor Day, 1978, and another a few years ago, just below the hill north of Pleasant Hill.

Conditions were greatly improved when turning lanes were installed at the Pleasant Hill shopping center and at the Pleasant Hill schools, and the reduced speed limit of 45 MPH was put into effect. But now more action is indicated. Reduced speed of 55 MPH to 45 MPH should be mandatory between Goshen and Lowell Bridge, because although HWY 58 is not a freeway, people drive on it as they do on I 5, which leads to accidents.

Also, a turning lane at Cloverdale Rd., which leads to Creswell, should be built, because it is so dangerous to make a left turn coming from Pleasant Hill, with log trucks and cars going 60 MPH and following too close. This is the intersection where a young girl was waiting to make a left turn and was rear-ended and pushed into oncoming traffic in the south lane and was killed. This accident is still under inverstigation.

I have heard many neighbors and residents living near this stretch of highway remark about how dangerous they feel it is to drive on it everyday. There are so many exits and the traffic and trucks are not geared for this.

Please look into this hazard and let me know what immediate or long range plans are in the offing for HWY 58. In the interim, lowering the speed limit would help considerably. I dread the possibility of another fatality happening because nothing was done.

Yours truly,

Rose B. Bauske

9372

L.

STATE OF OREGON

INTEROFFICE MEMO

ODOT - Traffic
DEPT.

378-6537
TELEPHONE

TO: Alfred Shirley, Jr.
Region 3 Engineer

DATE: November 22, 1978

FROM: L. E. George
Traffic Engineer Supervisor

SUBJECT: Request for Title II Safety Project
Region 3
Willamette Highway at Cloverdale Road
ORE58-Highway No. 18 - M.P. 2.64

Region 3 has asked if Federal Safety Funds can be justified for a left turn refuge at the subject location.

We have computed the priority index and find that it falls considerably short of the lowest rural ranking of 42.02 which is the lowest (No. 230) on our list submitted to the Federal Highway Administration. This location had a priority index of 34.28. Thus, it cannot be inserted in our list to justify the project.

The Region's benefit/cost ratio computation of 1.41 did include the single fatal accident which occured September 4, 1978 and not shown on the collision diagram. A benefit/cost computation utilizing the newly received National Safety Council accident cost figures (including the fatal) computes a ratio of 1.69.

This project does not meet the priority index computation requirements for Federal Highway Administration approval. The benefit/cost ratio is lower than two which had been used as a "Rule of thumb" for project approval prior to the new priority index method.

Based on the above information this project cannot be recommended for construction with Federal Safety monies at this time. This project will be added to our list of unfunded left turn refuge projects.

ORIGINAL SIGNED BY L. E. GEORGE

L. E. George
Traffic Engineer Supervisor

GLC:cs

cc: H. S. Coulter

NOTED
H.S.COULTER

RECEIVED
STATE HWY ENGR
NOV 24 '78
REFER TO

FOR
Info | Inves | R/D | D/R | Sign | Act | File

9372

L.

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

INTER-OFFICE CORRESPONDENCE
Roseburg, Oregon
November 1, 1978

FILE: TRA 7

FROM: ALFRED SHIRLEY, JR.
Regional Engineer

SUBJECT:

TO: H. S. Coulter
State Highway Engineer

At the August 23 meeting which was held at the Pleasant Hill School concerning traffic conditions on the Willamette Highway, we indicated that we would pursue the possibility of finding funds to construct a left turn refuge at the intersection of Cloverdale Road and the Willamette Highway.

We have done that and the dollar figure to construct that refuge is $195,700. A cost/benefit ratio is only 1.41 so you can see that this would not be eligible for Federal Aid Title II Safety funds.

This region does not have adequate minor betterment funds to achieve this project.

Would you please analyze this and determine whether you wish to pursue it further and provide the necessary funds to do the work.

You are aware, of course, that Commissioner Coleman also attended that Pleasant Hill meeting and is concerned about traffic conditions on the Willamette Highway.

as/cw

RECEIVED
STATE HWY ENGR
NOV 6 '78
REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

9372

GENERAL FILES

October 2, 1978

Ms. Evelyn Henderson, Secretary
Lowell Grange #745
Box 277
Lowell, OR 97452

Dear Ms. Henderson:

The Highway Division is currently studying the engineering design for a left-turn refuge at the intersection of the Willamette Highway and Cloverdale Road. Upon completion of the design and when we receive a cost estimate to construct that refuge, we will seek some funding to build the facility.

It is our hope that we can find some federal safety funds and can build the refuge in this next year, however, this is not a sure thing.

This office will keep you advised of any new developments.

Sincerely,

H. S. Coulter
State Highway Engineer

AS:cw jl

bc: Alfred Shirley, Jr.

Oregon State Highway Division

Salem, Oregon

The Lowell Grange #745, Lowell, Ore. urge you to do something about the dangerous areas on Highway #58.

A turning lane is badly needed from Hwy. #58 onto Cloverdale Road ---- just east of the Coast Fork Bridge. The traffic is heavy on Hwy. #58 and it is very dangerous to turn onto Cloverdale Road from the east.

A 19 yr. old Pleasant Hill girl was killed there on Labor Day of this year ---- it could have been prevented by having a turning lane.

Do something about this before another life is lost!! There have been many, many close calls!!

Hoping to see a turning lane there soon.

Members of the Lowell Grange #745

Evelyn S. Henderson Sec.

Lowell Grange #745
Box 277
Lowell, OR 97452

RECEIVED
STATE HWY ENGR

SEP 21 '78

REFER TO
Shirley

FOR

Info	Inves	R/D	D/R	Sign	Act	File
		✓				

9372 2.

STATE OF ORE ON INT OFFICE MEMO

ODOT - Traffic
DEPT.
378-6537
TELEPHONE

NOTED
H. S. COULTER

TO: MEMO TO FILE

DATE: August 24, 1978

RECEIVED
STATE HWY ENGR
AUG 25 '78
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

FROM: G. L. Clark
Investigations & Research Engineer

SUBJECT: Meeting with Superintendent of Schools
Regarding Traffic Condition
Willamette Highway
Pleasant Hill and Vicinity

On Wednesday, August 23, 1978, a meeting was held at the Pleasant Hill School with Superintendent Michael S. Palanuk. Those representing the Highway Division were as follows:

- Mr. Gordon Coleman, Transportation Commissioner
- Mr. Alfred Shirley, Jr., Region III Engineer, Roseburg
- Mr. L. R. Asburry, District Engineer, Eugene
- Mr. D. Jones, Assistant District Engineer, Eugene
- Mr. Glen L. Clark, Investigations & Research Engineer, Salem

Mr. Palanuk was concerned about the school buses safety entering the steady flow of vehicular traffic existing on the Willamette Highway ORE58 from the school grounds. He was concerned about the left-turn movement of buses East to South from ORE58 to Cloverdale Road. He pointed out that passing maneuvers were occurring within the continuous left-turn refuges (painted) in the vicinity of Pleasant Hill Shopping Center.

He was advised that the State had attempted to obtain Federal Safety Funds for installation of a left-turn refuge at Cloverdale Road but had been unsuccessful. An attempt is still being made to obtain State Funds for this project. It may involve relocation of the intersection due to a drainage structure on ORE58 immediately east of the present intersection.

He was advised that if standards allowed that "left turn only" stencils would be installed in the continuous left-turn refuges at the Pleasant Hill Shopping Center.

Several other items were discussed but none required action.

After the meeting, the writer contacted Mr. George, Traffic Engineer Supervisor, and obtained approval to install the requested stencils. By a copy of this memo Mr. Asburry is being so advised.

Glen L. Clark
Investigations & Research Engineer

GLC:tk
cc: Gordon Colman
H. S. Coulter ✓
Alfred Shirley
L. R. Asburry

81-125-1367

572

9372

July 20, 1978

Mr. Michael S. Palanuk
Superintendent
Pleasant Hill Public Schools
36386 Highway 58
Pleasant Hill, OR 97401

Dear Mr. Palanuk:

An analysis of traffic data and conditions on the Willamette Highway in the vicinity of Pleasant Hill has been completed and some action has already been taken based on our study.

tracer
Ira 7-8

The State Police have been contacted and requested to apply selective enforcement in the area, particularly for drivers using existing two-way, left-turn refuges for passing lanes. Additional signs will also be installed.

Of the suggestions made by your delegation, traffic data supported only the construction of left-turn refuges at Cloverdale Road. Funding possibilities are being studied to see if money is available for the construction of this refuge.

Mr. Alfred Shirley, Jr., our Region Engineer in your area, has been asked to contact you to discuss the details of this study.

Sincerely,

H. S. Coulter
State Highway Engineer

cc Supt. Robert R. Fisher, OSP
Alfred Shirley, Jr.

bc F. B. Klaboe
L. E. George
R. L. Schroeder

LEG:ds HSC:ia

STATE OF OREGON **INTEROFFICE MEMO**

ODOT - Traffic
DEPT.

378-6537
TELEPHONE

TO: H. S. Coulter
State Highway Engineer

DATE: June 1, 1978

FROM: L. E. George
Traffic Engineer Supervisor

SUBJECT: Highway Investigation
Willamette Highway No. 18 ORE58
Vicinity of Pleasant Hill

As I indicated to you sometime ago, an investigation and a report have been completed jointly by this office and Region 3 concerning traffic conditions on the Willamette Highway in the vicinity of Pleasant Hill. This investigation was undertaken as a result of a request made by a delegation at the January 24 Oregon Transportation Commission Meeting.

The delegation presented the Commission with a rather extensive list of requested improvements. Each of these has been reviewed and analyzed on the basis of existing traffic data. A copy of the report is attached.

In essence, the report recommends no action involving the proposed improvements. A left-turn refuge is warranted at the Cloverdale Road intersection, but at the present time to the best of my knowledge, it is not fundable.

L E George
L. E. George
Traffic Engineer Supervisor

LEG:ds
Attachment

cc: Alfred Shirley, Jr. w/attachment

RECEIVED
STATE HWY ENGR
JUN -2'78
REFER TO
Schroede
FOR
Info | Inves | R/D | D/R | Sign | Act | File

Palomaki

Include

81-125-1387

OREGON STATE HIGHWAY DIVISION
Traffic Engineering Section

Highway Investigation
Willamette Hwy. No. 18
Vicinity of Pleasant Hill
May, 1978

At the request of a delegation from the community of Pleasant Hill, an investigation has been made on the Willamette Highway No. 18 from Seavey Loop Road (M.P. 0.50) to Lost Creek Road (M.P. 11.49). The request was for the construction of seven left-turn refuges, two no-passing zones, a fire signal, and some sign modifications. The requests and any recommendations are discussed below.

Left-turn Refuges

Left-turn refuges were requested at Mathews Road (M.P. 2.40), Cloverdale Road (M.P. 2.64), Edenvale Road (M.P. 4.20), Bristow Road (M.P. 4.76), Pheasant Lane (M.P. 6.36), and Hilltop Drive (M.P. 7.19). Traffic counts and collision diagrams were requested for all of the locations, with the exception of Mathews Road. This intersection is adjacent to the structure crossing the Coast Fork of the Willamette River and the cost of widening the highway to provide a left-turn refuge would be prohibitive.

The collision diagram for the intersection of Cloverdale Road reveals that there have been seven reported accidents for the period of January 1, 1974 through November 30, 1977. Three of the accidents might have been prevented by the installation of a left-turn refuge for the east to south movement. One accident might have been prevented by the installation of a refuge for the west to north movement. The manual count showed 92 vehicles making the west to north left turn against 3,640 vehicles.

The collision diagram at Edenvale Road reveals that there have been two reported accidents for the period of January 1, 1974 through November 30, 1977. One of the accidents could have been prevented by the installation of a refuge for the west to north movement. The 24-hour manual count shows 94 vehicles making the west to north movement against 4,010 vehicles.

There were no reported accidents at the Bristow Road intersection. A manual count was not made at this intersection but a 24-hour hose count indicated that the ADT on Bristow Road was 140.

There were also no reported accidents at the intersection of Pheasant Lane for this same time period. The manual count for this intersection shows 63 vehicles making the west to north movement against 3,490 vehicles.

There was one reported accident at the intersection of Hilltop Drive for the period of January 1, 1974 through November 30, 1978. This accident could not have been prevented by a left-turn refuge for Hilltop Drive. The manual count showed 87 vehicles making the west to north left turn movement against 3,160 vehicles.

As a result of this investigation, it is felt that left-turn refuges are not warranted for any of the intersections studied with the only possible exception being that of Cloverdale Road for the east to south movement. The estimated contract cost for a single refuge at this location is $75,000 and $100,000 for a refuge in each direction. However, the proposal has a low benefit-cost ratio and would not qualify for Federal-Aid funds and there are no State funds available.

No-Passing Zones

No-passing zones were requested between Kensington Drive (M.P. 3.67) and Tillicum Avenue (M.P. 4.08) near the Pleasant Hill Shopping Center and between Enterprise Road (M.P. 5.23) and 0.27 mile east of Enterprise Road (M.P. 5.50) near the Pleasant Hill School. Both sections are currently striped as two-way left-turn lanes. The request noted that some motorists are using the turning lanes as passing lanes. Since it is illegal to pass in a two-way left-turn lane and all signing and striping are up to standards, there is no need for a no-passing zone.

In the portion of the two-way left-turn lane from Kensington Drive (M.P. 3.67) to Ridgeway Road (M.P. 3.95) there is only one location where a left-turn is possible. This portion could possibly be better utilized as a continuation of the Slow Moving Vehicle lane which ends at Kensington Drive. However, because of the geometrics, it would be difficult to make the change.

Signing and Signals

The delegation requested that the Highway Division install large flashing signs near Hidden Lane (M.P. 1.12) and Lost Creek Road (M.P. 11.49) advising motorists that there are school buses loading in the area between 6:30 a.m. and 9:00 a.m. and between 2:00 p.m. and 4:00 p.m. This sign would convey information similar to the "SCHOOL BUS STOP AHEAD" sign which, according to the MUTCD, is to be used "where terrain and roadway features limit the approach sight distance ...". The highway is relatively tangent and level throughout the area and the above conditions would not apply. Signs warning motorists that it is unlawful to pass school buses when red lights flash and appropriate school signs have been installed. It is recommended that no additional signs be installed.

It was also requested that the "SPEED 45" sign at M.P. 5.82 be moved to the location of the "SPEED ZONE AHEAD" sign near M.P. 5.90 to give motorists greater chance to slow down before reaching the school. The existing school exception ends at M.P. 5.50 which gives motorists 1700 feet in which to reduce their speed. After a review of the situation, it does not appear that moving the two signs 400 feet to the east would provide sufficient benefit to justify the cost.

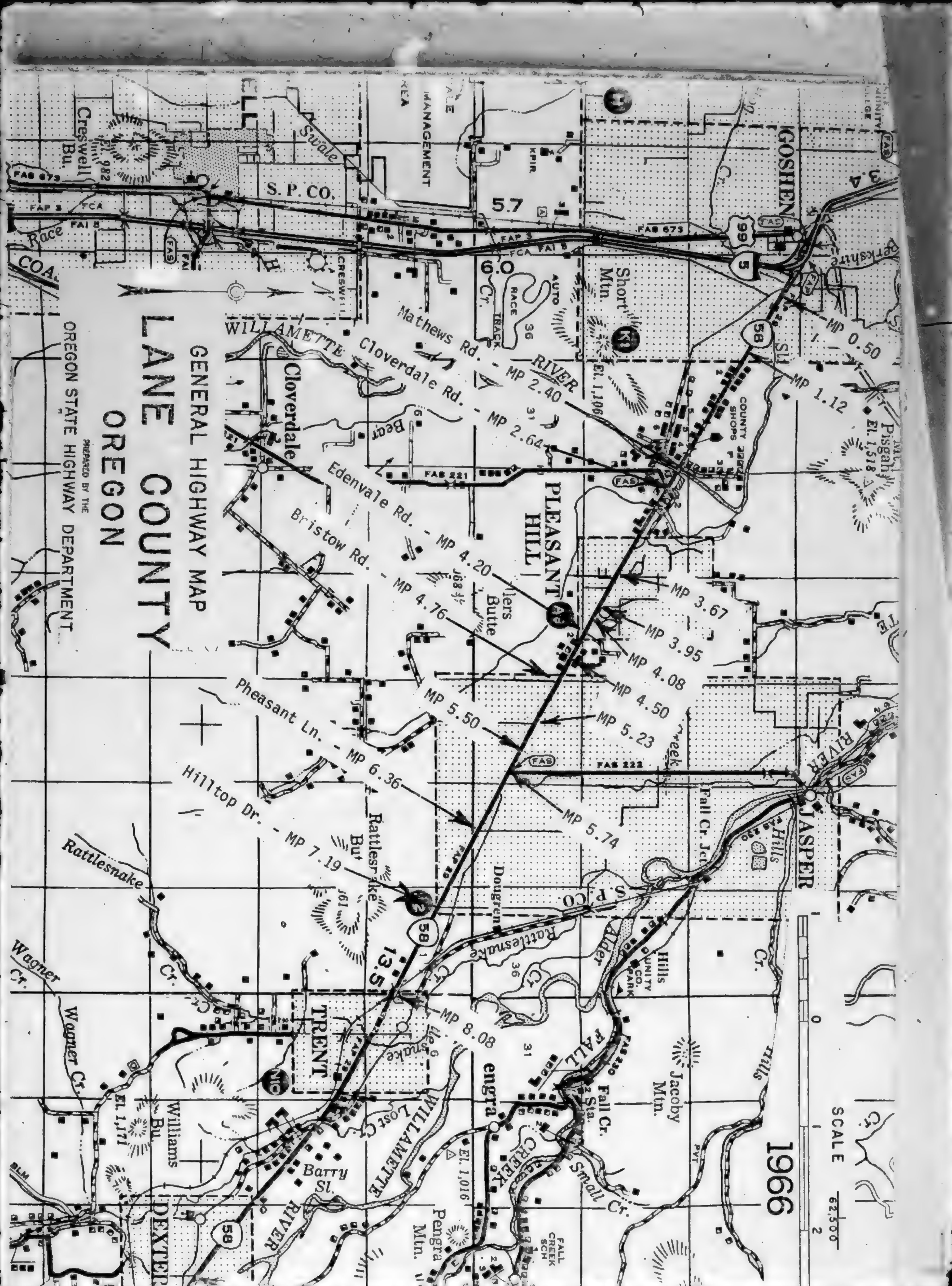
There was a further request for the installation of a flashing light at the access to the Pleasant Hill Fire Station near M.P. 4.50. The access is on a tangent, level section of roadway and has adequate sight distance. Advance signs have been installed. The situation was discussed with the District Engineer and it does not appear that a fire signal is warranted.

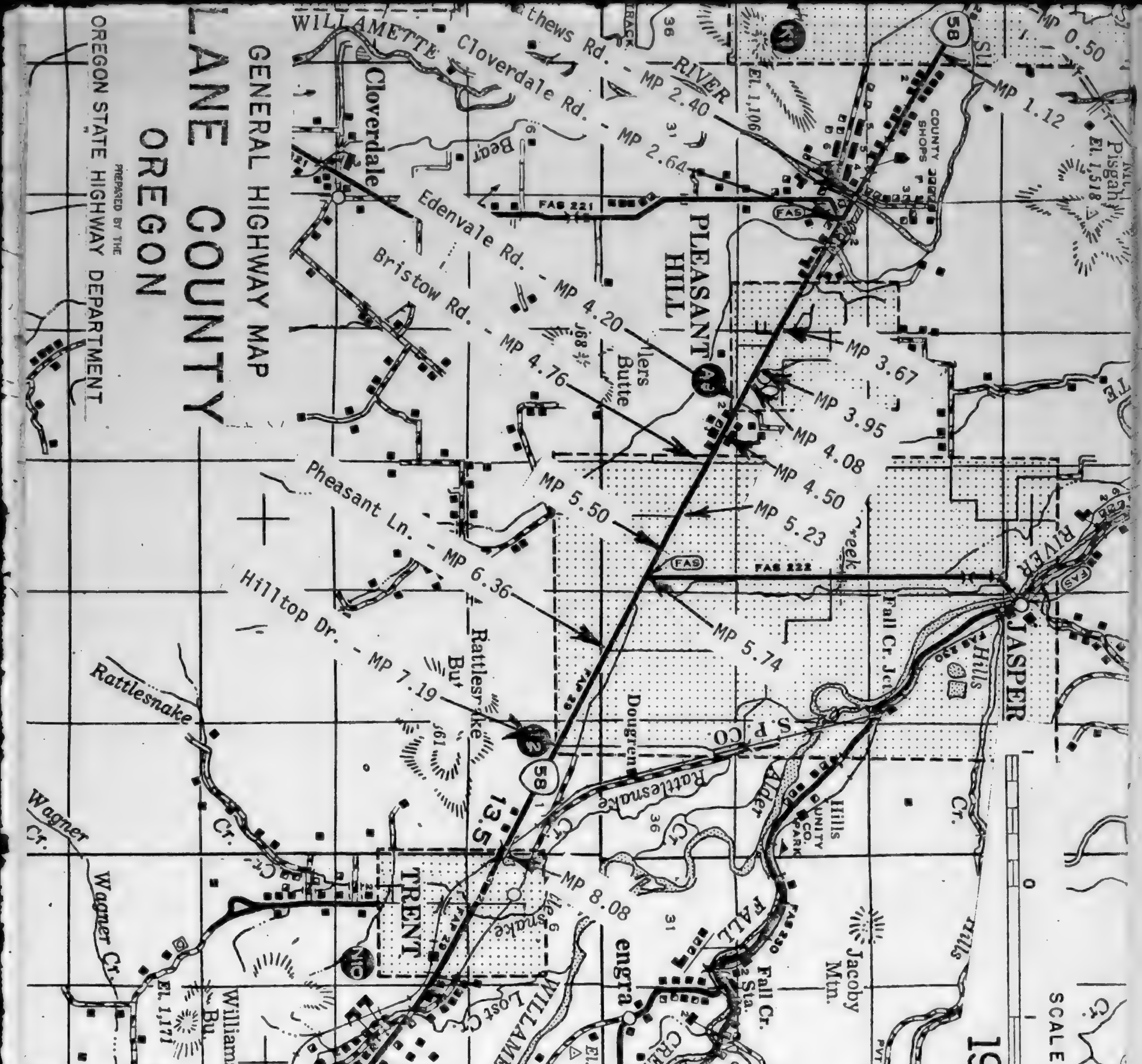
Conclusion

As a result of this investigation, it is recommended that none of the projects requested in the Pleasant Hill area be approved. Only the left-turn refuge at Cloverdale Rd. is warranted but no funds are available for this project. During the investigation, two situations not included in the request were noted. It is recommended that the Region Office review conditions at the overcrossing of the Southern Pacific RR at M.P. 8.08 to determine if guardrails near the structure should be flared or connected to the structure as appropriate.

It is further recommended that the region investigate the need for a longer deceleration lane for westbound traffic at the Springfield-Creswell Hwy. M.P. 5.74.

SRW:rah


GENERAL HIGHWAY MAP
LANE COUNTY
OREGON
PREPARED BY THE
OREGON STATE HIGHWAY DEPARTMENT
1966
SCALE
62,500
Mathews Rd. - MP 2.40
Cloverdale Rd. - MP 2.64
Edenvale Rd. - MP 4.20
Bristow Rd. - MP 4.76
Pheasant Ln. - MP 6.36
Hilltop Dr. - MP 7.19
MP 0.50
MP 1.12
MP 3.67
MP 3.95
MP 4.08
MP 4.50
MP 5.23
MP 5.50
MP 5.74
MP 8.08
GOSHEN
PLEASANT HILL
JASPER
TRENT
DEXTER
Cloverdale
Creswell
Creswell Bu.
S.P. CO.
WILLAMETTE RIVER
Short Mtn.
Mt. Pisgah
EL. 1,518
EL. 1,106
EL. 1,171
EL. 1,016
Rattlesnake Bu.
Rattlesnake Cr.
Wagner Cr.
Williams Bu.
Barry Sl.
Lost Cr.
Fall Cr.
Fall Cr. Jct.
FALL CREEK
Pengra
Pengra Mtn.
Jacoby Mtn.
Dougren
Alder Cr.
Small Cr.
Berkshire Sl.
Bear Cr.
Swale
Race
FALL CREEK SCH
COUNTY SHOPS
AUTO RACE TRACK
MANAGEMENT
FAS 221
FAS 222
FAS 673
FAP 3
FAI 5
FCA
58
99
5
13.5
5.7
6.0



LANE COUNTY
GENERAL HIGHWAY MAP
OREGON
PREPARED BY THE
OREGON STATE HIGHWAY DEPARTMENT
1966
SCALE
1/62,500
0
1
2
3
4 Miles
Mathews Rd. - MP 0.50
MP 1.12
Cloverdale Rd. - MP 2.40
MP 2.64
MP 3.67
MP 3.95
MP 4.08
Edenvale Rd. - MP 4.20
MP 4.50
Bristow Rd. - MP 4.76
MP 5.23
MP 5.50
MP 5.74
Pheasant Ln. - MP 6.36
Hilltop Dr. - MP 7.19
MP 8.08
MP 11.49
58
13.5
WILLAMETTE RIVER
Cloverdale
PLEASANT HILL
COUNTY SHOPS
Pisgah
El. 1,518
El. 1,106
FAS 221
FAS 222
FAS 230
FAP 29
Butte
Rattlesnake
Rattlesnake Butte
Dougren
S.P.CO.
Alder Cr.
Fall Cr. Jct.
JASPER
RIVER
Hills
Hills Creek
Jacoby Mtn.
TRENT
Lost Cr.
Barry Sl.
Williams Bu.
El. 1,171
El. 1,016
Wagner Cr.
Pengra
Pengra Mtn.
FALL CREEK
Fall Cr. Sta.
Small Cr.
FALL CREEK SCH
Fall Creek
Little
Unity
DEXTER
DEXTER RES.
SOUTHERN
LOWELL NORTH SHORE RECREATIONAL AREA (CO.)
RANGER STA.
Noisy
BLM
PVT

RECEIVED
MAY 8 1978
TRAFFIC ENGINEERING

NOTED
L E GEORGE

PER RSB 12 5-8-78 10-42-78AM

LE GEORGE

REGION 3 RECOMMENDS NO LEFT TRXX TURN REFUGE CONSTRUCTION AT XXXXRXX INTERSECTION OF CLOVERDALEROAD AND THE WILLAMETTE HIGHWAY COST BENEFIT RATIO NOT HIGH ENOUGH TO DDXAX OBTAIN FEDERAL- AID AND NO STATE MONIES AVAILABLE IN THIS REGION.

BUD SHIRLEY

CA004..

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

INTER-OFFICE CORRESPONDENCE

Roseburg, Oregon

April 25, 1978

FILE: TRA 7

FROM: ALFRED SHIRLEY, JR.
Regional Engineer

TO: L. E. George
Traffic Engineer

SUBJECT: Traffic Conditions
Willamette Highway No. 18
ORE58 - Lane County

This letter is a further comment on our letter of April 17 concerning traffic conditions on the Willamette Highway in the Pleasant Hill area.

By a copy of this letter, I am instructing the Region Federal Aid Engineer to investigate the possibility of funding a left turn refuge at the intersection of Cloverdale Road. This would probably involve the relocation of a short section of Cloverdale Road moving the intersection westerly to avoid the very costly replacement of the structure over the Coast Fork of the Willamette River.

as/cw

cc Dave Jones
Glen Clark

NOTED
L.E. GEORGE

RECEIVED
APR 28 1978
TRAFFIC ENGINEERING

NOTED
[illegible]

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

FILE: TRA 7

INTER-OFFICE CORRESPONDENCE

Roseburg, Oregon
April 17, 1978

FROM: ALFRED SHIRLEY, JR.
Regional Engineer

SUBJECT: Traffic Conditions
Willamette Hwy. No. 18
ORE58 Lane County

TO: L.E. George
Traffic Engineer
SALEM

As per your memo dated February 22, 1978, manual counts and collision diagrams have been prepared to determine the need for left turn refuges as outlined in the minutes of the O.T.C. meeting of January 24, 1978, concerning the Palanuk delegation.

A manual count was not taken at the intersection of Mathews Road and ORE58 (M.P. 2.40) due to the truss structure, immediately east of the intersection making widening impractical.

Manual counts were taken at the intersections of Cloverdale Road (M.P. 2.64), Edenvale Road (M.P. 4.20), Pheasant Lane (M.P. 6.36), and Hilltop Drive (M.P. 7.19). A 24 hour hose count was also taken on Bristow Road which revealed an ADT of 142 vehicles.

The number of vehicles making left turns from ORE58 onto the respective side roads is less than 100 vehicles daily with the exception of the westbound approach to Cloverdale Road which showed 322 vehicles making the east to south movement against 3,370 vehicles.

The collision diagram for the intersection of Cloverdale Road reveals that there have been seven reported accidents for the period of January 1, 1974 thru November 30, 1977. Three of the accidents might have been prevented by the installation of a left turn refuge for the east to south movement. One accident might have been prevented by the installation of of a refuge for the west to north movement. The manual count showed 92 vehicles making the west to north left turn against 3,640 vehicles.

The collision diagram at Edenvale Road reveals that there have been two reported accidents for the period of January 1, 1974 thru November 30, 1977. One of the accidents could have been prevented by the installation of a refuge for the west to north movement. The 24 hour manual count shows 94 vehicles making the west to north movement against 4,010 vehicles.

RECEIVED
APR 19 1978
TRAFFIC ENGINEER

NOTED

NOTED
DWAYNE HOFSTETTER

There were no reported accidents at the intersection of Bristow Road during this same period. As stated earlier, the ADT on Bristow Road is only 140 vehicles.

There were also no reported accidents at the intersection of Pheasant Lane for this same time period. The manual count for this intersection shows 63 vehicles making the west to north movement against 3,490 vehicles.

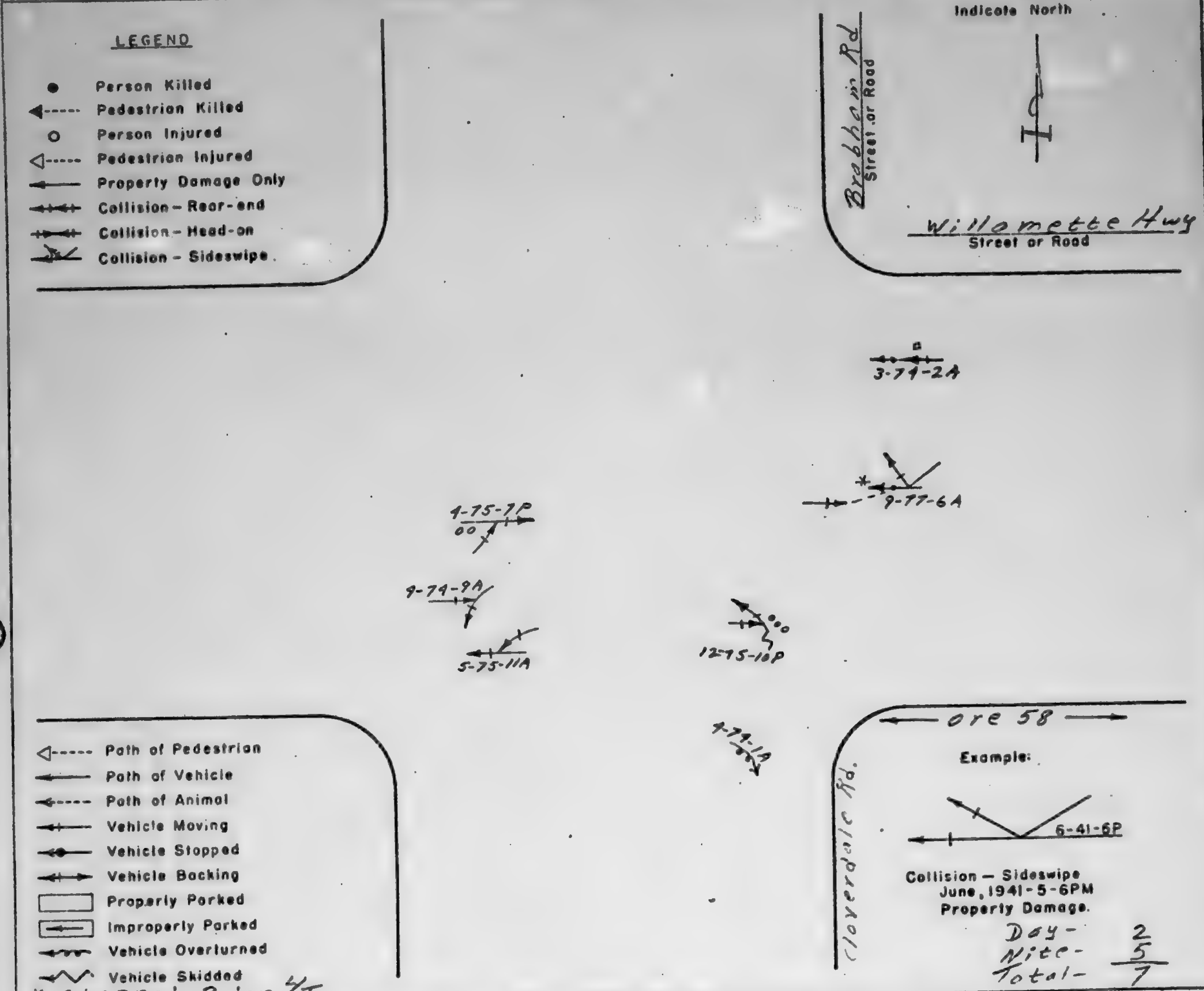
There was one reported accident at the intersection of Hilltop Drive for the period of January 1, 1974 thru Novemeber 30, 1978. This accident could not have been prevented by a left turn refuge for Hilltop Drive. The manual count showed 87 vehicles making the west to north left turn movement against 3,160 vehicles.

As a result of this investigation, it is felt that left turn refuges are not warranted for any of the intersections studied with the only possible exception being that of Cloverdale Road for the east to south movement. The estimated contract cost for a single refuge at this location is $75,000 and $100,000 for a refuge in each direction.

KDO/AS/cao
Encl.
cc: Dave Jones

Oregon State Highway Division
Traffic Engineering Section
Accident Analysis
COLLISION DIAGRAM

City of ____________ County *Lane*
Intersection of *Willamette Hwy* and *Cloverdale Rd.*
Highway Number *18 (ore 58)* *MP 2.69*
Period Covered *1-1-74* *11-30-77*
Compiled by *LG* Drawn by ____________ Date *3-2-78*


LEGEND
Person Killed
Pedestrian Killed
Person Injured
Pedestrian Injured
Property Damage Only
Collision - Rear-end
Collision - Head-on
Collision - Sideswipe
Brabham Rd
Street or Road
Indicate North
Willamette Hwy
Street or Road
3-74-2A
9-77-6A
4-75-7P
9-74-9A
5-75-11A
12-75-10P
4-74-1A
ore 58
Cloverdale Rd.
Example:
6-41-6P
Collision - Sideswipe
June, 1941-5-6PM
Property Damage.
Path of Pedestrian
Path of Vehicle
Path of Animal
Vehicle Moving
Vehicle Stopped
Vehicle Backing
Properly Parked
Improperly Parked
Vehicle Overturned
Vehicle Skidded

Day- 2
Nite- 5
Total- 7

* Stopped Prior 4/T

Collision Type	1974				1975				1976				11-Mos. 1977				Total			
	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop Damage	Total	Fatal	Non-fatal	Prop Damage	Total	Fatal	Non-fatal	Prop. Damage	Total
Angle																				
Head-on																		1		1
Rear-end		1		1														1		1
Sideswipe														1		1		2	2	4
Turning Movement			1	1		2	1	3												
Parking																		1		1
Non-collision		1		1																
Fixed Object																				
Pedestrian																				
Backing																				
Misc.																				
TOTAL		2	1	3		2	1	3				0		1		1		5	2	7

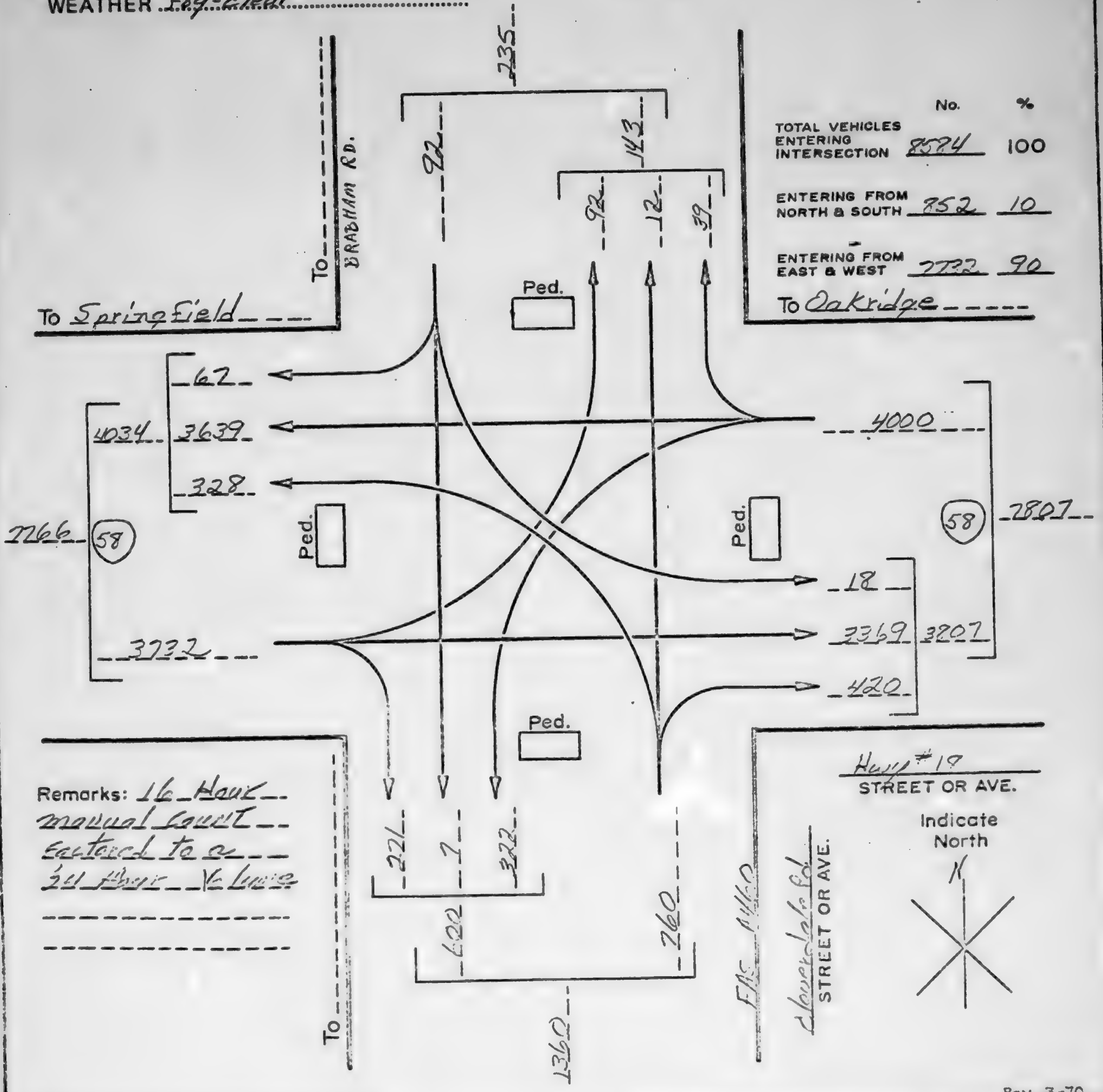
Form E-260 — 2M — 11-45 5/70

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION

TWENTY-FOUR HOUR VEHICULAR VOLUME

DATE March 1-9, 1978
DAY OF WEEK Wed Thur
ACTUAL COUNT (VEH.) 16 HRS.
HOURS COUNTED 6 AM - 10 PM
PEDESTRIAN COUNT ______ HRS.
HOURS COUNTED ______
WEATHER Fog-clear

~~CITY~~ OR COUNTY Lane County
INTERSECTION OF Willamette Hwy No. 18 (ORE 58) @ Cloverdale Road (FAS A460)
MILE POST 2.64
CLASSIFICATION ALL Vehicles



235
92
143
92
12
39
To BRABHAM RD.
To Springfield
Ped.
62
3639
328
4034
7766
58
Ped.
4000
7807
58
Ped.
18
3369
3807
420
3732
Ped.
221
7
322
620
760
1380
To
FAS A460
Cloverdale Rd.
STREET OR AVE.
To Oakridge

	No.	%
TOTAL VEHICLES ENTERING INTERSECTION	8574	100
ENTERING FROM NORTH & SOUTH	852	10
ENTERING FROM EAST & WEST	7722	90

Remarks: 16 Hour manual count factored to a 24 Hour Volume

Hwy #18
STREET OR AVE.

Indicate North
N

Rev. 3-70

Rev. 3'70

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION

SUMMARY OF TRAFFIC COUNT

Date 3/1$^{AM\ PM}$-9/78
Day of week Wed-thur
Hours counted 6AM-10PM
Weather Fog-clear

Classification ALL Vehicles

~~City~~ or County Lane
Intersection Willamette Hwy #18
@ Cloverdale Road (FAS A46
Mile Post 2.64

TIME		SUMMARY BY MOVEMENTS												TOTAL	From North and South	Per Cent of Total	From East and West	Per Cent of Total	ENTERING VOLUMES - SUMMARY BY LEGS			
		North to East	East to North	North to West	West to North	North to South	South to North	East to West	West to East	East to South	South to East	West to South	South to West						North	East	West	South
A. M.	6:00- 7:00	1	2	9	2	-	-	149	101	18	29	8	6	325	45	14	280	86	10	169	111	35
	7:00- 8:00	-	1	7	2	-	-	433	173	13	31	3	43	706	81	11	625	89	7	447	178	74
	8:00- 9:00	-	2	6	1	-	1	312	163	22	29	3	46	595	82	14	503	86	6	336	167	76
	9:00-10:00	-	2	8	3	-	1	198	150	15	25	10	8	420	42	10	378	90	8	215	163	34
	10:00-11:00	2	-	1	2	-	-	174	156	20	23	20	7	405	33	8	372	92	3	194	178	30
	11:00-12:00	2	3	8	6	1	1	223	172	23	18	8	12	477	42	9	435	91	11	249	186	31
P. M.	12:00- 1:00	-	3	2	5	-	1	184	185	18	21	6	13	438	37	8	401	92	2	205	196	35
	1:00- 2:00	3	14	-	12	-	-	168	196	5	23	2	20	443	46	10	397	90	3	187	210	43
	2:00- 3:00	1	4	5	3	2	-	203	202	25	16	20	20	501	44	9	457	91	8	232	225	36
	3:00- 4:00	2	1	2	12	1	2	277	247	31	27	24	13	639	47	7	592	93	5	309	283	42
	4:00- 5:00	3	2	5	9	1	3	277	316	36	34	36	22	754	78	10	676	90	9	315	361	69
	5:00- 6:00	-	1	1	5	1	1	205	321	22	31	37	19	644	53	8	591	92	2	229	363	51
	6:00- 7:00	1	-	5	2	-	1	227	239	27	34	21	23	591	64	11	527	89	6	254	273	58
	7:00- 8:00	1	-	2	4	-	-	151	146	8	17	19	21	369	41	11	328	89	3	159	169	38
	8:00- 9:00	-	-	-	5	-	-	63	149	4	15	10	10	256	25	10	231	90	-	67	164	25
	9:00-10:00	-	-	-	5	-	-	64	147	6	9	14	5	250	14	6	236	94	-	70	166	14
	10:00-11:00																					
	11:00-12:00																					
A. M.	12:00- 1:00																					
	1:00- 2:00																					
	2:00- 3:00																					
	3:00- 4:00																					
	4:00- 5:00																					
	5:00- 6:00																					
24-Hour total		18	[illegible]	67	92	7	12	3639	3369	322	420	271	328	8584	852	10	7732	90	92	4000	3732	760
16-Hour total		16	35	61	84	6	11	3308	3063	293	382	246	298	7803	774	10	7029	90	83	3636	3393	691
__-Hour total																						
Control																						
Factor																						

Tabulated by Dw
Checked by KRS 3-14-78

Cloverdale Rd St. is North and South
Hwy. 18 St. is East and West

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION

SUMMARY OF TRAFFIC COUNT

AM PM
-9/78
Thur
AM-10 PM
clear

Classification ALL Vehicles

~~City~~ or County Lane
Intersection Willamette Hwy #18(ORE58)
@ Cloverdale Road (FAS A460)
Mile Post 2.64

West to North	North to South	South to North	East to West	West to East	East to South	South to East	West to South	South to West	TOTAL	From North and South	Per Cent of Total	From East and West	Per Cent of Total	Entering Volumes North	Entering Volumes East	Entering Volumes West	Entering Volumes South	Pedestrians North	Pedestrians East	Pedestrians West	Pedestrians South
2	–	–	149	101	18	29	8	6	325	45	14	280	86	10	169	111	35				
2	–	–	433	173	13	31	3	43	706	81	11	625	89	7	447	178	74				
1	–	1	312	163	22	29	3	46	585	82	14	503	86	6	336	167	76				
3	–	1	198	150	15	25	10	8	420	42	10	378	90	8	215	163	34				
2	–	–	174	156	20	23	20	7	405	33	8	372	92	3	194	178	30				
6	1	1	223	172	23	18	8	12	477	42	9	435	91	11	249	186	31				
5	–	1	184	185	18	21	6	13	438	37	8	401	92	2	205	196	35				
12	–	–	168	196	5	23	2	20	443	46	10	397	90	3	187	210	43				
3	2	–	203	202	25	16	20	20	501	44	9	457	91	8	232	225	36				
12	1	2	227	247	31	27	24	13	639	47	7	592	93	5	309	283	42				
9	1	3	227	316	36	34	36	22	754	78	10	676	90	9	315	361	69				
5	1	1	205	321	22	31	37	19	644	53	8	591	92	2	229	363	51				
2	–	1	227	239	27	34	26	23	591	64	11	527	89	6	254	273	58				
4	–	–	151	146	8	17	19	21	369	41	11	328	89	3	159	169	38				
5	–	–	63	149	4	15	10	10	256	25	10	231	90	–	67	164	25				
5	–	–	64	147	6	9	14	5	250	14	6	236	94	–	70	166	14				
92	7	12	3639	3369	322	420	271	328	8584	852	10	7732	90	92	4000	3732	760				
84	6	11	3308	3063	293	382	246	298	7803	774	10	7029	90	83	3636	3393	691				

Tabulated by Dw
Checked by KRS 3-14-78

dale Rd St. is North and South
18 St. is East and West

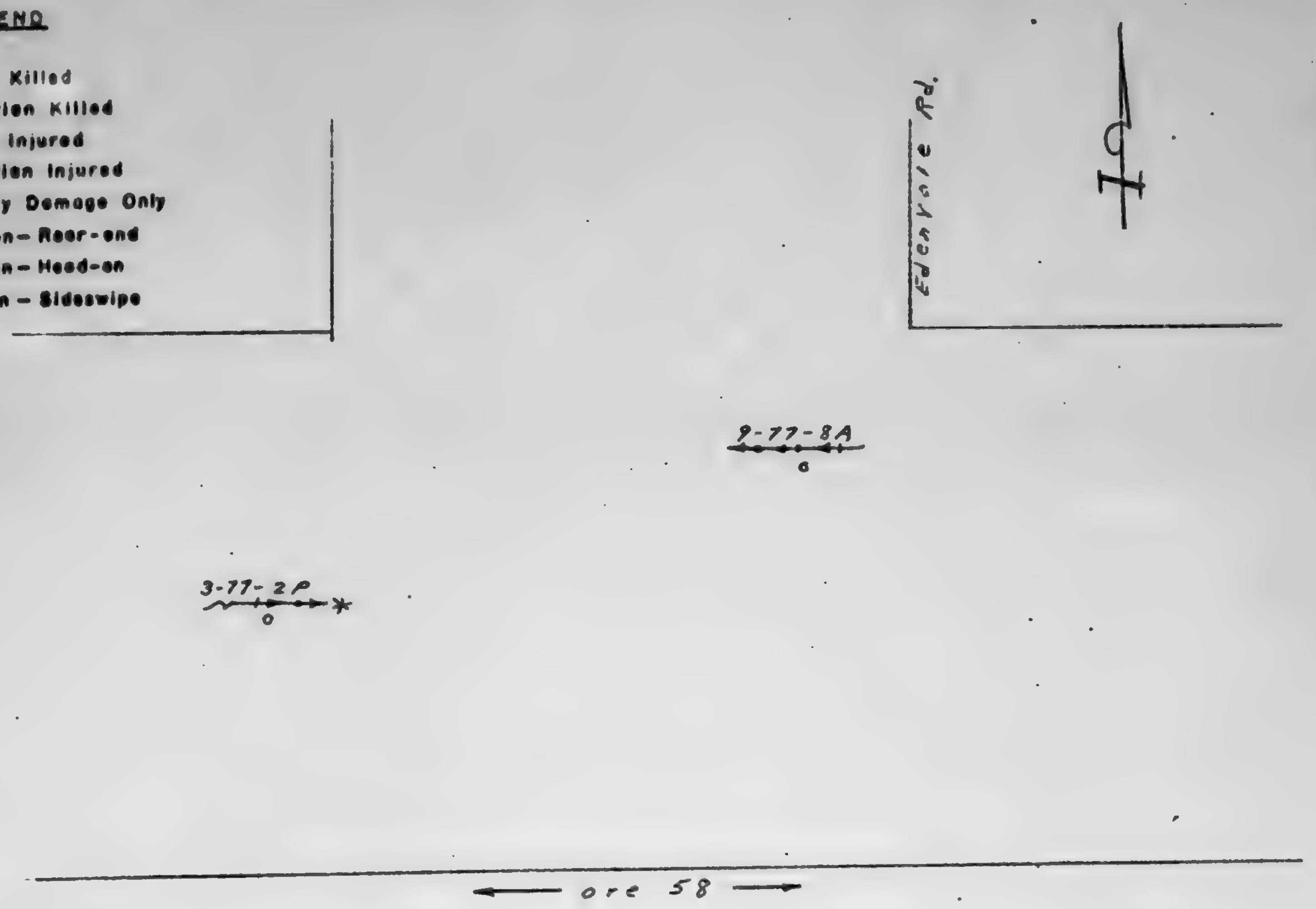
OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION
ACCIDENT ANALYSIS

COLLISION DIAGRAM

City of ____________ County Lane
Intersection of Willamette Hwy and Edenvale Rd.
Highway Number 18 (ore 58) MP 4.20
Period Covered 1-1-74 11-30-77
Compiled by ______ Drawn by ______ Date 3-2-78

LEGEND

- ● Person Killed
- ◁----- Pedestrian Killed
- ○ Person Injured
- ◁----- Pedestrian Injured
- ←—— Property Damage Only
- ←←— Collision - Rear-end
- →← Collision - Head-on
- ⤫ Collision - Sideswipe



- ◁----- Path of Pedestrian
- ←—— Path of Vehicle
- ◁----- Path of Animal
- ←+— Vehicle Moving
- ←●— Vehicle Stopped
- ←+→ Vehicle Backing
- ▭ Properly Parked
- ▭ Improperly Parked
- ←▾▾ Vehicle Overturned
- ←⋀⋀ Vehicle Skidded

* stopped Prior L/T

Day- 2
Nite- 0
Total- 2

Collision Type	1974				1975				1976				11-Mos. 1977				Total			
	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total
Angle																				
Head-on																				
Rear-end														2		2		2		2
Sideswipe																				
Turning Movement																				
Parking																				
Non-collision																				
Fixed Object																				
Pedestrian																				
Backing																				
Misc.																				
TOTAL				0				0				0		2		2		2		2

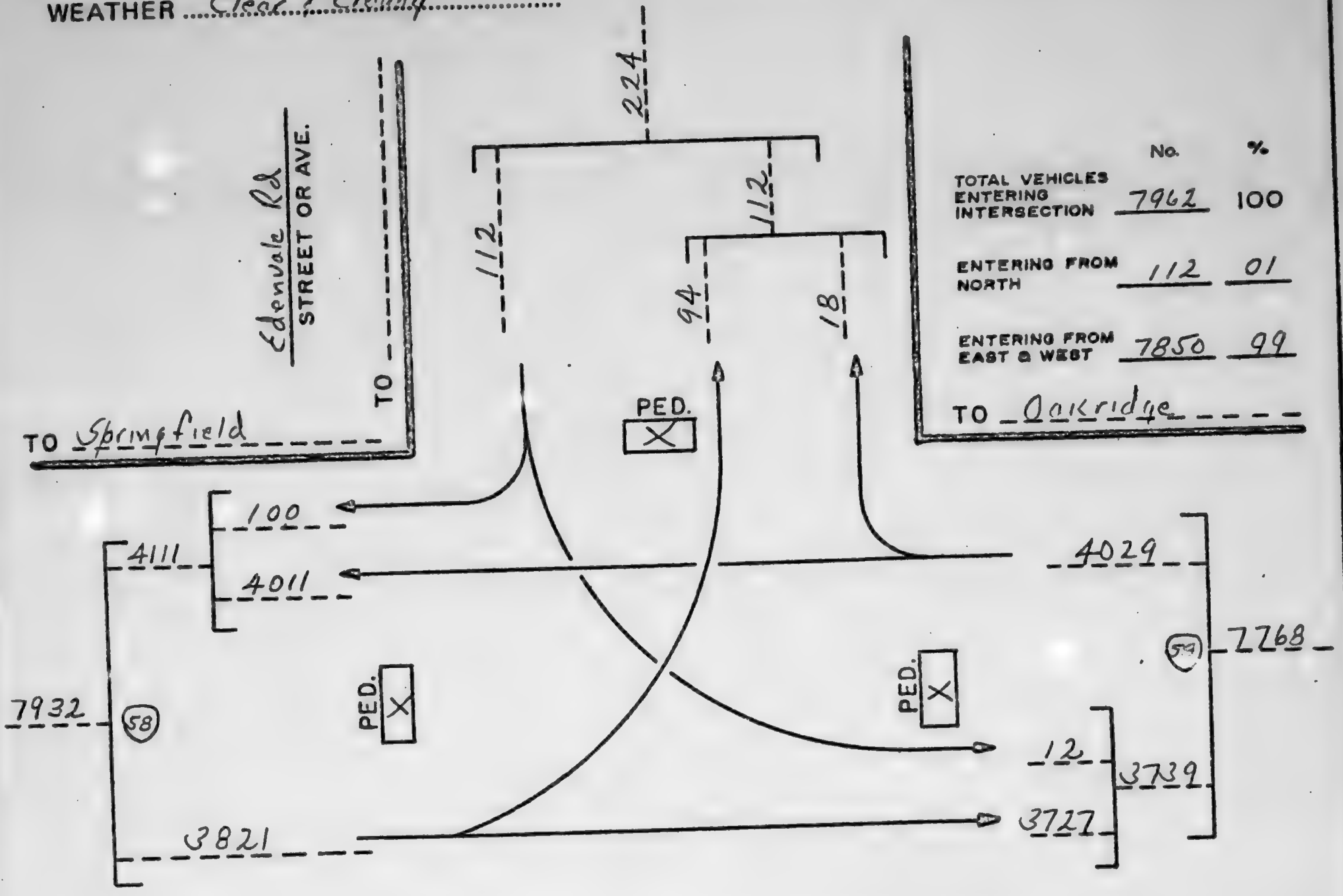
Form E-261-6-70

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION

TWENTY-FOUR HOUR VEHICULAR VOLUME

DATE Mar 6 (AM) & 7 (PM), 1978
DAY OF WEEK Mon & Tue
ACTUAL COUNT (VEH.) 16 HRS.
HOURS COUNTED 6A – 10P
PEDESTRIAN COUNT — HRS.
HOURS COUNTED —
WEATHER Clear & Cloudy

CITY OR COUNTY Lane Co.
INTERSECTION OF Willamette Hwy #18 (Ore 58) & Edenvale Rd.
MILE POST 4.20
CLASSIFICATION



224
112
112
94
18
Edenvale Rd
STREET OR AVE.
TO
TO Springfield
PED.
TO Oakridge
100
4111
4011
4029
7768
59
7932
58
PED.
PED.
12
3739
3821
3727

	No.	%
TOTAL VEHICLES ENTERING INTERSECTION	7962	100
ENTERING FROM NORTH	112	01
ENTERING FROM EAST & WEST	7850	99

Remarks: 16 hour manual count factored to a 24 hour volume (1.10)

Hwy #18
STREET OR AVE.

Indicate North

Rev. 3'78

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION

SUMMARY OF TRAFFIC COUNT

Date Mar 6 (AM) & 7 (PM) 1978
Day of week Mon & Tue
Hours counted 16 hours (6A-10P)
Weather Clear & Cloudy

Classification All Vehicles

City or County Lane Co
Intersection Willamette Hwy #18
& Edenvale Rd
Mile Post 4.20

TIME		SUMMARY BY MOVEMENTS North to East	East to North	North to West	West to North	North to South	South to North	East to West	West to East	East to South	South to East	West to South	South to West	TOTAL	From North and South	Per Cent of Total	From East and West	Per Cent of Total	ENTERING VOLUMES - SUMMARY BY LEGS North	East	West	South
A. M.	6:00- 7:00	0	0	4	2			154	120					280	4	01	276	99	4	154	122	
	7:00- 8:00	3	0	16	1			415	227					662	19	03	643	97	19	415	228	
	8:00- 9:00	3	1	10	0			317	189					520	13	03	507	97	13	318	189	
	9:00-10:00	0	1	3	4			252	185					445	3	01	442	99	3	253	189	
	10:00-11:00	0	3	7	3			201	160					374	7	02	367	98	7	204	163	
	11:00-12:00	0	1	2	3			247	223					476	2	01	474	99	2	248	226	
P. M.	12:00- 1:00	1	0	6	5			218	220					450	7	02	443	98	7	219	225	
	1:00- 2:00	0	0	4	2			213	196					415	4	01	411	99	4	213	198	
	2:00- 3:00	1	2	5	5			265	231					509	6	01	503	99	6	267	236	
	3:00- 4:00	2	2	9	14			331	267					625	11	02	614	98	11	333	281	
	4:00- 5:00	0	3	11	10			349	370					743	11	01	732	99	11	352	380	
	5:00- 6:00	0	0	4	14			260	432					710	4	01	706	99	4	260	446	
	6:00- 7:00	0	0	4	6			162	177					349	4	01	345	99	4	162	183	
	7:00- 8:00	1	2	1	7			114	176					301	2	01	299	99	2	116	183	
	8:00- 9:00	0	0	4	5			94	114					217	4	02	213	98	4	94	119	
	9:00-10:00	0	1	1	4			54	101					161	1	01	160	99	1	55	105	
	10:00-11:00																					
	11:00-12:00																					
A. M.	12:00- 1:00																					
	1:00- 2:00																					
	2:00- 3:00																					
	3:00- 4:00																					
	4:00- 5:00																					
	5:00- 6:00																					
24-Hour total		12	18	100	94			4011	3727					7962	112	01	7850	99	112	4029	3821	
__-Hour total																						
16-Hour total		11	16	91	85			3646	3388					7237	102	01	7135	99	102	3662	3473	
Control																						
Factor 1.10																						

Tabulated by Ray Roalwright

Checked by

Edenvale Rd St. is North

Willamette Hwy #18 St. is East and West

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION
SUMMARY OF TRAFFIC COUNT

(AM) & 7 (PM) 1978
Mon & Tue
6 hours (6A-10P)
r & Cloudy

City or County Lane Co.
Intersection Willamette Hwy #18 (Ore 58)
& Edenvale Rd
Mile Post 4.20

Classification All Vehicles

SUMMARY BY MOVEMENTS															ENTERING VOLUMES - SUMMARY BY LEGS				PEDESTRIANS USING CROSSWALKS			
rth o est	West to North	North to South	South to North	East to West	West to East	East to South	South to East	West to South	South to West	TOTAL	From North and South	Per Cent of Total	From East and West	Per Cent of Total	North	East	West	South	North	East	West	South
4	2			154	120					280	4	01	276	99	4	154	122					
16	1			415	227					662	19	03	643	97	19	415	228					
10	0			317	189					520	13	03	507	97	13	318	189					
3	4			252	185					445	3	01	442	99	3	253	189					
7	3			201	160					374	7	02	367	98	7	204	163					
2	3			247	223					476	2	01	474	99	2	248	226					
6	5			218	220					450	7	02	443	98	7	218	225					
4	2			213	196					415	4	01	411	99	4	213	198					
5	5			265	231					509	6	01	503	99	6	267	236					
9	14			331	267					625	11	02	614	98	11	333	281					
11	10			349	370					743	11	01	732	99	11	352	380					
4	14			260	432					710	4	01	706	99	4	260	446					
4	6			162	177					349	4	01	345	99	4	162	183					
1	7			114	176					301	2	01	299	99	2	116	183					
4	5			94	114					217	4	02	213	98	4	94	119					
1	4			54	101					161	1	01	160	99	1	55	105					
00	94			4011	3727					7962	112	01	7850	99	112	4029	3821					
91	85			3646	3388					7237	102	01	7135	99	102	3662	3473					

Tabulated by Ray Realwright

Checked by

vale Rd St. is North

mette Hwy #18 St. is East and West

OREGON STATE HIGHWAY DIVISION

TRAFFIC ENGINEERING SECTION

ACCIDENT ANALYSIS

COLLISION DIAGRAM

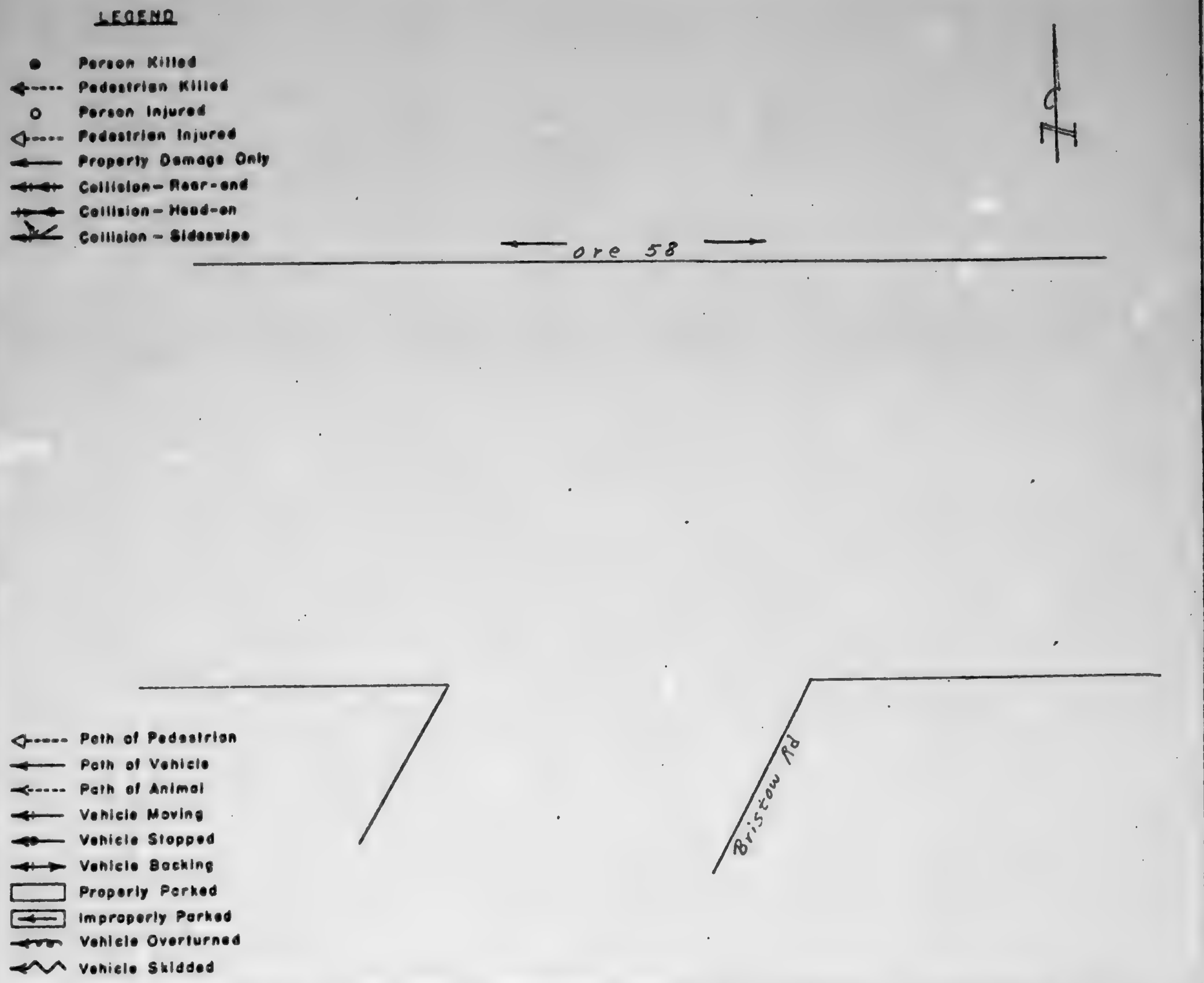
City of ______ County Lane

Intersection of Willamette Hwy and Bristow Rd

Highway Number 18 Ore 58 MP 7.76

Period Covered 1-1-74 11-30-77

Compiled by ______ Drawn by ______ Date 3-2-78


LEGEND
Person Killed
Pedestrian Killed
Person Injured
Pedestrian Injured
Property Damage Only
Collision – Rear-end
Collision – Head-on
Collision – Sideswipe
ore 58
Bristow Rd
Path of Pedestrian
Path of Vehicle
Path of Animal
Vehicle Moving
Vehicle Stopped
Vehicle Backing
Properly Parked
Improperly Parked
Vehicle Overturned
Vehicle Skidded

Collision Type	1974				1975				1976				11-Mos 1977				Total			
	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total
Angle																				
Head-on																				
Rear-end																				
Sideswipe																				
Turning Movement																				
Parking																				
Non-collision																				
Fixed Object																				
Pedestrian																				
Backing																				
Misc.																				
TOTAL				0				0				0				0				0

Form E-261-6-70

ROUTE OR HWY. NO. Bristol Rd
COUNTY Lane WEATHER Clear & Warm
DATE: SET OUT 3 /20/ 78 DAY Monday
PICK UP 3 /21/ 78 DAY Tuesday

OREGON STATE HIGHWAY DEPARTMENT
TRAFFIC ENGINEERING DIVISION
PLANNING SURVEY

PORTABLE RECORDER COUNT RECORD SHEET

MILE POST	LOCATION		TIME	READING	VOLUME	REMARKS	PREV. ADT
0.02	0.02 mile south of Hwy 18 (Willamette Hwy) K-Hill # 364	PICK UP	11:10A	35542	142		
		SET OUT	11:10A	35300			
		PICK UP					
		SET OUT					
		PICK UP					
		SET OUT					
		PICK UP					
		SET OUT					
		PICK UP					
		SET OUT					
		PICK UP					
		SET OUT					
		PICK UP					
		SET OUT					
		PICK UP					
		SET OUT					
		PICK UP					
		SET OUT					
		PICK UP					
		SET OUT					

RECORDER Tom [illegible]

Rev: 7/68 Form E-531 10M

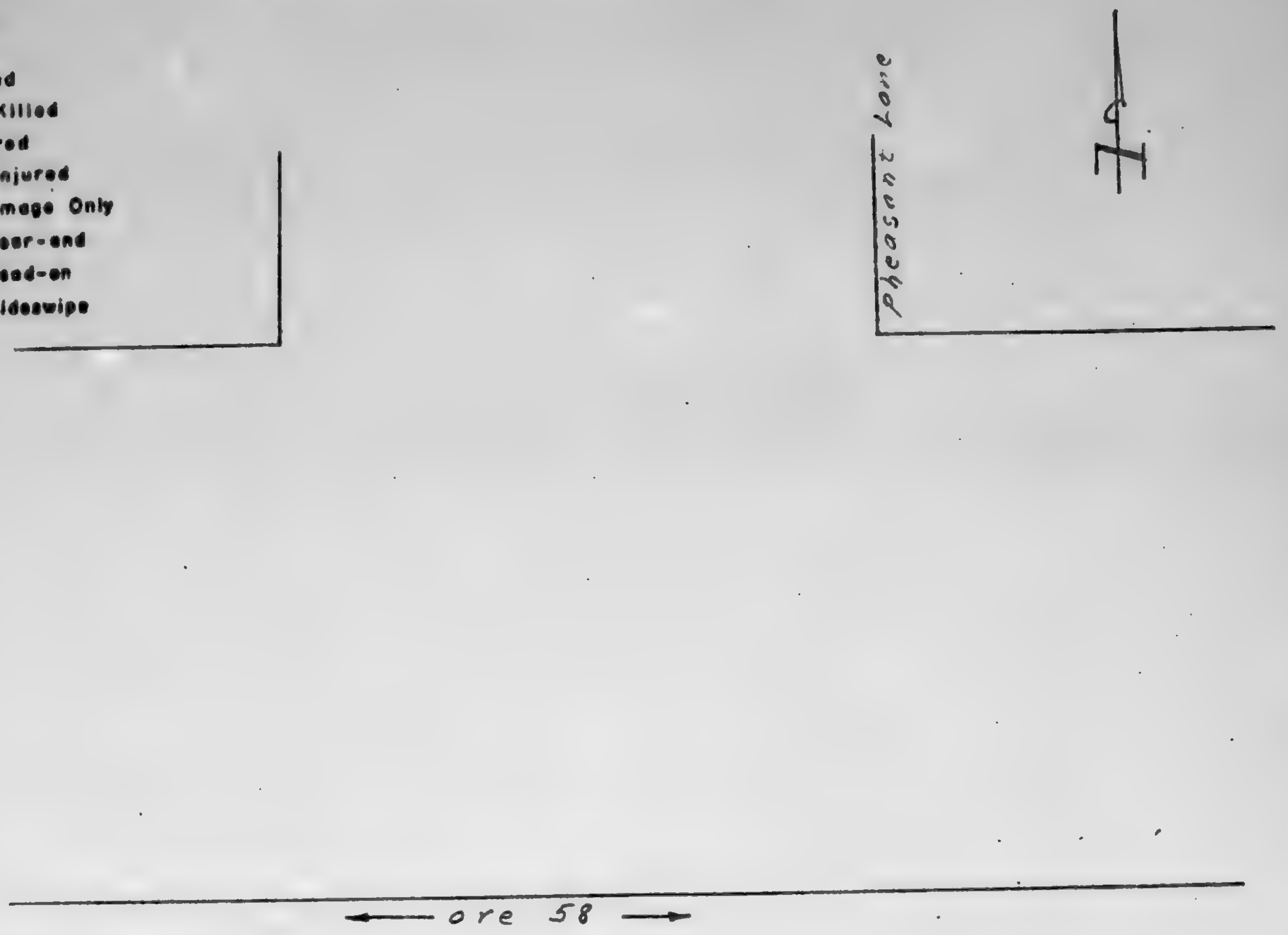
OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION
ACCIDENT ANALYSIS

COLLISION DIAGRAM

City of ____________ County *Lane*
Intersection of *Willamette Hwy* and *Pheasant Lane*
Highway Number *18 (ore 58)* *MP 6.36*
Period Covered *1-1-74* *11-30-77*
Compiled by *[illegible]* Drawn by ____________ Date *3-2-78*

LEGEND

- ● Person Killed
- ◁---- Pedestrian Killed
- ○ Person Injured
- ◁---- Pedestrian Injured
- ← Property Damage Only
- Collision - Rear-end
- Collision - Head-on
- Collision - Sideswipe



- ◁---- Path of Pedestrian
- ← Path of Vehicle
- ◁---- Path of Animal
- Vehicle Moving
- Vehicle Stopped
- Vehicle Backing
- ▭ Properly Parked
- Improperly Parked
- Vehicle Overturned
- Vehicle Skidded

Collision Type	1974				1975				1976				11-Mos. 1977				Total			
	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total
Angle																				
Head-on																				
Rear-end																				
Sideswipe																				
Turning Movement																				
Parking																				
Non-collision																				
Fixed Object																				
Pedestrian																				
Backing																				
Misc.																				
TOTAL				0				0				0				0				0

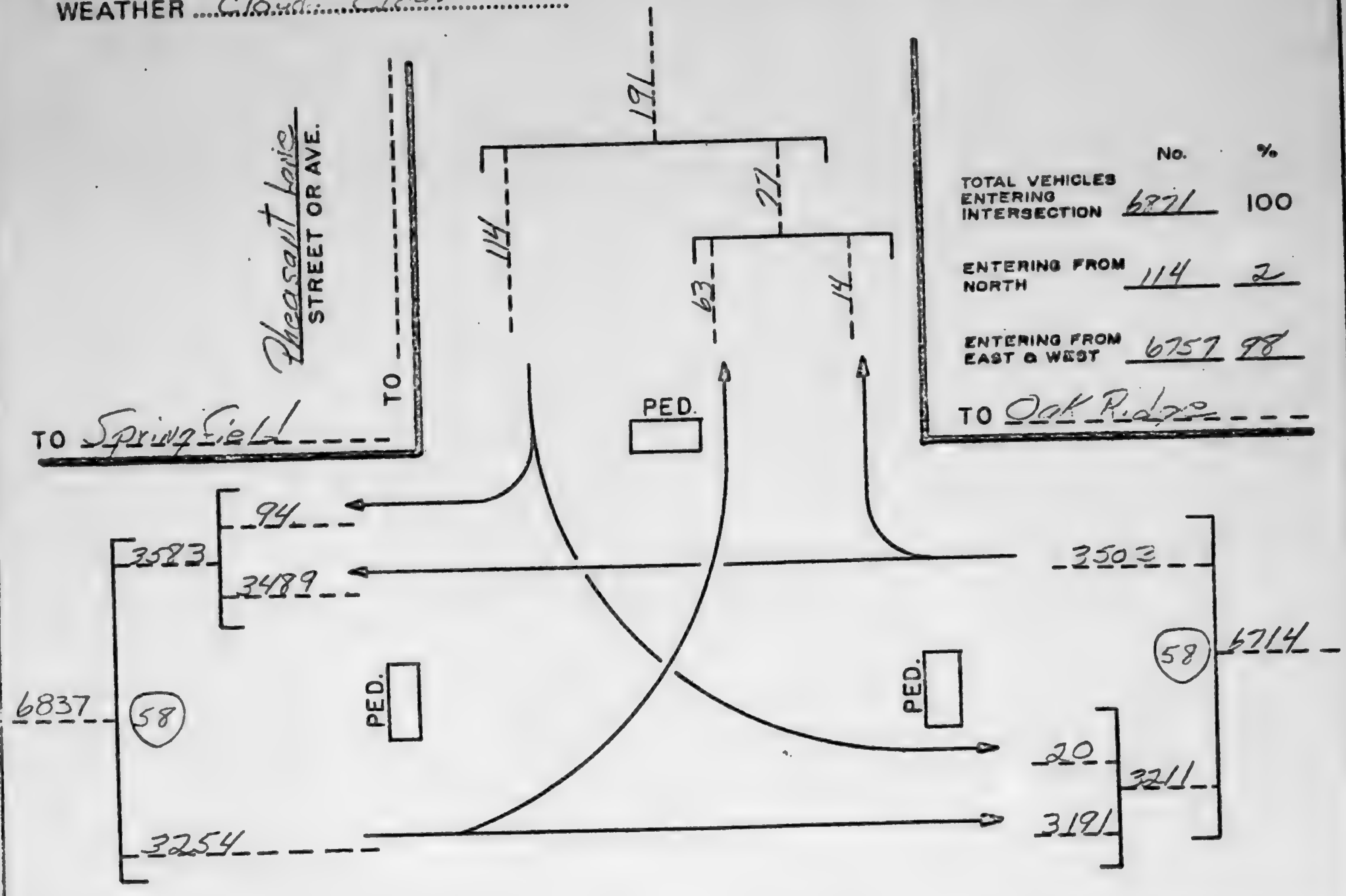
Form E-261-6-70

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION

TWENTY-FOUR HOUR VEHICULAR VOLUME

DATE march 13-14, 1978
DAY OF WEEK mon-tue
ACTUAL COUNT (VEH.) 16 HRS.
HOURS COUNTED 6AM - 10 PM
PEDESTRIAN COUNT .... HRS.
HOURS COUNTED ....
WEATHER Cloudy Clear

~~CITY~~ OR COUNTY Lane Co
INTERSECTION OF Willamette Hwy #18 (ORE 58) @ Pheasant Lane
....
MILE POST 6.36
CLASSIFICATION ALL Vehicles


191
114
77
63
14
Pheasant Lane
STREET OR AVE.
TO
TO Springfield
TO Oak Ridge
PED.
PED.
PED.
94
3583
3489
3503
6714
58
6837
58
20
3211
3191
3254

	No.	%
TOTAL VEHICLES ENTERING INTERSECTION	6871	100
ENTERING FROM NORTH	114	2
ENTERING FROM EAST & WEST	6757	98

Remarks: 16 Hour manual Count Factored to a 24 Hour Volume

Hwy # 18
STREET OR AVE.

Indicate North

Rev. 3-70

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION

SUMMARY OF TRAFFIC COUNT

~~City~~ or County Lane Co
Intersection Willamette Hwy #1
@ Pheasant Lane
Mile Post 6.36

Date March 13-14, 1978
Day of week Mon-Tue
Hours counted 6AM - 10PM
Weather cloudy, clear

Classification ALL Vehicles

TIME		North to East	East to North	North to West	West to North	North to South	South to North	East to West	West to East	East to South	South to East	West to South	South to West	TOTAL	From North and South	Per Cent of Total	From East and West	Per Cent of Total	North	East	West	South
		SUMMARY BY MOVEMENTS																	ENTERING VOLUMES - SUMMARY BY LEGS			
A. M.	6:00- 7:00	1	1	5	–			145	139					291	6	2	285	98	6	146	139	
	7:00- 8:00	–	–	20	1			324	156					501	20	4	481	96	20	324	157	
	8:00- 9:00	–	–	9	2			251	155					417	9	2	408	98	9	251	157	
	9:00-10:00	1	1	3	–			211	167					383	4	1	379	99	4	212	167	
	10:00-11:00	–	–	4	–			142	130					276	4	1	272	99	4	142	130	
	11:00-12:00	1	2	5	5			192	191					396	6	2	390	98	6	194	196	
P. M.	12:00- 1:00	1	–	4	2			180	206					393	5	1	388	99	5	180	208	
	1:00- 2:00	–	–	3	2			203	190					398	3	1	395	99	3	203	192	
	2:00- 3:00	2	2	3	5			252	222					486	5	1	481	99	5	254	227	
	3:00- 4:00	1	–	5	9			278	237					530	6	1	524	99	6	278	246	
	4:00- 5:00	–	2	6	9			332	270					619	6	1	613	99	6	334	279	
	5:00- 6:00	2	4	5	12			198	339					560	7	1	553	99	7	202	351	
	6:00- 7:00	3	–	6	3			169	194					375	9	2	366	98	9	169	197	
	7:00- 8:00	1	–	5	4			110	140					260	6	2	254	98	6	110	144	
	8:00- 9:00	4	1	2	2			123	87					219	6	3	213	97	6	124	[illegible]	
	9:00-10:00	1	–	–	1			62	78					142	1	1	141	99	1	62	77	
	10:00-11:00																					
	11:00-12:00																					
A. M.	12:00- 1:00																					
	1:00- 2:00																					
	2:00- 3:00																					
	3:00- 4:00																					
	4:00- 5:00																					
	5:00- 6:00																					
24-Hour total		20	14	94	63			3489	3191					6871	114	2	6757	98	114	3503	3254	
__-Hour total		18	13	85	57			3172	2901					6246	103	2	6143	98	103	3185	3158	
__-Hour total																						
Control . . .																						
Factor 1.10.																						

Tabulated by

Checked by

Pheasant Lane St. is North and South

Hwy #18 St. is East and West

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION

SUMMARY OF TRAFFIC COUNT

h 13-14, 1978
ion - Tue
6 AM - 10 PM
y, clear

Classification ALL Vehicles

~~City~~ or County Lane Co.
Intersection Willamette Hwy #18 (OR58)
@ Pheasant Lane
Mile Post 6.36

SUMMARY BY MOVEMENTS															ENTERING VOLUMES - SUMMARY BY LEGS				PEDESTRIANS USING CROSSWALKS			
orth to West	West to North	North to South	South to North	East to West	West to East	East to South	South to East	West to South	South to West	TOTAL	From North and South	Per Cent of Total	From East and West	Per Cent of Total	North	East	West	South	North	East	West	South
5	–			145	139					291	6	2	285	98	6	146	139					
20	1			324	156					501	20	4	481	96	20	324	157					
9	2			251	155					417	9	2	408	98	9	251	157					
3	–			211	167					383	4	1	379	99	4	212	167					
4	–			142	130					276	4	1	272	99	4	142	130					
5	5			192	191					396	6	2	390	98	6	194	196					
4	2			180	206					393	5	1	388	99	5	180	208					
3	2			203	190					398	3	1	395	99	3	203	192					
3	5			252	222					486	5	1	481	99	5	254	227					
5	9			278	237					530	6	1	524	99	6	278	246					
6	9			332	270					619	6	1	613	99	6	334	279					
5	12			198	339					560	7	1	553	99	7	202	351					
6	3			169	194					375	9	2	366	98	9	169	197					
5	4			110	140					260	6	2	254	98	6	110	144					
2	2			123	87					219	6	3	213	97	6	124	89					
–	1			62	78					142	1	1	141	99	1	62	79					
94	63			3489	3191					6871	114	2	6757	98	114	3503	3254					
85	57			3172	2901					6246	103	2	6143	98	103	3185	2958					

Tabulated by

Checked by

Pheasant Lane St. is North and-South

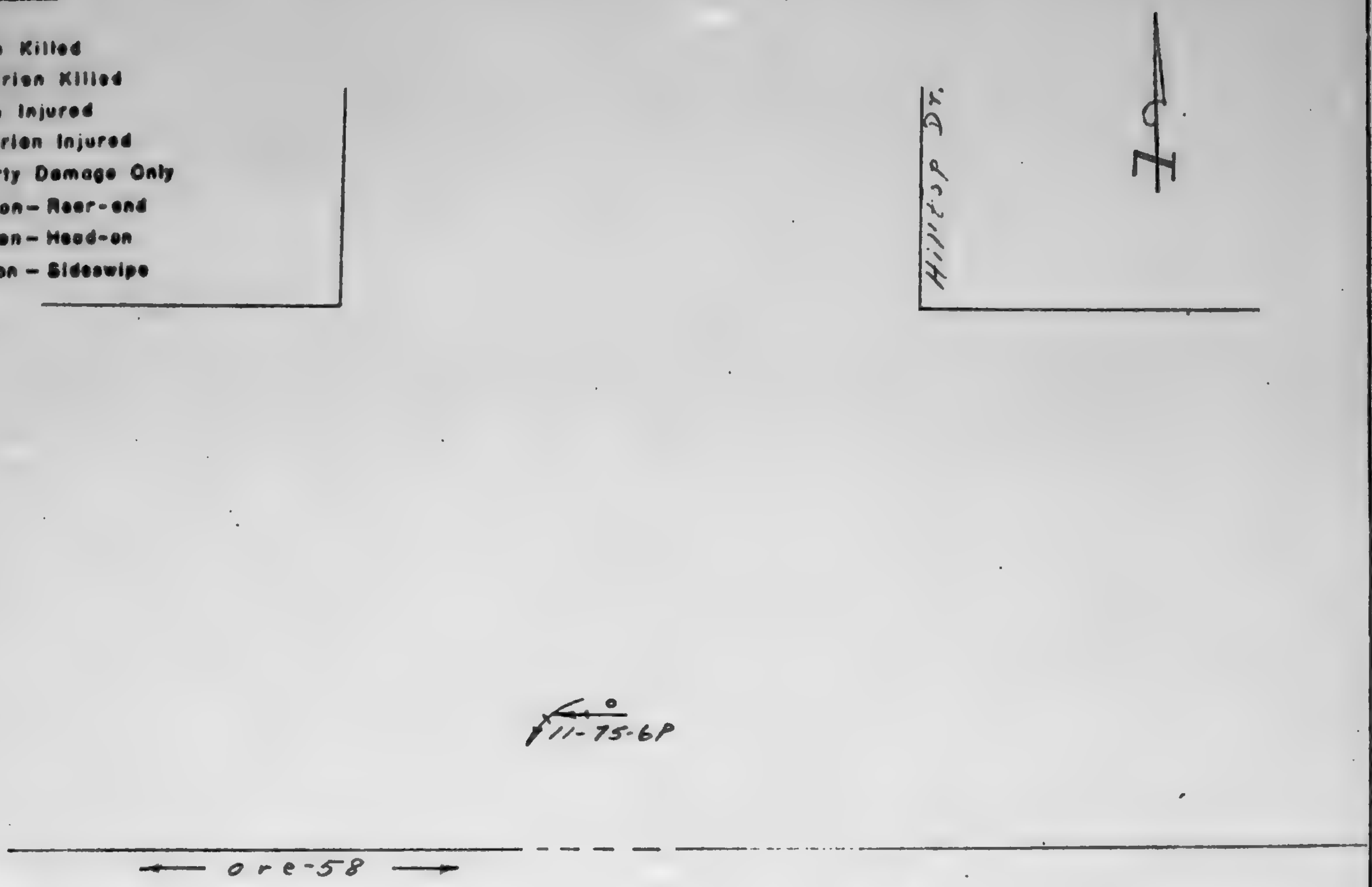
Hwy #18 St. is East and West

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION
ACCIDENT ANALYSIS
COLLISION DIAGRAM

City of ______ County Lane
Intersection of Willamette Hwy and Hilltop Drive
Highway Number 18 (Ore 58) MP 7.12
Period Covered 1-1-74 11-30-77
Compiled by Li Drawn by ______ Date 3-2-78

LEGEND

- ● Person Killed
- ◁----- Pedestrian Killed
- ○ Person Injured
- ◁----- Pedestrian Injured
- ←—— Property Damage Only
- Collision - Rear-end
- Collision - Head-on
- Collision - Sideswipe



- ◁----- Path of Pedestrian
- ←—— Path of Vehicle
- ←----- Path of Animal
- Vehicle Moving
- Vehicle Stopped
- Vehicle Backing
- ☐ Properly Parked
- Improperly Parked
- Vehicle Overturned
- Vehicle Skidded

Day- 0
Nite- 1
Total- 1

Collision Type	1974				1975				1976				11-Mos. 1977				Total			
	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total	Fatal	Non-fatal	Prop. Damage	Total
Angle																				
Head-on																				
Rear-end																				
Sideswipe																				
Turning Movement						1		1										1		1
Parking																				
Non-collision																				
Fixed Object																				
Pedestrian																				
Backing																				
Misc																				
TOTAL				0		1		1				0				0		1		1

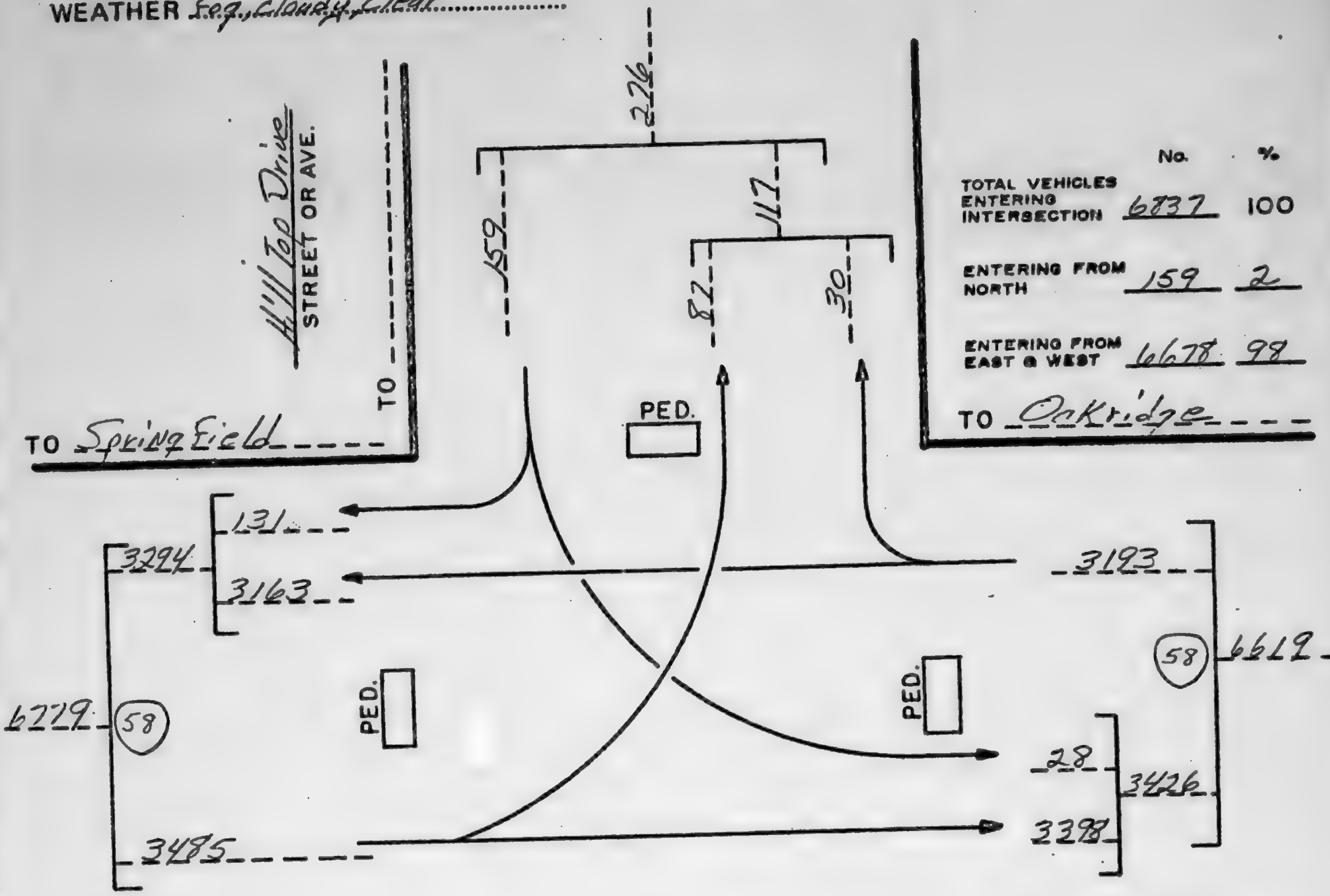
Form E-261-6-70

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION

TWENTY-FOUR HOUR VEHICULAR VOLUME

DATE march 27-28, 1978
DAY OF WEEK mon-Tue
ACTUAL COUNT (VEH.) 16 HRS.
HOURS COUNTED 6am-10pm
PEDESTRIAN COUNT .... HRS.
HOURS COUNTED ....
WEATHER Fog, cloudy, clear

~~CITY~~ OR COUNTY Lane County
INTERSECTION OF Willamette Hwy 18
(ORE58) @ Hill Top Drive
....
MILE POST 21.9
CLASSIFICATION ALL Vehicles

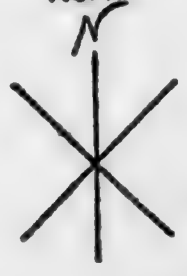

226
159
117
82
30
Hill Top Drive
STREET OR AVE.
TO
TO Spring Field
TO Ockridge
PED.
131
3163
3294
6779
58
3485
PED.
PED.
3193
6619
58
28
3426
3398

	No.	%
TOTAL VEHICLES ENTERING INTERSECTION	6837	100
ENTERING FROM NORTH	159	2
ENTERING FROM EAST & WEST	6678	98

Remarks: 16 Hour manual CounT Factored to a 24 Hour Volume

Hwy #18
STREET OR AVE.

Indicate North



Rev. 3'70

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION

SUMMARY OF TRAFFIC COUNT

City or County Lane Count
Intersection Willamette Hwy #18
Hill Top Drive
Mile Post 719

Date March 27-28, 1978
Day of week Mon - Tue
Hours counted 6 AM - 10 PM
Weather Fog, cloudy, clear

Classification All Vehicles

	TIME	North to East	East to North	North to West	West to North	North to South	South to North	East to West	West to East	East to South	South to East	West to South	South to West	TOTAL	From North and South	Per Cent of Total	From East and West	Per Cent of Total	North	East	West	South
A. M.	6:00- 7:00	1	–	7	–			135	138					281	8	3	273	97	8	135	138	
	7:00- 8:00	1	4	22	2			312	198					539	23	4	516	96	23	316	200	
	8:00- 9:00	2	–	29	2			255	156					444	31	7	413	93	31	255	158	
	9:00-10:00	2	1	7	2			148	150					310	9	3	301	97	9	149	152	
	10:00-11:00	2	3	8	7			198	198					416	10	2	406	98	10	201	205	
	11:00-12:00	1	2	7	1			162	226					399	8	2	391	98	8	164	227	
P. M.	12:00- 1:00	1	2	4	8			185	238					438	5	1	433	99	5	187	246	
	1:00- 2:00	3	1	2	4			165	232					407	5	1	402	99	5	166	236	
	2:00- 3:00	2	1	5	3			213	241					465	7	2	458	98	7	214	244	
	3:00- 4:00	3	4	10	4			259	211					491	13	3	478	97	13	263	215	
	4:00- 5:00	1	2	1	11			286	282					583	2	0	581	100	2	288	293	
	5:00- 6:00	1	2	1	16			201	318					539	2	0	537	100	2	203	334	
	6:00- 7:00	1	3	7	5			123	139					278	8	3	270	97	8	126	144	
	7:00- 8:00	3	–	6	5			94	135					243	9	4	234	96	9	94	140	
	8:00- 9:00	1	1	1	4			73	115					195	2	1	193	99	2	74	119	
	9:00-10:00	–	1	2	5			66	112					186	2	1	184	99	2	67	117	
	10:00-11:00																					
	11:00-12:00																					
A. M.	12:00- 1:00																					
	1:00- 2:00																					
	2:00- 3:00																					
	3:00- 4:00																					
	4:00- 5:00																					
	5:00- 6:00																					
24-Hour total		28	30	131	87			3163	3278					6837	159	2	6678	98	159	3193	3485	
16-Hour total		25	27	119	79			2875	3089					6214	144	2	6070	98	144	2902	3168	
-Hour total																						
Control																						
Factor 1.10																						

Tabulated by Du
Checked by [illegible]

Hill Top Drive St. is North and South
Hwy #18 St. is East and West

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION

SUMMARY OF TRAFFIC COUNT

h 27-28, 1978
Mon - Tue
6 AM - 10 PM
cloudy, clear

Classification All Vehicles

City or County Lane County
Intersection Willamette Hwy #18 [illegible]
Hill Top Drive
Mile Post 7.19

SUMMARY BY MOVEMENTS															ENTERING VOLUMES - SUMMARY BY LEGS				PEDESTRIANS USING CROSSWALKS			
North to West	West to North	North to South	South to North	East to West	West to East	East to South	South to East	West to South	South to West	TOTAL	From North and South	Per Cent of Total	From East and West	Per Cent of Total	North	East	West	South	North	East	West	South
7	-			135	138					281	8	3	273	97	8	135	138					
22	2			312	198					539	23	4	516	96	23	316	200					
29	2			255	156					444	31	7	413	93	31	255	158					
7	2			148	150					310	9	3	301	97	9	149	152					
8	7			198	198					416	10	2	406	98	10	201	205					
7	1			162	226					399	8	2	391	98	8	164	227					
4	8			185	238					438	5	1	433	99	5	187	246					
2	4			165	232					407	5	1	402	99	5	166	236					
5	3			213	241					465	7	2	458	98	7	214	244					
10	4			259	211					491	13	3	478	97	13	263	215					
1	11			286	282					583	2	0	581	100	2	288	293					
1	16			201	318					539	2	0	537	100	2	203	334					
7	5			123	139					278	8	3	270	97	8	126	144					
6	5			94	135					243	9	4	234	96	9	94	140					
1	4			73	115					195	2	1	193	99	2	74	119					
2	5			66	112					186	2	1	184	99	2	67	117					
131	87			3163	3278					6837	159	2	6678	98	159	3193	3485					
119	79			2875	3089					6214	144	2	6070	98	144	2902	3168					

Tabulated by Du

Checked by [illegible]

l Top Drive St. is North and South

way #18 St. is East and West

L. E. George

OREGON STATE HIGHWAY DIVISIO

REPORT OF SPEED ZONE INVESTIGATION
Willamette Highway No. 18
Seavey Loop Road to Lost Creek Road
Vicinity of Pleasant Hill
Lane County
OTC
February 27, 1978

RECOMMENDATION:

Rescind OTC ~~Resolution~~ Rule No. 657 dated March 27, 1974 and establish the following:

ection				Existing	Recommended
A	**From:**	Seavey Loop Road	**M.P.** 0.50	55 mph max.	55 mph max.
	To:	100 feet west of Ridgeway Road	**M.P.** 3.93	(BR under 55)	(BR under 55)
B	**From:**	100 feet west of Ridgeway Road	**M.P.** 3.93	45 mph 1/	45 mph
	To:	300 feet east of the Springfield-Creswell Hwy. No. 222	**M.P.** 5.82		
C	**From:**	300 feet east of Springfield-Creswell Hwy.	**M.P.** 5.82	55 mph max.	55 mph max.
	To:	Lost Creek Road	**M.P.** 11.49	(BR under 55)	(BR under 55)
	From:		**M.P.**		
	To:		**M.P.**		

1/ **Except that in the following sections, the designated speed shall be 20 MPH when children are present as per the provisions of Sub-section 2.a, of ORS 487.470:**

From: 100' east of Enterprise Road **M.P.** 5.25
To: 0.24 miles west of Springfield-Creswell Hwy. **M.P.** 5.50

HISTORICAL BACKGROUND:

Investigation requested by: Delegation from Pleasant Hill @ 6 year meeting
Requested speed: 45 mph

PREVIOUS ACTION:

Section of Hwy. No. 18 from M.P. 3.93 to 5.82 was investigated in January 1974 and retention of the 50 mph speed zone was recommended. OTC Resolution of March 27, 1974 established 45 mph speed zone.

INVESTIGATION:

	A	B	C
Section length	3.43 miles	1.89 miles	5.67 miles
85% Speed	58.13	53.83	58.54
1976 **Accident Rate** *	0.83	1.09	0.94
1976 **Average Daily Traffic**	7700	est. 8000	6200
Culture Type & Density	light bus. & res.	light bus. & res.	rural
Horizontal Alignment	tangent	tangent	1 curve safe @ 55 mph
Vertical Alignment	1 mod. V.C.	2 mod V.C.	several mod. V.C.
Curve Signs & Speed Riders	none req.	none req.	none req.
Existing Posted Speeds	55 mph	45 mph	55 mph
Recommended Speed	55 mph max. (BR under 55)	45 mph	55 mph max. (BR under 55)

* **Accidents per Million Vehicle Miles**

ROADWAY DATA:

	A	B	C
Surface	bituminous	bituminous	bituminous
Width	24 feet	24-43 feet	24 feet
Lanes	2	2-3	2
Parking	no	no	no
Shoulders	6 feet A.C.	4-5 feet A.C.	6-7 feet A.C.
Intersecting Streets	7	10	12
Paved	6	9	7
Stopped	7	10	12
Signalized	0	0	0

ACCIDENT DATA:

	A	B	C
Study Period	1/1/74 to 6/30/77	1/1/74 to 6/30/77	1/1/74 to 6/30/77
Total Accidents	40	22	47
Injuries	49	21	71
Fatalities	0	2	2
1976 Accidents	8	6	12
1976 Accident Rate (R)	0.83	1.09	0.94
1976 State Rate (r) 1/	1.63	1.63	1.63
Deviation (R-r)	—	—	—

SPOT SPEED DATA:

	A	B	C
85% Speed	58.13	53.83	58.54
Pace Limits 2/	50-60	44-54	50-60
% in Pace	92	73	85
Maximum Speed	89	67	69
Posted Speed	55	45	55
% Exceeding Posted Speed	55	90	50
Computed Safe Speed 3/	—	—	—
Recommended Speed	55 mph max. (BR under 55)	45 mph	55 mph max. (BR under 55)

1/ Rural, primary system, non-freeway.

2/ Ten-mile-per-hour range containing the largest number of sampled vehicles

3/ 85% Speed minus deviation

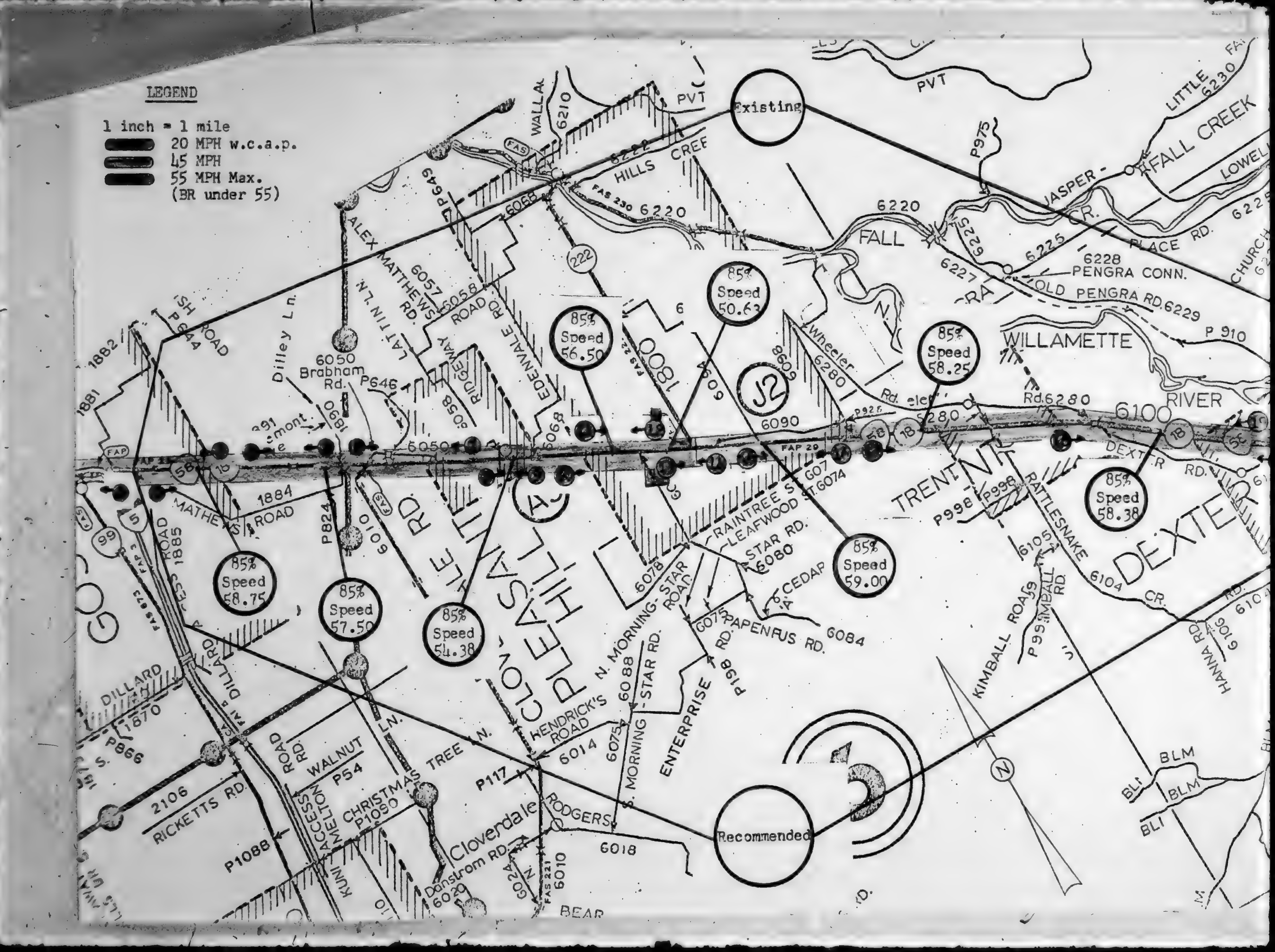
FACTORS INFLUENCING RECOMMENDATION:

A - Accident rate, spot speed data.

B - Due to past history of this section, retention of the 45 mph speed zone is anticipated but the accident data and spot speed data indicate a higher speed should be posted. Resolution is being rescinded to change mileposts at Pleasant Hill School and to correct typing error on original resolution.

C - Accident rate, spot speed data.

OG/cao


LEGEND
1 inch = 1 mile
20 MPH w.c.a.p.
45 MPH
55 MPH Max.
(BR under 55)
Existing
Recommended
85% Speed 58.75
85% Speed 57.50
85% Speed 54.38
85% Speed 56.50
85% Speed 50.63
85% Speed 59.00
85% Speed 58.25
85% Speed 58.38
PLEASANT HILL
CLOVERDALE RD.
TRENT
DEXTER
WILLAMETTE RIVER
FALL CREEK
LITTLE FALL CREEK
JASPER - LOWELL
PENGRA CONN.
OLD PENGRA RD. 6229
PLACE RD.
CHURCH
HILLS CREEK
EDENVALE RD.
RIDGEWAY ROAD
ALEX MATTHEWS RD.
LATTIN LN.
Brabham Rd.
Dilley Ln.
MATHEWS ROAD
DILLARD ROAD
RICKETTS RD.
WALNUT RD.
ACCESS
MELTON
KUNI
CHRISTMAS TREE LN.
Cloverdale
Danstrom RD.
RODGERS
HENDRICK'S ROAD
N. MORNING-STAR ROAD
S. MORNING-STAR RD.
ENTERPRISE RD.
PAPENFUS RD.
CEDAR
STAR RD.
RAINTREE ST.
LEAFWOOD ST.
KIMBALL ROAD
KIMBALL RD.
RATTLESNAKE CR.
HANNA RD.
Wheeler Rd.
BLM
BEAR
PVT
J2
N
58
18
222
99
5
FAP 20
FAS 230
FAS 221
6100
6220
6225
6227
6228
6230
6280
6090
6050
6058
6057
6068
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6080
6084
6075
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6014
6010
6018
6024
6020
6104
6105
6106
1800
1870
1881
1882
1884
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1890
2106
P649
P644
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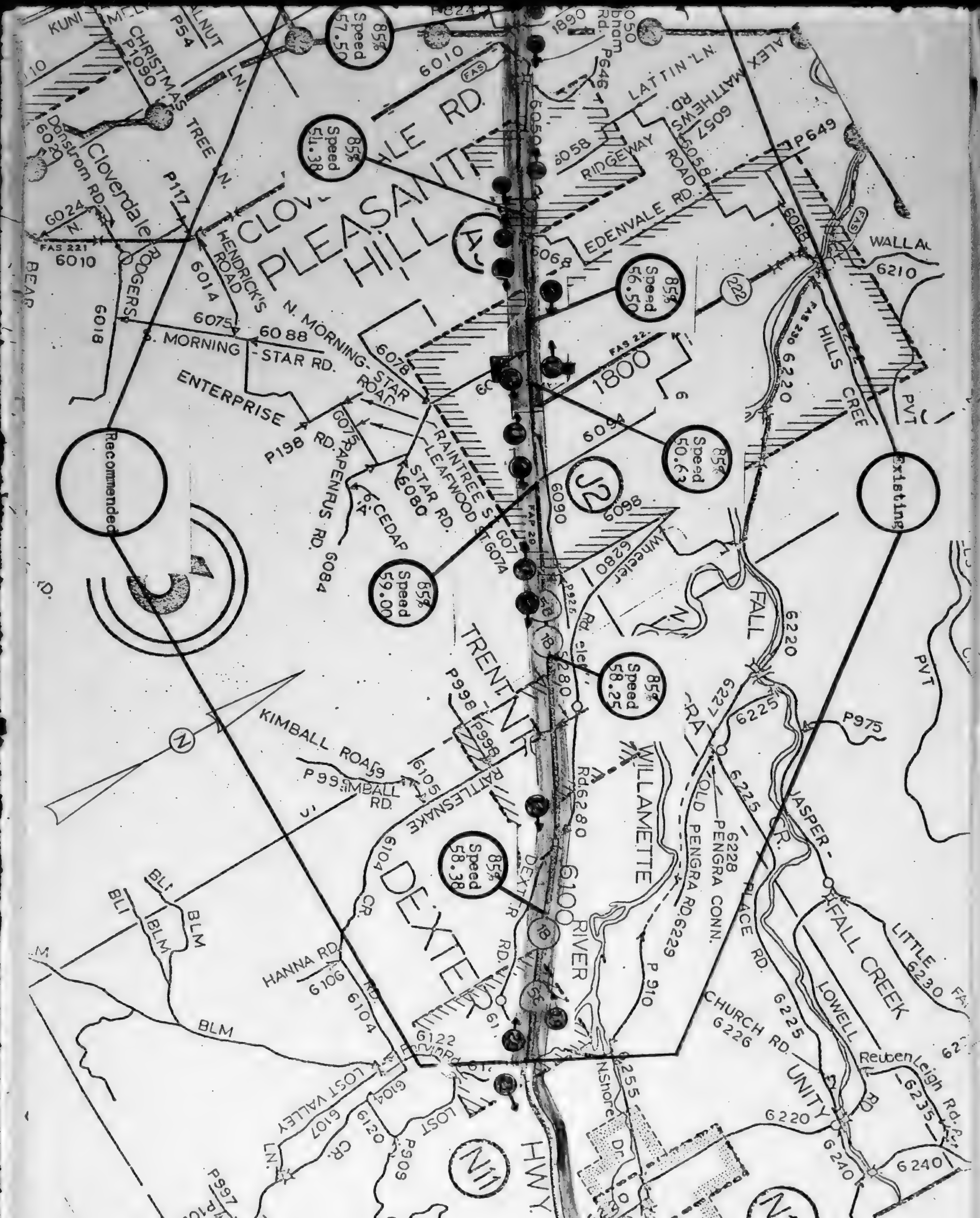
P998
P975
P910
P928



PLEASANT HILL
DEXTER
TRENT
WILLAMETTE
RIVER
FALL CREEK
LITTLE FALL CREEK
HWY.
CLOVERDALE RD.
Cloverdale
CHRISTMAS TREE LN.
WALNUT
P54
KUNI
Donstrom RD.
ROGERS
HENDRICK'S ROAD
N. MORNING-STAR ROAD
S. MORNING-STAR RD.
ENTERPRISE RD.
RAINTREE ST.
LEAFWOOD
STAR RD.
CEDAR
RAPENRUS RD.
KIMBALL ROAD
KIMBALL RD.
RATTLESNAKE CR. RD.
HANNA RD.
LOST VALLEY LN.
LOST CR.
ALEX MATTHEWS RD.
LATTIN LN.
RIDGEWAY ROAD
EDENVALE RD.
HILLS CREEK
Wheeler
OLD PENGRA RD.
PENGRA CONN.
PLACE RD.
JASPER
CHURCH RD.
LOWELL
UNITY RD.
Reuben Leigh Rd.
N. Shore Dr.
Recommended
Existing
85% Speed 57.50
85% Speed 51.38
85% Speed 56.50
85% Speed 50.63
85% Speed 59.00
85% Speed 58.25
85% Speed 58.38
A
J2
N11
N12
N
1800
1890
18
58
222
FAS 221
FAS 222
FAS 230
FAP 20
BLM
BEAR
PVT
P117
P198
P649
P646
P998
P975
P910
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P1020
P1090
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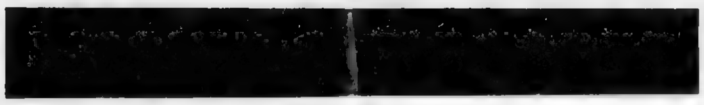
1

2



3

4

TYPICAL VIEWS
Willamette Highway No. 18
Lane County
February 28, 1978

1. Looking west on the Willamette Highway from Seavey Loop Rd./Mathews Rd.
2. Looking east on the Willamette Highway from Seavey Loop Rd./Mathews Rd.
3. Looking west on the Willamette Highway from 0.36 miles east of Hidden Lane.
4. Looking east on the Willamette Highway from 0.36 miles east of Hidden Lane.

2

3

4

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5

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7

8

TYPICAL VIEWS

Willamette Highway No. 18
Lane County
February 28, 1978

5. Looking west on the Willamette Highway from Dilley Lane.

6. Looking east on the Willamette Highway from Dilley Lane.

7. Looking west on the Willamette Highway from 200 feet west of Ridgeway Road.

8. Looking east on the Willamette Highway from 200 feet west of Ridgeway Road.

6

7

8

TYPICAL VIEWS

Willamette Highway No. 18
Lane County
February 28, 1978

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7

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Lane County
February 28, 1978

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Lane County
February 28, 1978

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9

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11

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13

TYPICAL VIEWS
Willamette Highway No. 18
Lane County
February 28, 1978

9. Looking west on the Willamette Highway from 320 feet east of Edenvale Road.
10. Looking east on the Willamette Highway from 320 feet east of Edenvale Road.
11. Looking east on the Willamette Highway from Bristow Road.
12. Looking west on the Willamette Highway from 580 feet east of Enterprise Road.
13. Looking east on the Willamette Highway from 580 feet east of Enterprise Road.

10

11

12

13

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Willamette Highway No. 18
Lane County
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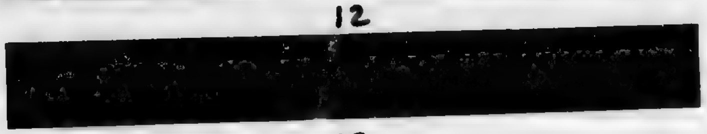
11

12



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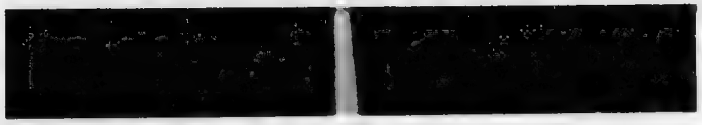
14

15

16



17

TYPICAL VIEWS
Willamette Highway No. 18
Lane County
February 28, 1978

14. Looking west on the Willamette Highway from 370 feet east of Springfield-Creswell Hwy.
15. Looking east on the Willamette Highway from 370 feet east of Springfield-Creswell Hwy.
16. Looking west on the Willamette Highway from Hilltop Drive.
17. Looking east on the Willamette Highway from Hilltop Drive.

15

16

17

TYPICAL VIEWS
Willamette Highway No. 18
Lane County
February 28, 1978

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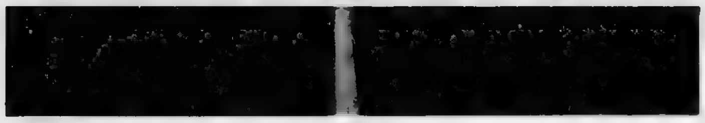
16



17

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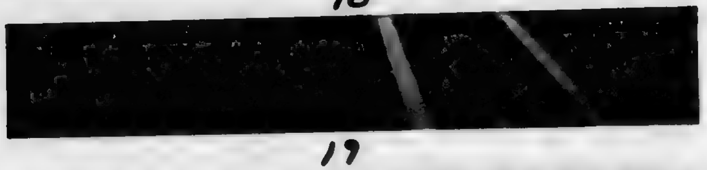

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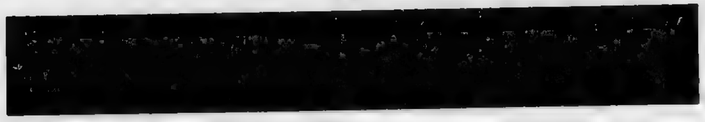


20

21

TYPICAL VIEWS
Willamette Highway No. 18
Lane County
February 28, 1978

18. Looking west on the Willamette Highway from 0.63 miles east of Rattlesnake Rd.

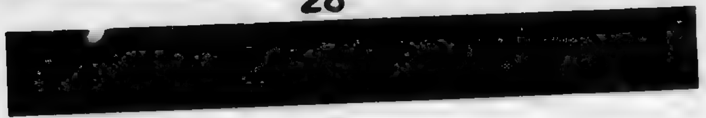
19. Looking west on the Willamette Highway from Dexter Park Road.

20. Looking west on the Willamette Highway from Lost Creek Road.

21. Looking east on the Willamette Highway from Lost Creek Road.

19

20



21

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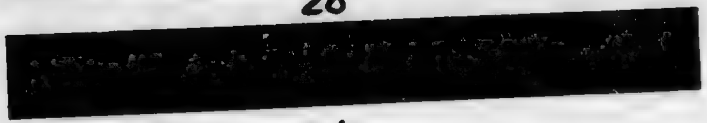

21

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OREGON STATE HIGHWAY DEPARTMENT TRAFFIC ENGINEERING DIVISION

Rural Motor Vehicle Accident Listing

LOCATION		COLLISION TYPE													CLASSIF.			Persons Killed	Persons Injured	REMARKS
Willamette Highway Hwy. No. 18 Rte. No. 58 From M.P. 0.50 To M.P. 11.49 Period Covered: 1-1-74 to 6-30-77		Angle	Head-on	Rear-end	Sideswipe Meeting	Sideswipe Overtaking	Turning	Parking	Non-Collision	Fixed-Object	Pedestrian	Backing	Miscellaneous	ALL COLLISIONS	Fatal	Non-Fatal	Prop. Damage			6-mos. 1977
@ Brabham Rd. m.p. 3.37	1974													0						
	1975													0						
	1976						1							1					2	
	1977													0						
	Total						1							1					2	
Brabham Rd. m.p. 3.37 to Kensington Rd. m.p. 3.67	1974													0						
	1975													0						
	1976			1										1					2	
	1977													0						
	Total			1										1					2	
@ Kensington Rd. m.p. 3.67	1974			1										1					4	
	1975													0						
	1976													0						
	1977													0						
	Total			1										1					4	
Page Total				2			1							3					8	

31

6-mos.

OREGON STATE HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING DIVISION

Rural Motor Vehicle Accident Listing

LOCATION	COLLISION TYPE													CLASSIF.					REMARKS
Willamette Highway Hwy. No. 18 Rte. No. 58 From M.P. 0.50 To M.P. 11.49 Period Covered: 1-1-74 to 6-30-77	Angle	Head-on	Rear-end	Sideswipe Meeting	Sideswipe Overtaking	Turning	Parking	Non-Collision	Fixed-Object	Pedestrian	Backing	Miscellaneous	ALL COLLISIONS	Fatal	Non-Fatal	Prop. Damage	Persons Killed	Persons Injured	6-mos 1977
Kensington Rd. m.p. 3.67 to m.p. 3.93 1974								1					1					1	
1975													0						
1976													0						
1977													0						
Total								1					1					1	
m.p. 3.93 to Ridgeway Rd. m.p. 3.95 1974													0						
1975													0						
1976													0						
1977													0						
Total													0						
@ Ridgeway Rd. m.p. 3.95																			
1974													0						
1975													0						
1976													0						
1977													0						
Total													0						
Page Total								1					1					1	

4/

OREGON STATE HIGHWAY DEPARTMENT TRAFFIC ENGINEERING DIVISION

Rural Motor Vehicle Accident Listing

LOCATION

Willamette Highway

Hwy. No. 18 Rte. No. 58
From M.P. 0.50
To M.P. 11.49
Period Covered:
1-1-74 to 6-30-77

LOCATION	Angle	Head-on	Rear-end	Sideswipe Meeting	Sideswipe Overtaking	Turning	Parking	Non-Collision	Fixed-Object	Pedestrian	Backing	Miscellaneous	ALL COLLISIONS	Fatal	Non-Fatal	Prop. Damage	Persons Killed	Persons Injured	REMARKS
																			6 mos 1977
Seavey/mathews Rd. m.p 0.50 to mathews Rd. m.p. 2.40																			
1974						2			1				3						
1975						2		2					4					6	
1976			2										2					1	
1977				1					1				2					6	
Total			2	1		4		2	2				11					13	
@ mathews Road m.p. 2.40																			
1974						1							1						
1975			1			1							2					4	
1976						1							1					2	
1977													0						
Total			1			3							4					6	
Sub-Total			3	1		7		2	2				15					19	

1/12

OREGON STATE HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING DIVISION

Rural Motor Vehicle Accident Listing

LOCATION

Willamette Highway ...
Hwy. No. 18 Rte. No. 58
From M.P. 0.50
To M.P. 11.49
Period Covered:
1-1-74 to 6-30-77

REMARKS

6-mos. 1977

LOCATION	COLLISION TYPE													CLASSIF.				
	Angle	Head-on	Rear-end	Sideswipe Meeting	Sideswipe Overtaking	Turning	Parking	Non-Collision	Fixed-Object	Pedestrian	Backing	Miscellaneous	ALL COLLISIONS	Fatal	Non-Fatal	Prop. Damage	Persons Killed	Persons Injured
mathews Road m.p. 2.40 to Cloverdale Road m.p. 2.64																		
1974			1			1							2					1
1975								1					1					
1976													0					
1977													0					
Total			1			1		1					3					1
@ Cloverdale Road m.p. 2.64																		
1974			1			1							2					1
1975						3							3					5
1976													0					
1977													0					
Total			1			4							5					6
Cloverdale Road m.p. 2.64 to Brabham Road m.p. 3.37																		
1974			3			2		2					7					6
1975								1					1					1
1976			1	1	1								3					3
1977								2					2					4
Total			4	1	1	2		5					13					14
Page Total			4	1	1	7		6					21					21

2/

OREGON STATE HIGHWAY DEPARTMENT TRAFFIC ENGINEERING DIVISION

Rural Motor Vehicle Accident Listing

LOCATION

Willamette Highway

Hwy. No. 18 Rte. No. 58
From M.P. 0.50
To M.P. 11.49
Period Covered:
1-1-74 to 6-30-77

REMARKS

6-mos.
1977

LOCATION		Angle	Head-on	Rear-end	Sideswipe Meeting	Sideswipe Overtaking	Turning	Parking	Non-Collision	Fixed-Object	Pedestrian	Backing	Miscellaneous	ALL COLLISIONS	Fatal	Non-Fatal	Prop. Damage	Persons Killed	Persons Injured
Ridgeway Rd. m.p. 3.95 to Edenvale Rd. m.p. 4.20	1974													0					
	1975													0					
	1976										1			1					1
	1977													0					
	Total										1			1					1
@ Edenvale Rd. m.p. 4.20	1974													0					
	1975													0					
	1976													0					
	1977			1										1					1
	Total			1										1					1
Edenvale Rd. m.p. 4.20 to Bristow Rd. m.p. 4.76	1974					2	1							3	1			2	2
	1975								1					1					
	1976						1							1					1
	1977													0					
	Total					2	2		1					5				2	3
Page total				1		2	2		1		1			7				2	5

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OREGON STATE HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING DIVISION

Rural Motor Vehicle Accident Listing

LOCATION

Willamette Highway

Hwy. No. 18 Rte. No. 58
From M.P. 0.50
To M.P. 11.49
Period Covered:
1-1-74 to 6-30-77

REMARKS

6-mos
1977

LOCATION		COLLISION TYPE													CLASSIF.				
		Angle	Head-on	Rear-end	Sideswipe Meeting	Sideswipe Overtaking	Turning	Parking	Non-Collision	Fixed-Object	Pedestrian	Backing	Miscellaneous	ALL COLLISIONS	Fatal	Non-Fatal	Prop. Damage	Persons Killed	Persons Injured
@Bristow Road mp. 4.76	1974													0					
	1975													0					
	1976													0					
	1977													0					
	Total													0					
Bristow Rd. m.p. 4.76 to Enterprise Rd. m.p. 5.23	1974			1										1					
	1975			1										1					2
	1976								1					1					1
	1977													0					
	Total			2					1					3					3
@Enterprise Rd. m.p. 5.23																			
	1974													0					
	1975						1							1					4
	1976													0					
	1977													0					
	Total						1							1					4
Page total				2			1		1					4					7

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OREGON STATE HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING DIVISION

Rural Motor Vehicle Accident Listing

LOCATION

Willamette Highway

Hwy. No. 18 Rte. No. 58
From M.P. 0.50
To M.P. 11.49
Period Covered:
1-1-74 to 6-30-77

REMARKS

6-mos
1977

LOCATION		Angle	Head-on	Rear-end	Sideswipe Meeting	Sideswipe Overtaking	Turning	Parking	Non-Collision	Fixed-Object	Pedestrian	Backing	Miscellaneous	ALL COLLISIONS	Fatal	Non-Fatal	Prop. Damage	Persons Killed	Persons Injured
Enterprise Rd. m.p. 5.23 to Springfield-Creswell Hwy. m.p. 5.74	1974									1				1					1
	1975													0					
	1976													0					
	1977													0					
	Total									1				1					1
@Springfield-Creswell Hwy. m.p. 5.74	1974	1		1			1		1	1				5					8
	1975						2							2					
	1976						1		1					2					
	1977													0					
	Total	1		1			4		2	1				9					8
Springfield-Creswell Hwy. to m.p. 5.82	1974													0					
	1975													0					
	1976									1				1					
	1977													0					
	Total									1				1					
Page total		1		1			4		2	3				11					9

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OREGON STATE HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING DIVISION

Rural Motor Vehicle Accident Listing

LOCATION

Willamette Highway

Hwy. No. 18 Rte. No. 58
From M.P. 0.50
To M.P. 11.49
Period Covered:
1-1-74 to 6-30-77

LOCATION		Angle	Head-on	Rear-end	Sideswipe Meeting	Sideswipe Overtaking	Turning	Parking	Non-Collision	Fixed-Object	Pedestrian	Backing	Miscellaneous	ALL COLLISIONS	Fatal	Non-Fatal	Prop. Damage	Persons Killed	Persons Injured	REMARKS
m.p. 5.82 to Immigrant Rd. m.p. 5.92	1974													0						6-mos 1977
	1975								1					1					1	
	1976													0						
	1977													0						
	Total								1					1					1	
@ Immigrant Rd. mp. 5.92	1974													0						
	1975						1							1						
	1976													0						
	1977			1										1					4	
	Total			1			1							2					4	
Immigrant Rd. mp. 5.92 to Pheasant Lane mp. 6.36	1974			1										1					1	
	1975								1					1					1	
	1976								2					2						
	1977													0						
	Total			1					3					4					2	
Page Total				2			1		4					7					7	

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OREGON STATE HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING DIVISION

Rural Motor Vehicle Accident Listing

LOCATION

Willamette Highway

Hwy. No. 18 Rte. No. 58
From M.P. 0.50
To M.P. 11.49
Period Covered:
1-1-74 to 6-30-77

LOCATION	COLLISION TYPE													CLASSIF.					REMARKS
	Angle	Head-on	Rear-end	Sideswipe Meeting	Sideswipe Overtaking	Turning	Parking	Non-Collision	Fixed-Object	Pedestrian	Backing	Miscellaneous	ALL COLLISIONS	Fatal	Non-Fatal	Prop. Damage	Persons Killed	Persons Injured	6-mos 1977
@ Pheasant Lane mp. 6.36																			
1974													0						
1975													0						
1976													0						
1977													0						
Total																			
Pheasant Lane mp. 6.36 to Hilltop Rd. mp. 7.19 1974		1											1						
1975			1										1					4	
1976													0						
1977													0						
Total		1	1										2					4	
@ Hilltop Rd. mp. 7.19 1974													0						
1975						1							1					1	
1976													0						
1977													0						
Total						1							1					1	
Page Total		1	1			1							3					5	

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OREGON STATE HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING DIVISION

Rural Motor Vehicle Accident Listing

LOCATION

Willamette Highway
Hwy. No. 18 Rte. No. 58
From M.P. 0.50
To M.P. 11.49
Period Covered: 1-1-74 to 6-30-77

LOCATION		COLLISION TYPE													CLASSIF.					REMARKS
		Angle	Head-on	Rear-end	Sideswipe Meeting	Sideswipe Overtaking	Turning	Parking	Non-Collision	Fixed-Object	Pedestrian	Backing	Miscellaneous	ALL COLLISIONS	Fatal	Non-Fatal	Prop. Damage	Persons Killed	Persons Injured	6 mos 1977
Hilltop Rd. mp 7.17 to Rattlesnake Rd. mp 8.55	1974		1			1				1				3					5	
	1975		1						1	1				3	1			1	9	
	1976													0						
	1977						1							1					1	
	Total		2			1	1		1	2				7	1			1	15	
@ Rattlesnake Rd. mp 8.55	1974	1		1						1				3					3	
	1975						1							1					2	
	1976	2							1					3					4	
	1977													0						
	Total	3		1			1		1	1				7					9	
Rattlesnake Rd. mp 8.55 to Wheeler Rd. mp 9.41	1974			2		1				1				4	1			1	6	
	1975						2							2					3	
	1976									1				1					3	
	1977					1								1						
	Total			2		2	2			2				8	1			1	12	
Page total		3	2	3		3	4		2	5				22	2			2	36	

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OREGON STATE HIGHWAY DEPARTMENT TRAFFIC ENGINEERING DIVISION

Rural Motor Vehicle Accident Listing

LOCATION		COLLISION TYPE													CLASSIF.					REMARKS
Willamette Highway Hwy. No. 18 Rte. No. 58 From M.P. 0.50 To M.P. 11.49 Period Covered: 1-1-74 to 6-30-77		Angle	Head-on	Rear-end	Sideswipe Meeting	Sideswipe Overtaking	Turning	Parking	Non-Collision	Fixed-Object	Pedestrian	Backing	Miscellaneous	ALL COLLISIONS	Fatal	Non-Fatal	Prop. Damage	Persons Killed	Persons Injured	6-mos 1977
@Wheeler Rd. mp. 9.41	1974						1							1					2	
	1975													0						
	1976													0						
	1977													0						
	Total						1							1					2	
Wheeler Rd. mp. 9.41 to Dexter Rd. mp. 9.56	1974			1										1					1	
	1975								1					1						
	1976			1										1						
	1977													0						
	Total			2					1					3					1	
@Dexter Rd. mp. 9.56	1974													0						
	1975													0						
	1976													0						
	1977													0						
	Total													0						
Page total				2			1		1					4					3	

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OREGON STATE HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING DIVISION

Rural Motor Vehicle Accident Listing

LOCATION

Willamette Highway

Hwy. No. 18 Rte. No. 58

From M.P. 0.50

To M.P. 11.49

Period Covered:

1-1-74 to 6-30-77

LOCATION		COLLISION TYPE													CLASSIF.					REMARKS
		Angle	Head-on	Rear-end	Sideswipe Meeting	Sideswipe Overtaking	Turning	Parking	Non-Collision	Fixed-Object	Pedestrian	Backing	Miscellaneous	ALL COLLISIONS	Fatal	Non-Fatal	Prop. Damage	Persons Killed	Persons Injured	6-mos 1977
Dexter Rd. mp. 9.56 to mathews Dr. mp. 10.83	1974			1			2							3					5	
	1975								1					1						
	1976			1										1						
	1977													0						
	Total			2			2		1					5					5	
@ mathews Dr. mp. 10.83	1974													0						
	1975													0						
	1976	1												1					3	
	1977													0						
	Total	1												1					3	
mathews Dr. mp. 10.83 to Lost Creek Rd. mp. 11.49	1974									1				1						
	1975									1				1						
	1976	1		1			1							3					12	
	1977													0						
	Total	1		1			1			2				5					12	
Page total		2		3			3		1	2				11					20	
Grand Total		6	3	26	2	6	32		21	12	1			109				4	141	

OREGON STATE HIGHWAY DEPARTMENT
TRAFFIC ENGINEERING DIVISION
PASSENGER VEHICLE SPEEDS

HIGHWAY ROUTE NO. 58

HIGHWAY NO. 18

MILE POST 1.12

GENERAL LOCATION Hidden Lane

DATE February 27, 1978

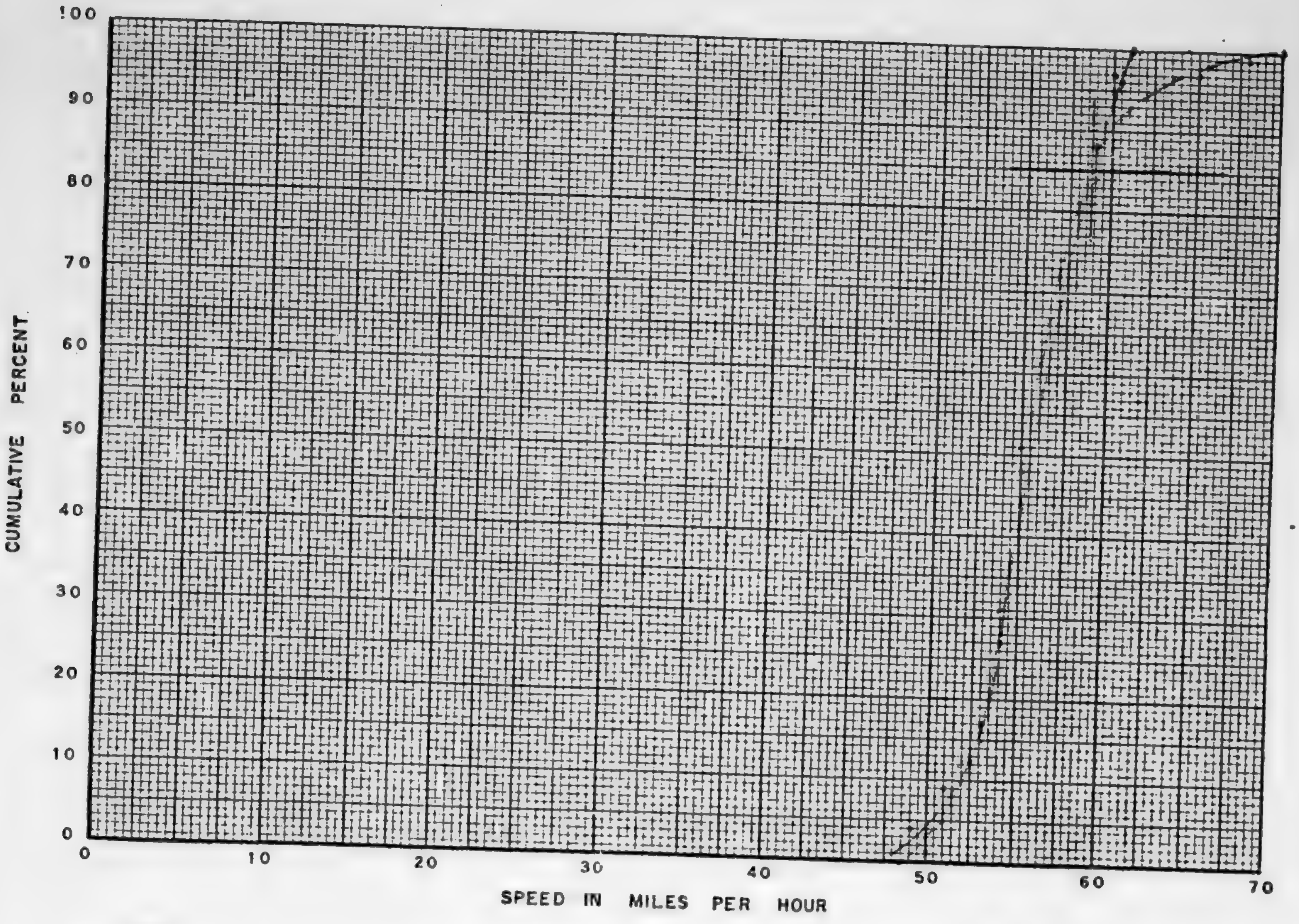
TIME 12:30P M TO 1:30P M

WEATHER CONDITION fair

NUMBER IN SAMPLE 150

——— west BOUND

– – – east BOUND

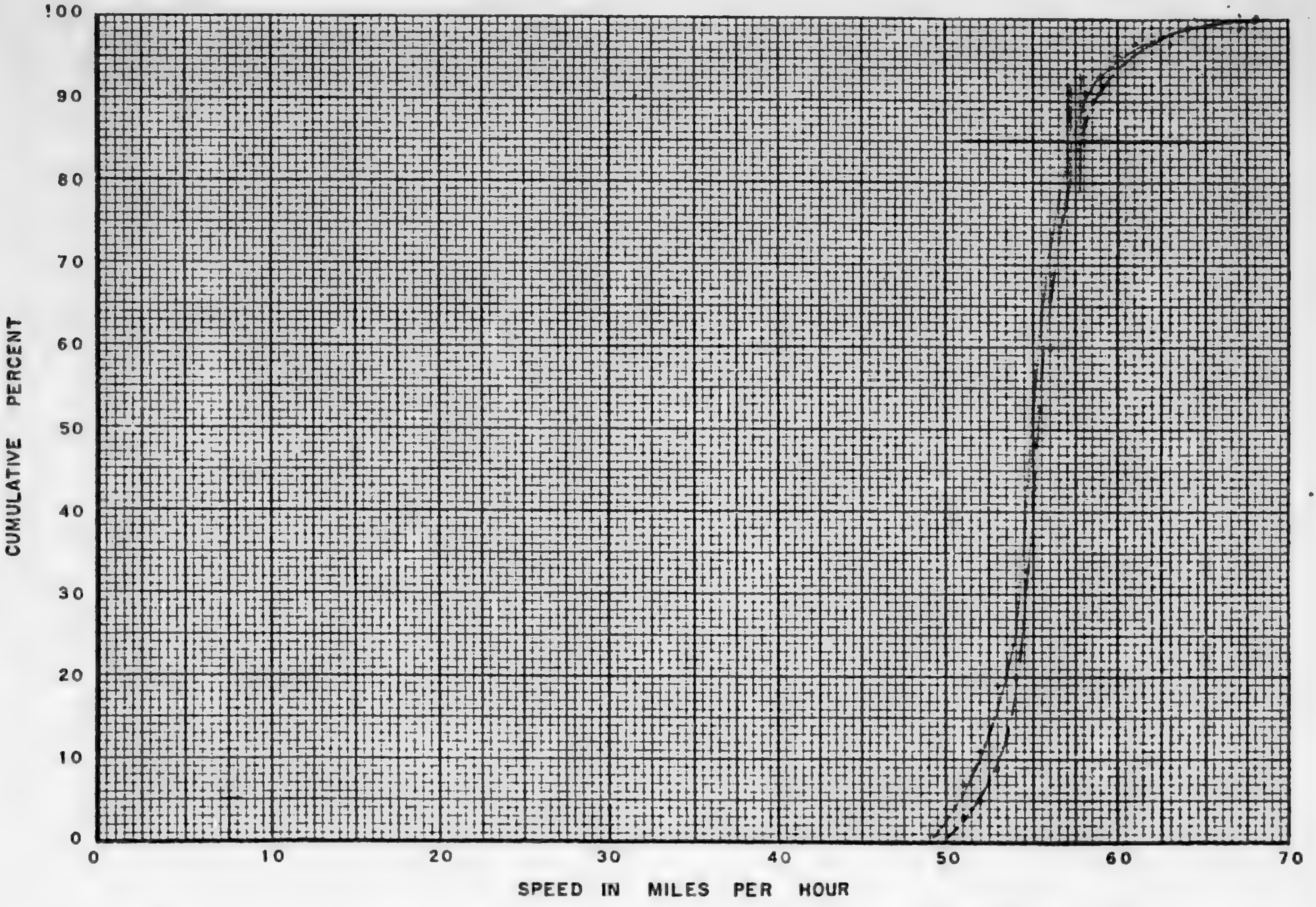


ITEM	west BOUND	east BOUND
85% SPEED	58.75	58.75
PACE LIMITS	51-61	50-60
% IN PACE	93	88
MAX. SPEED	61	89

ORE ON STATE HIGHWAY DEPARTMEN
TRAFFIC ENGINEERING DIVISION
PASSENGER VEHICLE SPEEDS

HIGHWAY ROUTE NO. 58
HIGHWAY NO. 18
MILE POST 2.29
GENERAL LOCATION Overflow Bridge

DATE February 27, 1978
TIME 1:40P M TO 2:50P M
WEATHER CONDITION fair
NUMBER IN SAMPLE 150
——— west BOUND
— — — east BOUND



ITEM	west BOUND	east BOUND
85% SPEED	57.25	57.75
PACE LIMITS	50-60	50-60
% IN PACE	92	94
MAX. SPEED	68	67

OREGON STATE HIGHWAY DEPARTMENT
TRAFFIC ENGINEERING DIVISION
PASSENGER VEHICLE SPEEDS

HIGHWAY ROUTE NO. 58

HIGHWAY NO. 18

MILE POST 4.01

GENERAL LOCATION middle of Pleasant Hill Business District

DATE February 28, 1978

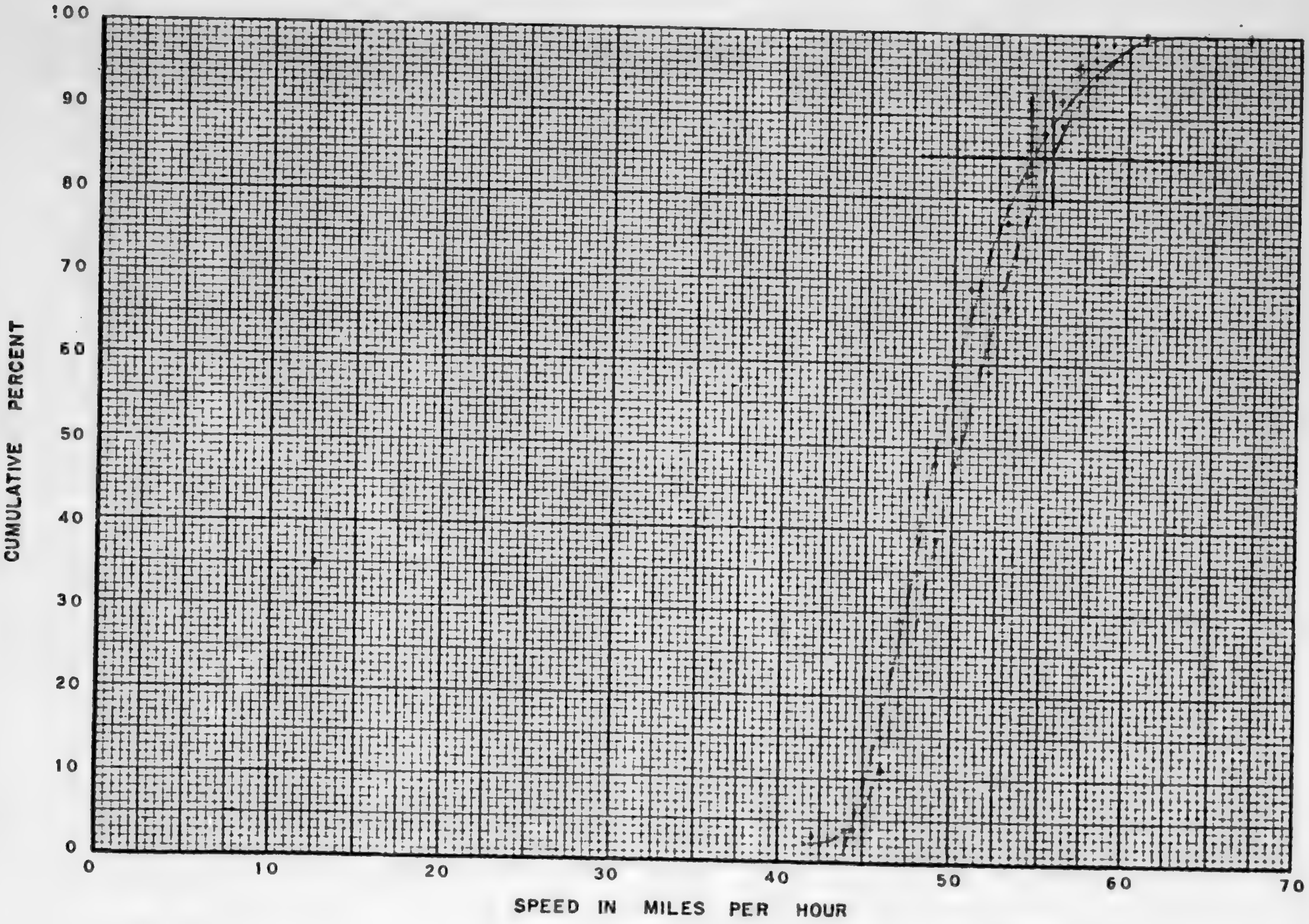
TIME 10:20A M TO 12:30P M

WEATHER CONDITION overcast

NUMBER IN SAMPLE 150

———— west BOUND

— — — east BOUND



ITEM	west BOUND	east BOUND
85% SPEED	53.25	55.50
PACE LIMITS	44-54	46-56
% IN PACE	80	77
MAX. SPEED	61	67

OREGON STATE HIGHWAY DEPARTMENT
TRAFFIC ENGINEERING DIVISION
PASSENGER VEHICLE SPEEDS

HIGHWAY ROUTE NO. 58

HIGHWAY NO. 18

MILE POST 4.96

GENERAL LOCATION

DATE February 28, 1978

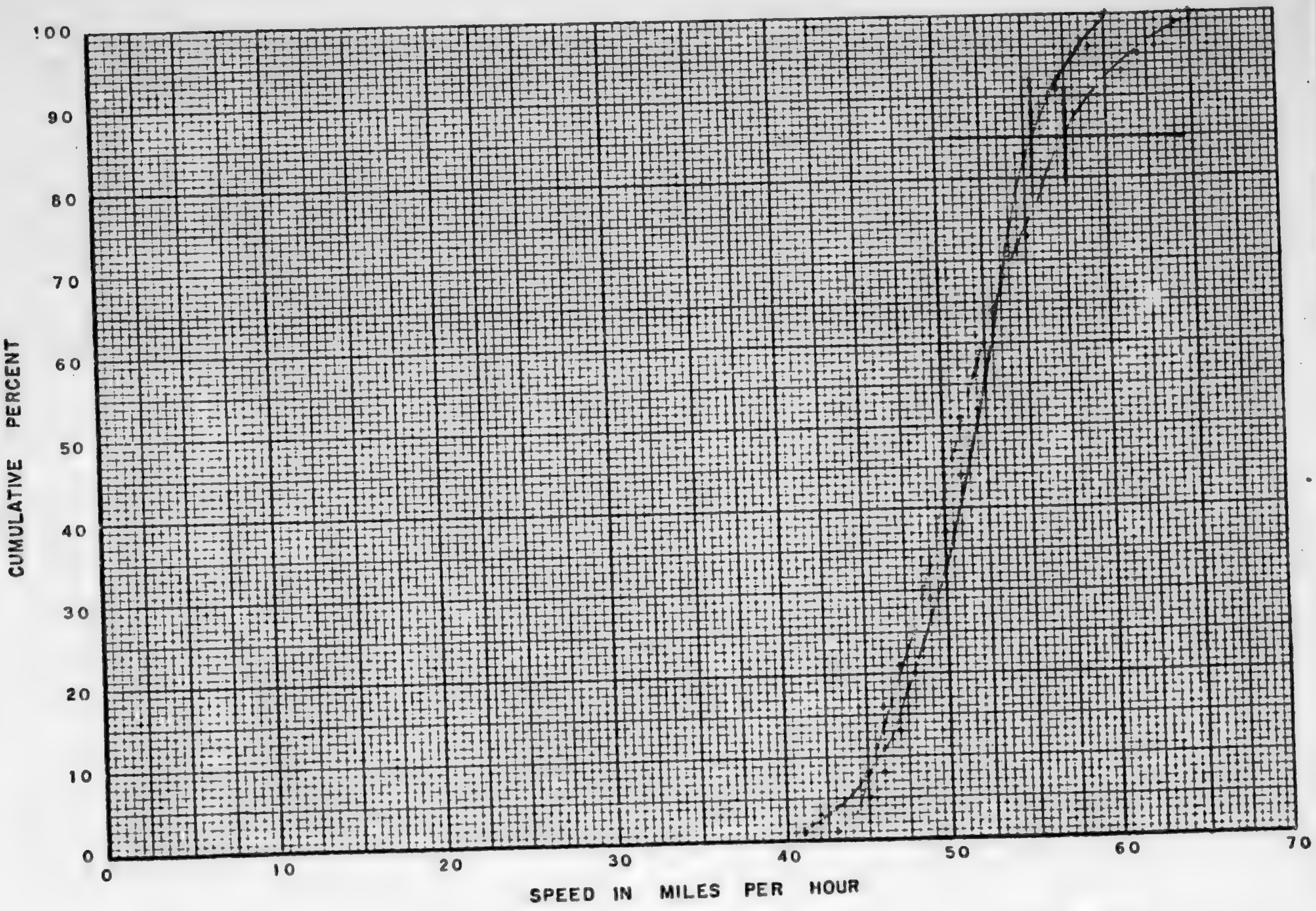
TIME 12:45P M TO 1:40P M

WEATHER CONDITION fair

NUMBER IN SAMPLE 150

———— west BOUND

— — — east BOUND



ITEM	west BOUND	east BOUND
85% SPEED	55.5	57.5
PACE LIMITS	46-56	47-57
% IN PACE	74	69
MAX. SPEED	60	65

OREGON STATE HIGHWAY DEPARTMENT
TRAFFIC ENGINEERING DIVISION
PASSENGER VEHICLE SPEEDS

HIGHWAY ROUTE NO. 58

HIGHWAY NO. 18

MILE POST 5.48

GENERAL LOCATION Driveway to Pleasant Hill School

DATE February 28, 1978

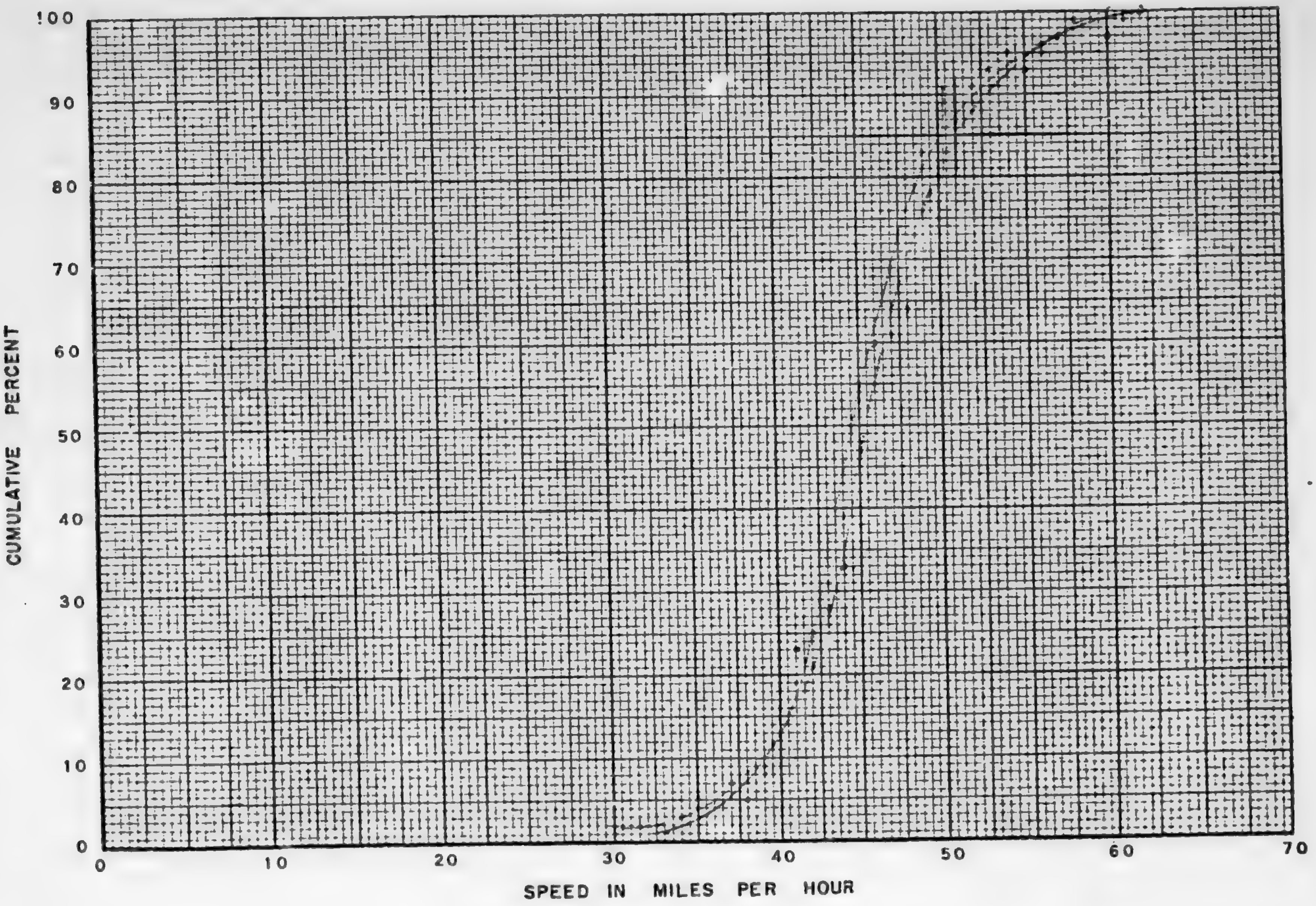
TIME 1:50P M TO 2:35P M

WEATHER CONDITION fair

NUMBER IN SAMPLE 150

——— west BOUND

— — — east BOUND



ITEM	west BOUND	east BOUND
85% SPEED	50.25	51.0
PACE LIMITS	41-51	41-51
% IN PACE	71	68
MAX. SPEED	62	60

OREGON STATE HIGHWAY DEPARTMENT
TRAFFIC ENGINEERING DIVISION
PASSENGER VEHICLE SPEEDS

HIGHWAY ROUTE NO. 58

HIGHWAY NO. 18

MILE POST 6.36

GENERAL LOCATION Pheasant Lane

DATE March 1, 1978

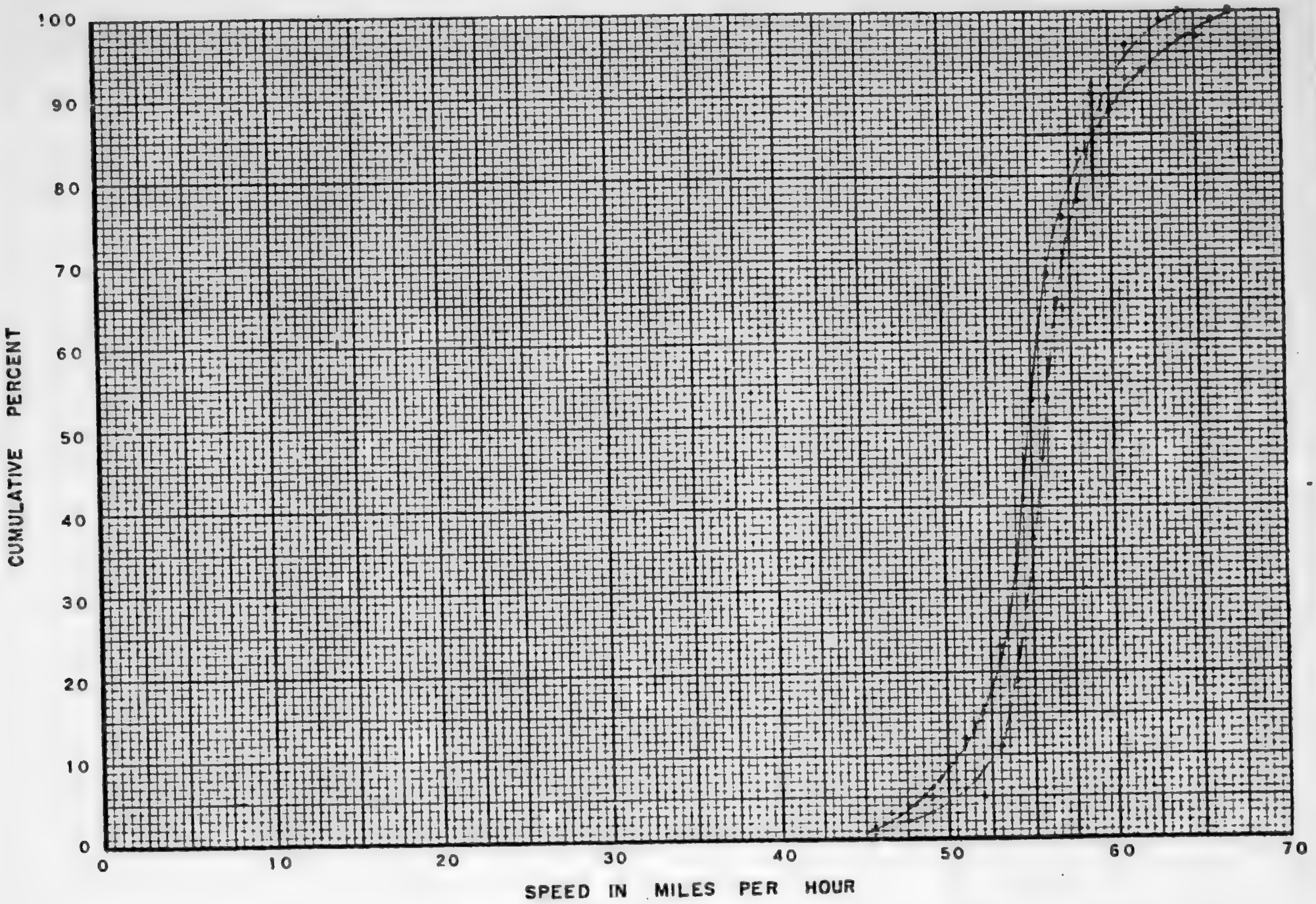
TIME 12:05P M TO 1:15P M

WEATHER CONDITION overcast

NUMBER IN SAMPLE 150

——— east BOUND

— — — west BOUND

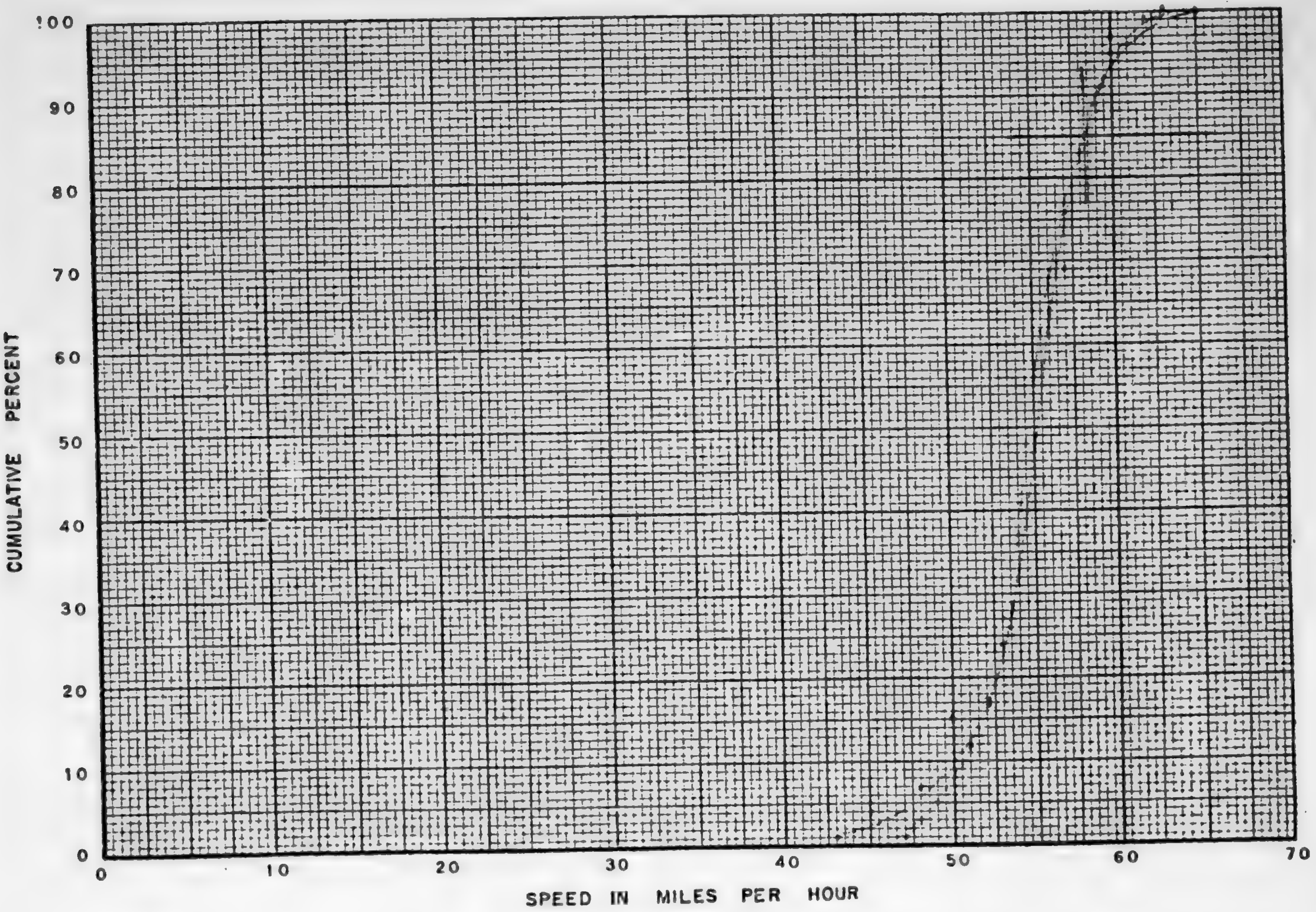


ITEM	east BOUND	west BOUND
85% SPEED	59.0	59.0
PACE LIMITS	51-61	50-60
% IN PACE	83	87
MAX. SPEED	67	64

OREGON STATE HIGHWAY DEPARTMENT
TRAFFIC ENGINEERING DIVISION
PASSENGER VEHICLE SPEEDS

HIGHWAY ROUTE NO.	58	DATE	March 1, 1978
HIGHWAY NO.	18	TIME	1:20P M TO 2:15P M
MILE POST	7.85	WEATHER CONDITION	fair
GENERAL LOCATION		NUMBER IN SAMPLE	150

——— west BOUND
— — — east BOUND



ITEM	west BOUND	east BOUND
85% SPEED	58.25	58.25
PACE LIMITS	50-60	50-60
% IN PACE	86	84
MAX. SPEED	63	65

OR[illegible]ON STATE HIGHWAY DEPARTME

TRAFFIC ENGINEERING DIVISION

PASSENGER VEHICLE SPEEDS

HIGHWAY ROUTE NO. 58

HIGHWAY NO. 18

MILE POST 10.15

GENERAL LOCATION

DATE March 1, 1978

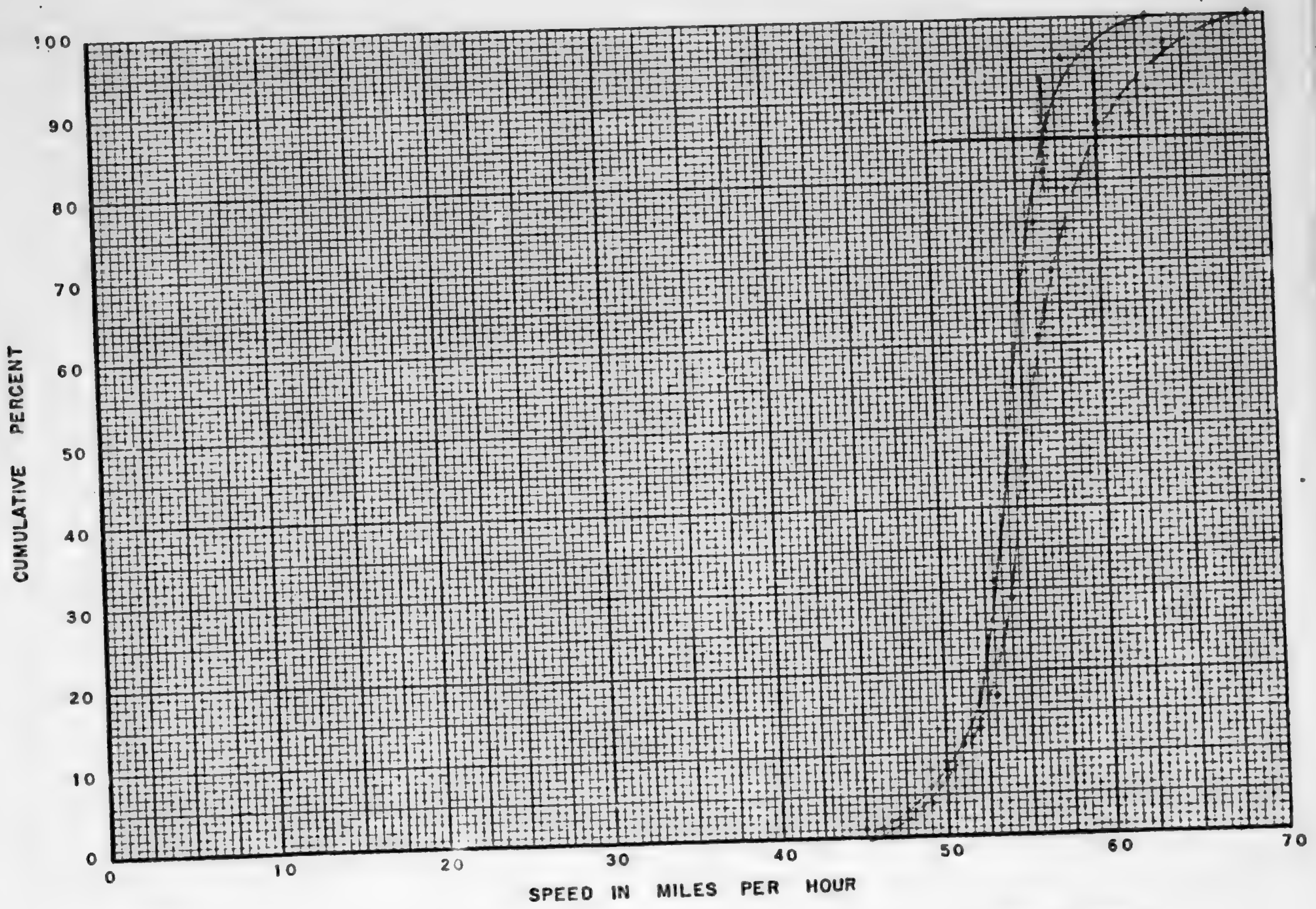
TIME 2:20P M TO 3:30P M

WEATHER CONDITION fair

NUMBER IN SAMPLE 150

——— west BOUND

— — — east BOUND



ITEM	west BOUND	east BOUND
85% SPEED	56.75	60.00
PACE LIMITS	49-59	51-61
% IN PACE	89	79
MAX. SPEED	63	69

#16

EXCERPT FROM COMMISSION MEETING MINUTES

March 27, 1974

ITEM: 5a (1)

Mr. Johnson reported that an investigation had been made concerning a speed zone in Lane County. Upon his favorable recommendation, the Commission adopted the following proposed rule as a permanent rule if no hearing is necessitated following publication of the rules in the Secretary of State's Administrative Rule Bulletin:

(1) Rescind Speed Zone Rule No. 636 and establish the following speed zone on the Willamette Highway in the vicinity of Pleasant Hill in Lane County:

3.93 — 45 MPH from 100 feet west of Ridgeway Road (M.P. 3.39) to 300 feet east of the Springfield-Creswell Highway No. 222 (M.P. 5.82) except that between M.P. 5.35 and M.P. 5.47 the designated speed shall be 20 MPH when children are present as per the provisions of Subsection 1.a. of ORS 483.104.

STATE OF OREGO

INTEROFFICE MEMO

TO: Alfred Shirley, Jr.
Region 3 Engineer

DATE: February 22, 1978

FROM: L. E. George
Traffic Engineer Supervisor

SUBJECT: Improvements
Willamette Highway No. 18
ORE58
Lane County

A delegation presented to the January 24 Commission Meeting the attached material concerning recommendations for improvements to ORE58 in the Pleasant Hill vicinity. Mr. Coulter has requested our comments on these recommendations.

In order to comment properly, it is suggested that your office and this office make a cooperative effort to review the various recommendations presented to the Commission. I have attached a copy of the recommendations and an excerpt from the Commission Meeting Minutes.

I have also discussed with Kipp Osborn the possibility of a combined effort in reviewing the recommendations. I have suggested to Kipp that he initiate as soon as possible a speed zone investigation in order to analyze the possibility of their speed zone recommendation. Their comments on enforcement will be discussed with Major Brandaw of the Oregon State Police Headquarters Office.

As can be seen, there are twelve specific recommendations, part of which involve signing and pavement stenciling (some of which are not currently Oregon's standards) and six locations at which they are requesting either shoulder widening and left-turn lane construction. Kipp is proceeding with turning movement counts at these locations to determine the validity of these requests. Where traffic data indicates that construction might be warranted, I would suggest that your office prepare cost estimates. We are in the process of having accident data prepared that can be used, together with the traffic volumes, to review the requests for construction. Concurrent with your work on the speed zoning and the construction estimates, this office will also prepare cost estimates for each of the requested traffic control devices. We can then combine our data and the data from your office into a final report and recommendations to Mr. Coulter.

Let's proceed along these lines, if this arrangement is satisfactory to you.

L. E. George

L. E. George
Traffic Engineer Supervisor

L.E. George
3/2/78
O.K.
Bud Shirley

ROSEBURG REGION
RECEIVED

DBS RSA FILE
ENJ FAE R3I

LEG:ds
Attachments

cc: H. S. Coulter
E. S. Hunter

81-125-1387

COMMISSION MEETING OF JANUARY 24, 1978
(DELEGATION - Palanuk - Pleasant Hill)

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CHAIRMAN JACKSON: We have Mr. Palanuk, is that how you pronounce it? From Pleasant Hill.

MICHAEL S. PALANUK: Thank you for giving me a few minutes of your time. I have some material that I would like to distribute to you that was distributed to Mr. Coleman at the last meeting and an area meeting that was held in Eugene on October 27th. I don't want to spend much time on that itself, other than to say at that meeting we proposed that some short-term items be taken care of on Highway 58, which is south and east of Eugene, and that other items be considered for the Six Year Plan. The short-term items that we had in mind were additional signing - signing on the roadway, signing along the roadway - which would help to cut down the number of accidents that are occurring in that area. We have a very high accident rate there. I haven't checked for this year, but for those that were reported, we had 61 accidents last year and two of those were fatalities. Information from the division staff here leads me to believe that that's probably about 40% of the accidents that actually occurred in the area.

What I wanted to bring to your attention again is that we have about 7,000 vehicles a day travelling through the area, and 7,000 vehicles a day through the area is maybe not the largest number that you've considered in the work that you've gone through this year. However, about one out of four of those vehicles are large vehicles. By large I mean 78,000 gross, and because of that, and because of the fact that the vehicles that are passing through the area are travelling often in excess of the speed limit, but certainly at the speed limit most of the time, we have many, many chances for accidents. We couple that with the fact that there are 22 intersections on the ten-mile stretch that I'm talking about, and this is where our accidents occur. It's a combination of speed and left turns or intersections in that area.

What I would like you to seriously consider is No. 1, getting the staff of the Highway Division to take care of the signing that we've requested just as soon as possible. I wanted to bring you some kind of horror story for what happened today in Pleasant Hill, but I'm sorry nothing happened on the way here. But normally any day I travel that road, I either see something along that road or I hear about something having happened in the area of accidents.

The other item - I see that you've included a couple of items on the Willamette Highway, which is what we're really referring to, in your Six Year Plan, or at least the one you're considering at this point in time. I'm not sure I know what reconstruction means; maybe one of you could fill me in on that. The overlay, of course, is a necessary thing that just has to be taken care of, like so many of the streets. But I would hope in the reconstruction that's being considered that additional left-turn lanes - or refuge lanes - would be taken care of. That's all I've got to say other than I might answer questions if you have some.

COLEMAN: Mr. Palanuk, I think that you stated in the Eugene meeting that your basic concern there was for the safety of the school children and the buses going in and out of the Pleasant Hill School district. Is this correct?

PALANUK: Yes, I've noted in the material that I sent you that we have something like 4,000 pupil miles per day, and what that amounts to for us is in the neighborhood of 148 miles of school bus traffic on Highway 58 on the stretch that I'm talking about. Of course, our total mileage per day is much greater than that.

COLEMAN: I also remember something else that you stated, that sometimes you actually had to go out and flag down on the highway to get the buses out because of the heavy traffic.

PALANUK: I don't do it, but one of the principals has to do it, and I've actually seen him do it now. I had never seen him do it until hunting season.

COLEMAN: Your desire of the signing is to find some way of slowing that traffic down in that school area.

PALANUK: Not only the school district itself, but also throughout the entire 10-mile stretch, and there are several options available. One of them would be to reduce the speed limit throughout the entire area. There are some places where it's 55 miles an hour; there are others where it's 45, and of course the school zone is 20, which is a joke, because, and it's a sad joke, because it's seldom that any vehicle travels 20 miles an hour through there, excepting the school buses and the superintendant.

JACKSON: Fred, have you any comments on these recommendations?

KLABOE: No, I don't know where that signing proposal is or what we're doing on it. Scott or Ed do you know?

COULTER: No I don't. I'll follow up on it and find out.

KLABOE: As far as the reconstruction he's talking about on that section to the east of your school, the section's in the Program; they'll be four-laning that piece of highway.

PALANUK: Up to the Coast Fork of the Willamette.

KLABOE: Up to the Coast Fork, which isn't going to help your situation.

JACKSON: Well, will you take a look at these recommendations and see what we can do about it.

COULTER: I'll look into that, look into signing. We can check into the enforcement of the existing speed laws.

KLABOE: I think it's all been done many times. We've done a lot of work in there like putting a left refuge lane and things like that in there, but it is a congested area, and it's just a big problem.

PALANUK: We are facing one other thing that I feel will happen within the next three years. It's a radical changing in zoning out there, and the reason for that change in the zoning is that there is a large section of the school district that's being forced to install sewer systems - a large trunk line - and when that does happen, I'm certain that the present zoning, which is 15 and 20 acres in all new construction will be brought down to anywhere from a third or half an acre to say, 5 acres or so. So the problem may get a great deal worse than it is. I'm certain it will get worse, things always do, but that's in the offing - certainly within the next 3 to 5 years.

JACKSON: Thank you very much. We'll take a look at the suggestions.

cy L.E. George

Your comments on these recommendation please, —

HIGHWAY 58 IMPROVEMENT RECOMMENDATIONS

The residents of the Pleasant Hill School District as well as the State Highway Division have known for sometime the dangers involved in traveling on Highway 58 which is south and east of the city of Eugene. This highway is a connecting link between Interstate 5 and the Klamath Falls area and on to the south.

Due to its being the most direct link between those two points, the average daily traffic volume through this school district is in excess of 7,000 vehicles per day. About one-fourth of those vehicles travel only within the school district and to Lowell, the other three-fourths of them travel on to Oakridge and the south. ?

If traffic volume alone were the only consideration, probably the Pleasant Hill School District should receive less consideration than some of the other areas that you will be considering at your meetings throughout the state. However, large vehicles make up a very high percentage of this traffic. In fact, recent random counts have shown that heavy vehicles represent approximately one-fourth of the traffic in this area during weekday daylight hours. ? 33.5%

A second factor is that the section of Highway 58 within the school district has 22 intersections which require local vehicular traffic to cross the oncoming lane. Accidents which have occurred in these areas center on these intersections and create a serious hazard to all residents of the area, but especially the school buses which provide in excess of 4,000 pupil miles per day on Highway 58 alone. ? 10.37 miles

As we are all aware, accidents generally occur for two reasons in this area: (1) excessive speed and (2) changing speed or stopping on the highway to make turns.

Highway Division statistics for the 1976 calendar year show that there were 61 accidents which resulted in 77 injuries including two fatalities on the 10.37 miles of road we are referring to. However, due to reporting requirements and a general public reluctance to report accidents, Division personnel point out that these figures may represent as little as 40 percent of those accidents which do occur. Those accidents which did get reported occurred with a traffic volume of about 7,400 vehicles per day with over 77,000 vehicle miles during each day. Annualizing the mileage, this represents over 28 million vehicle miles per year on Highway 58 within the area.

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As we feel that there are four approaches that would alleviate the problem, we would like to present them at this time.

Our first recommendation is that there be increased enforcement of the existing speed limits. Specifically, the 45 mile per hour zone in the area and the 20 mile per hour zone fronting the schools. Even though the county spends a great deal of time patroling this area, this in itself is not effective in that the manpower isn't available to provide regular enforcement. We understand there are Federal funds which would increase the county traffic force and urge you to make application for them. We also urge that the coverage of this area by the State Police be increased.

The second item we propose is that the speed limit through the school district which extends from mile post 1.12 to mile post 11.49 be reduced to 45 miles per hour. The reasons for these recommendations are that the 55 mile per hour speed limit is not being followed, coupled with the fact that left turns make those accidents that do occur more likely to be of a serious nature.

Our third recommendation is that increased signing take place which will be mention below.

Finally, we recommend that the approaches to the numerous intersections in the area be widened or a third lane be developed as noted below.

Attached is a straight line chart with the recommendations noted in the previous two paragraphs. The material which follows is a more full description of those recommendations.

RECOMMENDATIONS

1. Install large flashing sign at mile post 1.12 indicating that school buses are on the roads between 6:30 and 9:00 a.m. and 2:00 and 4:00 p.m. Our reasoning for this is we want increased awareness of school bus traffic at these times as there are 4,125 pupil miles occurring during these times on a daily basis. We understand that there are limitations on signing, but believe that the awareness of buses while in operation outweighs the justification for the limitations.

2. At mile post 2.40 the intersection with Mathews Road and Dilley Lane should be moved a short distance west and a left turn lane constructed or widening of the shoulders. The reason for this is that multiple accidents have taken place at this intersection, most of them involving large vehicles.

3. At mile post 2.64, the Cloverdale intersection, construct a left turn lane or widen the shoulders and install a blinking caution light. Again, the reason for this is that numerous accidents which take place due to left turns in this area.

4. At approximately mile post 3.50, construct a left turn lane or widen the shoulders across from the Texaco service station.

5. Between mile posts 3.67 and 4.00 paint multiple signs on the center left turn lane which indicate "no passing" This area is constantly being used as a passing lane by cars as well as trucks.

   No paint
   - use signing

6. Mile post 4.20 Edenvale Road, construct a left turn lane or widen the shoulders due to the many accidents near accidents at this point.

7. At approximately mile post 4.50, install a blinking caution light at the fire station. This light has been sought for some time by the fire department.

   Fire signal?

8. Mile post 4.76, Bristow Road, construct a left turn lane or widen the shoulders. Again, accidents and near accidents are frequent occurrences at this point.

9. Mile post 5.23 to 5.50 paint multiple signs on the center left turn lane indicating no passing and lengthen the left turn lane which ends at 5.23. Conjestion during school hous is extreme here and there is seldom room enough for buses and automobiles using this lane to fit within its confines.

   No paint
   use signing

10. At approximately 5.80, the 45 mile per hour speed limit sign should be moved to the site of the present Reduce Speed Ahead sign in order to slow the traffic down in front of the schools.

    ? check out
    S.

11. Mile post 6.36, Pheasant Lane, construct a left turn lane or widen the shoulder at this point due to multiple left turns at this point.

12. Mile post 7.19, Hilltop Drive, construct a left turn or widen the shoulder at this point. A great deal of building has been going on in this area recently and as a result, more and more near accidents are taking place at this time than accidents statistics indicate.

13. Mile post 11.49, install a large flashing sign for westbound traffic similar to that recommended at mile post 1.12.

Although we realize that not all of our recommendations can be acted on immediately, we do feel that all of them merit not only your consideration, but that corrective action be taken on them as soon as possible.

Petitions urging that improvements be made in this area signed by over 800 persons were submitted at your regional meeting of October 27, 1977.

Recommendations		Miles
	Goshen	0
Install large flashing sign indicating school buses on roads 6:30 a.m.-9:00 a.m. and 2:00 p.m.-4:00 p.m.	Mathews	1.12
Move intersection a short distance west and construct left turn lane or widen shoulders	Mathews	2.40
Construct left turn lane or widen shoulders and install blinking caution light	Cloverdale	2.64
Construct left turn lane or widen shoulders at service station	Brabham	3.37
Paint multiple signs on the turn lane indicating no passing	Kensington	3.67
	Ridgeway	3.95
Construct left turn lane or widen shoulders	Edenvale	4.20
Install blinking caution light at the fire station Construct left turn lane or widen shoulders	Bristow	4.76
Paint multiple signs on the center left turn lane indicating no passing and lengthen left turn lane from the east	Enterprise	5.23
	Jasper	5.74
Move 45 mile per hour limit sign to the point of the existing reduce speed ahead sign	Immigrant	5.92
Construct left turn lane or widen shoulder	Pheasant Lane	6.36
Construct left turn lane or widen shoulder	Hilltop	7.19
	Mill	8.20
	Rattlesnake	8.55
	Wheeler	9.41
	Dexter	9.56

and 2:00 p.m.-4:00 p.m.

Move intersection a short distance west and construct left turn lane or widen shoulders	Mathews	2.40
Construct left turn lane or widen shoulders and install blinking caution light	Cloverdale	2.64
Construct left turn lane or widen shoulders at service station	Brabham	3.37
Paint multiple signs on the turn lane indicating no passing	Kensington	3.67
	Ridgeway	3.95
Construct left turn lane or widen shoulders	Edenvale	4.20
Install blinking caution light at the fire station		
Construct left turn lane or widen shoulders	Bristow	4.76
Paint multiple signs on the center left turn lane indicating no passing and lengthen left turn lane from the east	Enterprise	5.23
	Jasper	5.74
Move 45 mile per hour limit sign to the point of the existing reduce speed ahead sign	Immigrant	5.92
Construct left turn lane or widen shoulder	Pheasant Lane	6.36
Construct left turn lane or widen shoulder	Hilltop	7.19
	Mill	8.20
	Rattlesnake	8.55
	Wheeler	9.41
	Dexter	9.56
	Mathews Dr.	10.83
Install large flashing sign indicating school buses on roads 6:30 a.m.-9:00 a.m. and 2:00 p.m.-4:00 p.m.	Lost Creek	11.49

937

F. B. Crandall L.

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OREGON STATE HIGHWAY DEPARTMENT

INTER-DEPARTMENT CORRESPONDENCE

Roseburg, Oregon
March 11, 1965

SUBJECT: Proposed Left Turn Refuge
Willamette Highway - Junction
with ORE222
ORE58-Hwy. No. 18-M.P. 2.64

To: L. R. Chandler
Division Engineer
OFFICE

L

Attached is a letter dated March 5, 1965 from Mr. Tom Edwards, Assistant State Highway Engineer, with instructions to redesign the previously submitted design to eliminate bridge widening.

Attached is the revised design utilizing minimum design standards. This project is estimated to cost $5300. The proposed channelization would consist of painted lines.

Glen L. Clark
Glen L. Clark
Division Traffic Engineer

GLC:crd

cc: Tom Edwards
F. B. Crandall
Bob Bothman
D. J. Sage

NOTED
TRAFFIC CONTROL

NOTED
L. E. GEORGE

9372

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File No. ____________
Rd. No. ______ M.P. ______
City of ____________
Streets ____________
Rural ______ Urban ______

Salem, Oregon 97310
March 4, 1965

Left Turn Refuge Construction
Willamette Highway at Springfield - Creswell Highway
East of Goshen

Tom Edwards
Assistant State Highway Engineer
OFFICE

There is attached a report from Division III on the above subject. This report was prepared in response to your letter of February 4.

I concur in Division office negative recommendation respect construction of left turn refuge. The $20,000 price tag would be too high for the traffic volume accommodated.

In lieu of left turn refuge construction, the installation of advance "CROSS ROAD" symbol signs is in order. I would also suggest that the pavement be widened so as to provide a better turning radius in the northeast and southwest quadrants of the intersection. You will note from the accident diagram that there have been almost as many accidents involving right turns as left turns at this location.

F. B. Crandall
Traffic Engineer

FBC:aa
Attachment

NOTED
L. E. GEORGE

1981 Pudding River Br. Sec. 9373
on the Hillsboro-Silverton Hwy.
(Grading, Paving & Struc.) #1

9373

bi   cc: (Rulie

STATE COPY ✓

U.S. Department of Transportation
Federal Highway Administration

FINAL ACCEPTANCE REPORT

1-5-86

REGION NO. 10	REPORT NO. 2	COUNTY Marion	DIVISION Oregon
DATE OF REPORT 1/15/86	REPORT MADE BY W. H. Kappus, Area Engineer		PROJECT NO. BRF-75(8)
COMPLETION DATE (Actual) 6/14/83	ACCEPTANCE DATE BY CONRTACT AGENCY 7/9/85	TIME ELAPSED 125 %	CONTRACT TIME 350 CD

LOCATION
See Below

The FHWA-47, Statement of Materials and Labor Used by Contractors on Highway Construction Involving Federal Funds, has been submitted. (Projects over $500,000)
A copy of the State's materials certificate is attached to the Division office copy of this report.
There is compliance with section 1.23 of the Regulations pertaining to encroachments on the right-of-way.

REMARKS: *The project has been completed in reasonably close conformity with the approved plans and specifications including authorized changes and extra work.*

PUDDING RIVER BRIDGE
HILLSBORO-SILVERTON HIGHWAY
Grading, Paving, & Structure

This project provided for replacement of a wooden structure with prestressed box beam bridge 319 feet long with a horizontal clearance of 40 feet. The new structure was constructed immediately downstream from the old structure which provided for a much improved alignment.

The final project cost overran the original authorization by approximately 30 percent. Major foundation problems developed during the construction of bent #3. As a result several design changes were made prior to constructing bent #2. These changes proved successful but added substantially to the total cost. These added expenses included; furnishing and driving additional pile lengths, furnishing and driving sheet piling, standby time and stabilizing bent #3. Overruns also occurred in flagging time and AC paving quantities. Flagging and AC overruns were related to the design and staging changes.

A final inspection of the completed project was made June 27, 1983.

- WHK -

W. E. SCHWARTZ

RECEIVED
STATE HWY ENGR
JAN 21 '86
REFER TO
Fredrickson
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Cy
1/23

ACCEPTANCE OF PROJECT IS RECOMMENDED		ACCEPTED BY FEDERAL HIGHWAY ADMINISTRATION	
SIGNATURE Original Signed By WILLIAM H. KAPPUS Area Engineer		SIGNATURE G. K. HOSSNER Field Operations Engineer	
TITLE Area Engineer	DATE JAN 17 1986	TITLE Field Operations Engineen	DATE JAN 21 1986

FORM FHWA 1446B   PREVIOUS EDITIONS MAY BE USED.

#9373 8-7-85

file

REPORT OF ACTION UNDER DELEGATED AUTHORITY BY

ASSISTANT STATE HIGHWAY ENGINEER

On behalf of the Commission and under delegated authority, the following contracts were accepted as being completed according to specifications:

Contractor and Contract No.	Section and County	Acceptance Date
Oregon Asphaltic Paving Co. Contract No. 9577	SE Stark St.-SE Division St. Multnomah County	7-05-85
Ross Bros. Const., Inc. Contract No. 9373	Pudding River Bridge Marion County	7-09-85
Porter W. Yett Co. Contract No. 9741	Wilsonville-Hubbard Hwy. @ NE Arndt Rd. Clackamas & Marion Counties	7-09-85
Copeland Paving, Inc. Contract No. 9796	Ferris Gulch-Long Gulch Jackson County	7-09-85
Oregon Asphaltic Paving Co. Contract No. 9811	Portland Ave. @ Abernethy Ave. (Gladstone) Clackamas County	7-10-85
L T Contractors, Inc. Contract No. 9383	Sunny Valley Intch.-Jumpoff Joe Cr. Josephine County	7-10-85
Tice Electric Co. Contract No. 9828	NE 47th Ave. @ NE Oregon St. Multnomah County	7-11-85
H & H Electric, Inc. Contract No. 9895	Mt. Hood Hwy. @ Industrial Way (Sandy) Clackamas County	7-12-85
F. Kelly Somers Const. Inc. & F.L.Somers Co.,Inc., J.V. Contract No. 9601	Thornton Creek Lincoln County	7-12-85
Peter Kiewit Sons Co. Contract No. 9037	Martin Cr.-Anlauf Intch. Douglas & Lane Counties	7-15-85
Elte, Inc. Contract No. 9728	Chapman Slide Columbia County	7-16-85
Ken Leahy Construction, Inc. Contract No. 9876	Helvetia Road Intch. Washington County	7-16-85

Contractor and Contract No.	Section and County	Acceptance Date
J. C. Compton Co. Contract No. 9485	Vail Cr.-Nylund Rd. Linn County	7-25-85
Green & White Rock Products, Inc. Contract No. 9367	NW Kings Blvd.-Highland Dr. (Corvallis Benton County	7-25-85
Wildish-Corvallis Const. Co. Contract No. 9419	NW 9th St.-SPRR (Corvallis) Benton County	7-25-85
Mocon Corp. Contract No. 9403	W. Burnside St. @ SW Tichner Dr. Multnomah County	7-25-85
Abhe & Svoboda, Inc. Contract No. 9825	Salmon Creek Bridge Lane County	7-25-85
Stach Construction Co., Inc. Contract No. 9838	Umpqua River (Reedsport) Br. & Cape Creek Br. Douglas & Lane Counties	7-25-85
Eugene Sand & Gravel, Inc. Contract No. 9776	"Q" St.-S. "A" St. (Springfield) Lane County	7-25-85
Comco dba Salem Road & Driveway Contract No. 9802	Mt. Angel-Abiqua Creek Marion County	7-25-85
Roseburg Paving Co. Contract No. 9794	NE Garden Valley Blvd.- NE Diamond Lake Blvd. Douglas County	7-25-85
S. J. Groves & Sons Co. Contract No. 9668	L.R.T. O'Xing. of UPRR (Holladay St.) Multnomah County	7-30-85
Bend Aggregate & Paving Co. Contract No. 9956	Bend Rock Production Deschutes County	7-30-85
Wildish-Corvallis Const. Co. Contract No. 9605	Rice Hill-Metz Hill Intch. Douglas County	7-30-85
Fabricators, Inc. Contract No. 9640	Manbrin Dr. N.-Stark St. N. Marion County	7-31-85

Contractor and Contract No.	Section and County	Acceptance Date
C. C. Meisel Co., Inc. Contract No. 9659	East McMinnville Intch. Yamhill County	7-31-85
F. Hodgson & Sons Contract No. 9742	NW Hoge Ave.-NW Harbor Blvd. (Ptld.) Multnomah County	8-01-85
Linnco Electric Co. Contract No. 9842	Hillsboro-Silverton Hwy. @ Boones Ferry Rd. Marion County	8-01-85

EXPENDITURE RECAP

	ABOVE PROJECTS	FY TO DATE
Original Authorization	$ 62,073,774.32	$ 62,073,774.32
Anticipated Costs	$ 69,167,764.28	$ 69,167,764.28
% Overrun (Underrun)	+11.43%	+11.43%

August 8, 1985

W. E. Schwartz, P.E.
Asst. State Highway Engineer

9373

August 1, 1985

Safeco Insurance Company
4101 S.W. Kruse Way
Lake Oswego, OR 97034

CON 3
#9373

On July 15, 1985, we wrote to you concerning release of final payment on Contract No. 9373 awarded to Ross Bros. Construction, Inc. for grading, paving and structure work on the Pudding River Bridge Section of the Hillsboro-Silverton Highway in Marion County.

Final payment on this contract is $9,485.44 and the total contract amount is $1,111,471.99 including $11,941.11 for work performed under force account.

Robert W. Gormsen
COMMISSION SERVICES

ms

cc: Ross Bros. Construction, Inc.
3301 Brooklake Road N.
Salem, OR 97303

bc: C. O. Fredrickson
Walt Hart
Bill Anhorn

1313

STATE COPY

TO BE COMPLETED BY FHWA	U.S. Department of Transportation **Federal Highway Administration**	Form Approved; O M B No. 04-R2089
MONTHLY TRANSACTION NUMBER 5-181	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	State OREGON
PROJECT REPORT NUMBER		County MARION
MODIFICATION NUMBER 5		Project Number BRF-75(8)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15, 1981, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,290,024.00	$ 1,300,825.00
Federal funds	$ 1,032,018.00	$ 1,040,659.00
Other revisions		

This modification is made for the following reasons: To include increase in cost of construction engineering.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 29th day of May, 1985.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Manager, Program Section
(Title)

~~BY~~ FOR: H. S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 7-83)

Previous editions are obsolete

OREGON STATE HIGHWAY DIVISION
SALEM, OREGON   MAY 22, 1985

FEDERAL AID PROJECT NO. BRF-75(8)

PUDDING RIVER BRIDGE
HILLSBORO-SILVERTON HIGHWAY
MARION COUNTY

REVISED PROJECT AGREEMENT ESTIMATE

TYPE CODE 6201
ROADWAY (Sta. 2156+00 to Sta. 2166+97)(Sta. 2170+24 to Sta. 2182+00)

TOTAL from previously revised estimate of July 23, 1984	$590,176.00

TYPE CODE X081
STRUCTURE BR. #1917A (Sta. 2166+97 to Sta. 2170+24)

SUBTOTAL from previous estimate of July 23, 1984	$616,216.48
Engineering	92,432.52
TOTAL	$710,649.00

Length of Roadway ---------------- 0.431 mi.
Length of Structure -------------- 0.061 mi.

TOTAL 0.492 mi.

Cost of Roadway Per Mile --------- $1,369,317.87

SUMMARY OF FUNDS (80%)

DESCRIPTION	TOTAL FUNDS	FEDERAL FUNDS	STATE FUNDS
Roadway	$ 590,176.00	$ 472,140.00	$118,036.00
Structure	710,649.00	568,519.00	142,130.00
TOTAL	$1,300,825.00	$1,040,659.00	$260,166.00

Group 1: 100%
Contract No.: 9373
Prefix: 124-1984
Prefix: 124-1064

DDB:pf

9373

TO BE COMPLETED BY FHWA MONTHLY TRANSACTION NUMBER 7-262 PROJECT REPORT NUMBER MODIFICATION NUMBER 4	U.S. Department of Transportation **Federal Highway Administration** **MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT** 7-25-84	Form Approved; O M B No. 04-R2089 State OREGON County MARION Project Number BRF-75(8)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15 , 19 81 , is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,235,070.00	$ 1,290,024.00
Federal funds	$ 988,055.00	$ 1,032,018.00
Other revisions		

This modification is made for the following reasons: To include increased construction and construction engineering costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 25th day of July , 19 84 .

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By Wayne Holme

For Manager, Program Section
(Title)

~~By~~ FOR: H. S. Coulter

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 7-83)

Previous editions are obsolete

OREGON STATE HIGHWAY DIVISION
SALEM, OREGON JULY 23, 1984

FEDERAL AID PROJECT NO. BRF-75(8)

PUDDING RIVER BRIDGE
HILLSBORO-SILVERTON HIGHWAY
MARION COUNTY

REVISED PROJECT AGREEMENT ESTIMATE

TYPE CODE 6201
ROADWAY (Sta. 2156+00 to Sta. 2166+97)(Sta. 2170+24) to Sta. 2182+00)

ITEM	UNIT PRICE	ORIGINAL QUANTITY	ORIGINAL AMOUNT	REVISED QUANTITY	REVISED AMOUNT
Toe Trench Excavation	$ 12.00	40	$ 480.00	163.30	$ 1,959.60
Aggregate Shoulders	8.50	1,150	9,775.00	1,980.12	16,831.02
Loose Riprap, Class 100	12.00	750	9,000.00	989.41	11,872.92
Roadside Seeding & Mulching	500.00	2	1,000.00	3.92	1,960.00
Concrete Inlet, Type "O" (PA #201)	681.60	--	--	1.00	681.60
Concrete Inlet, Type "G2" (PA #202)	741.60	--	--	1.00	741.60
12-inch Culvert Pipe (PA #203)	25.00	--	--	7.00	175.00
Move Gate (PA #204)	844.80	--	--	1.00	844.80
SUBTOTALS			$ 20,255.00		$ 35,066.54

Increase $ 14,811.54
Subtotal from previously Revised Project Agreement Estimate of January 13, 1983 498,385.00
SUBTOTAL $513,196.54
Engineering 76,979.46
TOTAL $590,176.00

TYPE CODE X081
STRUCTURE BR. #1917A (Sta. 2166+97 to Sta. 2170+24)

ITEM	UNIT PRICE	ORIGINAL QUANTITY	ORIGINAL AMOUNT	REVISED QUANTITY	REVISED AMOUNT
Structure Excavation	$ 17.00	215	$ 3,655.00	276	$ 4,695.40
Drive Steel Piles	.50	2,908	1,454.00	4,296	2,148.00

ITEM	UNIT PRICE	ORIGINAL QUANTITY	ORIGINAL AMOUNT	REVISED QUANTITY	REVISED AMOUNT
Structural Concrete, Class 3300	8,800.00	100%	88,000.00	103.12%	90,745.60
Repair Bridge Parapet (PA #501)	1,250.00	--	--	6	7,500.00
SUBTOTALS			$ 93,109.00		$105,089.00

Increase	$ 11,980.00
Subtotal from previously Revised Project Agreement Estimate of January 13, 198~~4~~3	604,236.48
SUBTOTAL	$616,216.48
Engineering	83,631.52
TOTAL	$699,848.00

Length of Roadway -----------------	0.431 mi.
Length of Structure ---------------	0.061 mi.
TOTAL	0.492 mi.

Cost of Roadway per Mile ---------- $1,369,317.87

SUMMARY OF FUNDS (80%)

DESCRIPTION	TOTAL FUNDS	FEDERAL FUNDS	STATE FUNDS
Roadway	$ 590,176.00	$ 472,140.00	$118,036.00
Structure	699,848.00	559,878.00	139,970.00
TOTAL	$1,290,024.00	$1,032,018.00	$258,006.00

Group 1: 100%
Contract No. 9373
Prefix: 124-1984
Prefix: 124-1064

WH:pf

9373

STATE COPY 6

TO BE COMPLETED BY FHWA	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State Oregon
MONTHLY TRANSACTION NUMBER 1-169		County Marion
PROJECT REPORT NUMBER	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	Project Number BRF-75(8)
MODIFICATION NUMBER 3	1-19-83	

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15, 1981, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,150,545.00	$ 1,235,070.00
Federal funds	$ 920,436.00	$ 988,055.00
Other revisions		

This modification is made for the following reasons: to include increase in construction costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 19th day of January, 1983.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Acting Program Section Manager
(Title)

~~By~~ XXX For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)
For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen File

Oregon State Highway Division
Salem, Oregon January 13, 1983

Federal-Aid Project
No. BRF-75(8)

Pudding River Bridge
Hillsboro-Silverton Highway
Marion County

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6201
Roadway (Sta. 2156+00 to Sta. 2166+97)(Sta. 2170+24 to Sta. 2182+00)

Subtotal of previous estimate of October 8, 1981 $443,617.00

Previous Estimate

Flagman	250 Hr.	10.00	$ 2,500.00
Class "B" or "C" Asphalt Concrete	2,200 Ton	36.00	79,200.00
			$ 81,700.00

Revised Estimate

Flagman	802 Hr.	10.00	$ 8,020.00
Class "B" or "C" Asphalt Concrete	3,568 Ton	36.00	128,448.00
			$136,468.00

Increase	$ 54,768.00
SUBTOTAL	498,385.00
Engineering	59,888.00
TOTAL	$558,273.00

Type Code X081
Structure Br. #1917A (Sta. 2166+97 to 2170+24)

Subtotal of previous estimate of July 15, 1983 $574,479.00

Additional Item

RZ10 Sheet Piles (P.A. #4)	1,972 Lin. Ft.	15.09	$ 29,757.48

Increase	$ 29,757.48
SUBTOTAL	604,236.48
Engineering	72,560.52
TOTAL	$676,797.00

Length of Roadway ---------------- 0.431 mi.
Length of Structure -------------- 0.061 mi.
TOTAL LENGTH 0.492 mi.

Cost of Roadway Per Mile ---------$1,295,296.98

SUMMARY OF FUNDS

Description	Total Cost	Federal Funds	State Funds
Roadway	$ 558,273.00	$ 446,618.00	$111,655.00
Structure	676,797.00	541,437.00	135,360.00
TOTAL	$1,235,070.00	$ 988,055.00	$247,015.00

Group 1 100%
Contract No. 9373
Prefix: 124-1984
Prefix: 124-1064

9373

STATE COPY

2.

TO BE COMPLETED BY FHWA MONTHLY TRANSACTION NUMBER 7-215	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State Oregon
PROJECT REPORT NUMBER	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	County Marion
MODIFICATION NUMBER 2	7/21/82	Project Number BRF-75(8)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15, 19 81, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,131,505.00	$ 1,150,545.00
Federal funds	$ 905,204.00	$ 920,436.00
Other revisions		

This modification is made for the following reasons: to include increase in construction costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 21st day of July, 19 82.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Program Management Engineer
(Title)

XXX For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Con File

Oregon State Highway Division
Salem, Oregon July 15, 1982

Federal-Aid Project
No. BRF-75(8)

Pudding River Bridge
Hillsboro-Silverton Highway
Marion County

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6201
Roadway (Sta. 2156+00 to Sta. 2166+97)(Sta. 2170+24 to 2182+00)

Total the same as previous estimate of October 8, 1981 $ 503,505.00

Type Code X081
Structure Br. #1917A (Sta. 2166+97 to 2170+24)

Subtotal of previous estimate of June 2, 1982 $ 555,439.00

Additional Items

Cut Pile Tips & Reweld New Piles (P.A. #3)	12 Each	95.00	$ 1,140.00
Furnish Pile Driving Equipment (P.A. #4)	4 Each	300.00	1,200.00
Drive Sheet Piles, Bent #2 (P.A. #4)		All Required	8,600.00
Standby Time (P.A. #4)		All Required	3,100.00
Stabilize Bent #3 (E.W.O. #1)		All Required	5,000.00
			$ 19,040.00
		Increase	$ 19,040.00
		Subtotal	$ 574,479.00
		Engineering	72,561.00
		Total	$ 647,040.00

Length of Roadway -------------- 0.431
Length of Structure ------------ 0.061
TOTAL LENGTH 0.492

Cost of Roadway Per Mile--------$1,168,225.05

SUMMARY OF FUNDS

Description	Total Cost	Federal Funds	State Funds
Roadway	$ 503,505.00	$ 402,804.00	$ 100,701.00
Structure	647,040.00	517,632.00	129,408.00
TOTAL	$1,150,545.00	$ 920,436.00	$ 230,109.00

Group 1	100%
Contract No.	9373
Prefix:	124-1984
Prefix:	124-1064

9323

STATE COPY

TO BE COMPLETED BY FHWA

MONTHLY TRANSACTION NUMBER 6-77

PROJECT REPORT NUMBER

MODIFICATION NUMBER 1

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT

6-8-82

State Oregon

County Marion

Project Number BRF-75(8)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15, 19 81, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,085,804.00	$ 1,131,505.00
Federal funds	$ 868,643.00	$ 905,204.00
Other revisions		

This modification is made for the following reasons: to include increase in construction costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 8 th day of June, 19 82.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Program Management Engineer
(Title)

~~XXX~~ For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen. File

Oregon State Highway Division
Salem, Oregon June 2, 1982

Federal-Aid Project
No. BRF-75(8)

Pudding River Bridge
Hillsboro-Silverton Highway
Marion County

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6201
Roadway (Sta. 2156+00 to Sta. 2166+97)(Sta. 2170+24 to 2182+00)

Total the same as previous estimate of October 8, 1981	$503,505.00

Type Code X081
Structure Br. #1917A (Sta. 2166+97 to 2170+24)

Subtotal of previous estimate of October 8, 1981	$513,039.00

Additional Items

Steel Piling (P.A. #3)	1,600 Lin. Ft.	26.50	$ 42,400.00
		Increase	$ 42,400.00
		Subtotal	$555,439.00
		Engineering	72,561.00
		TOTAL	$628,000.00

Length of Roadway ---------------- 0.431
Length of Structure -------------- 0.061
TOTAL LENGTH 0.492

Cost of Roadway Per Mile --------$1,168,225.05

SUMMARY OF FUNDS

Description	Total Cost	Federal Funds	State Funds
Roadway	$ 503,505.00	$402,804.00	$100,701.00
Structure	628,000.00	502,400.00	125,600.00
TOTAL	$1,131,505.00	$905,204.00	$226,301.00

Group 1	100%
Contract No.	9373
Prefix:	124-1984
Prefix:	124-1064

9373

STATE COPY 2.

TO BE COMPLETED BY FHWA	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	STATE Oregon
10-99		COUNTY Marion
	FEDERAL-AID PROJECT AGREEMENT 10/15/81	PROJECT NO. BRF-75(8)

The State, through its Highway Agency, having complied, or hereby agreeing to comply, with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) the Regulations issued pursuant thereto and, (3) the policies and procedures promulgated by the Federal Highway Administrator relative to the above designated project, and the Federal Highway Administration having authorized certain work to proceed as evidenced by the date entered opposite the specific item of work, Federal funds are obligated for the project not to exceed the amount shown herein, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends only to project costs incurred by the State after the Federal Highway Administration authorization to proceed with the project involving such costs.

PROJECT TERMINI

Pudding River Bridge

PROJECT CLASSIFICATION OR PHASE OF WORK	EFFECTIVE DATE OF AUTHORIZATION	APPROXIMATE LENGTH *(Miles)*
HIGHWAY PLANNING AND RESEARCH (HP & R)		
PRELIMINARY ENGINEERING		
RIGHTS-OF-WAY		
CONSTRUCTION	9-2-81	0.492

OTHER *(Specify)*

FUNDS PRO RATA 80.0%

ESTIMATED TOTAL COST OF PROJECT	FEDERAL FUNDS
$ 1,085,804.00	$ 868,643.00

The State further stipulates that as a condition to payment of the Federal funds obligated, it accepts and will comply with the applicable provisions set forth on the reverse hereof.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Exec. Asst. to State Hwy. Engr.
(Title)

XXX For: H.S. Coulter

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Date executed by Division Administrator OCT 15 1981

FORM PR-2 (REV. 10-75) PREVIOUS EDITIONS ARE OBSOLETE

AGREEMENT PROVISIONS

1. RESPONSIBILITY FOR WORK

a. Except for projects constructed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in compliance with the approved plans and specifications or project proposal which, by reference, are made a part hereof.

b. With regard to projects performed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in accordance with the terms of its approved Certification, or exceptions thereto as may have been approved by the Federal Highway Administration.

2. HIGHWAY PLANNING AND RESEARCH (HP&R) PROJECT. The State highway agency will (a) conduct or cause to be conducted, under its direct control, engineering and economic investigations of projects for future construction, together with highway research necessary in connection therewith, pursuant to the work program approved by the Federal Highway Administration and (b) prepare reports suitable for publication of the result of such investigations and research, but no report will be published without the prior approval of the Federal Highway Administration.

3. PROJECT FOR ADVANCE ACQUISITION OF RIGHTS-OF-WAY. In the event that actual construction of a road on this right-of-way is not undertaken by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

4. PRELIMINARY ENGINEERING PROJECT FOR PREPARATION OF RIGHT-OF-WAY PLANS OR FOR PREPARATION OF CONSTRUCTION PLANS, SPECIFICATIONS AND ESTIMATES. In the event that right-of-way acquisition for, or actual construction of the road for which this preliminary engineering is undertaken is not started by the close of the fifth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

5. INTERSTATE SYSTEM PROJECT. (a) The State highway agency will not add or permit to be added, without the prior approval of the Federal Highway Administration any points of access to, or exit from, the project in addition to those approved in the plans and specifications for the project. (b) The State highway agency will not permit automotive service stations, or other commercial establishments for serving motor vehicle users, to be constructed or located on the right-of-way of the interstate system. (c) The State highway agency will not after June 30, 1968, permit the construction of any portion of the Interstate Route on which this project is located, including spurs and loops, as a toll road without the written concurrence of the Secretary of Transportation or his officially designated representative. The term 'toll road' does not include toll bridges or toll tunnels.

6. PROJECT FOR CONSTRUCTION IN ADVANCE OF APPORTIONMENT. (a) This project authorized pursuant to 23 U.S.C. 115 as amended, will be subject to all procedures and requirements, and conform to the standards applicable to projects on the system on which located, financed with the aid of Federal funds. (b) No obligation of previously apportioned Federal funds is created by this agreement, its purpose and intent being to provide that, upon application by the State highway agency, and approval thereof by the Federal Highway Administration, any Federal-aid funds of the class designated by the project number prefix, apportioned to the State under 23 U.S.C. 104 subsequent to the date of this agreement, may be used to reimburse the State for the Federal share of the cost of work done on the project.

7. STAGE CONSTRUCTION. The State highway agency agrees that all stages of construction necessary to provide the initially planned complete facility, within the limits of this project, will conform to at least the minimum values set by approved AASHTO design standards applicable to this class of highways, even though such additional work is financed without Federal-aid participation..

8. BOND ISSUE PROJECT. Construction, inspection and maintenance of the project will be accomplished in the same manner as for regular Federal-aid projects. No present or immediate obligation is created by this Agreement against Federal funds, its purpose and intent being to provide aid to the State, as authorized by 23 U.S.C. 122, for retiring maturities of the principal indebtednesss of the bonds referred to below. When the State requests Federal reimbursement to aid in the retirement of such bonds, the request will be supported by the appropriate certification required by 23 CFR Part 140, Subpart F, and Volume 1, Chapter 4, Section 8 of the Federal-Aid Highway Program Manual or the alternative State procedure set forth in the State's Certificate, and payment of the authorized Federal share will be made from appropriate funds available. If in any year there is no unobligated balance of any apportioned Federal funds available from which payments hereunder may be made, there will be no obligation on the part of the Federal Government on account of bond maturities for that year. Funds available to the highway agency for this project are the proceeds of bonds issued by the governmental unit indicated on the attached tabulation, pursuant to the authority and in the amounts by date of issue and beginning date of maturities set forth therein.

9. SPECIAL HIGHWAY PLANNING AND RESEARCH PROJECT. The State Highway agency hereby authorizes the Federal Highway Administration to charge the State's pro rata share of costs incurred against funds apportioned to the State under 23 U.S.C. 307 (c), as amended. In the event a project is financed with both Federal-aid funds and State matching funds, the State agrees to advance to The Federal Highway Administration the State matching funds for its share of the estimated cost. For a National Pooled Fund study, the State hereby assigns its responsibility for the work to the Federal Highway Administration. For an Intra-Regional Cooperative Study, the State hereby assigns its responsibility for the work to the lead State for the study.

10. PARKING REGULATION AND TRAFFIC CONTROL. The State highway agency will not permit any changes to be made in the provisions for parking regulations and traffic control as contained in the agreement between the State and the local unit of Government referred to in the paragraph on "Additional Provisions," without the prior approval of the Federal Highway Administration, unless the State determines, and the Division Administrator concurs, that the local unit of Government has a functioning traffic engineering unit with the demonstrated ability to apply and maintain sound traffic operations and control.

G-File

Oregon State Highway Division
Salem, Oregon October 8, 1981

Federal Aid Project
No. BRF-75(8)

Pudding River Bridge
Hillsboro-Silverton Highway
Marion County

PROJECT AGREEMENT ESTIMATE

Type Code 6201
Roadway (Sta. 2156+00 to Sta. 2166+97)(Sta. 2170+24 to 2182+00)

Mobilization	(46%)		All Required	$ 26,680.00
Temporary Protection and Direction of Traffic	(46%)		All Required	345.00
Temporary Signs	132	Sq. Ft.	5.00	660.00
Temporary Barricades	12	Each	50.00	600.00
Temporary Continuous Rail Traffic Barriers Reflectorized	50	Lin. Ft.	4.00	200.00
Temporary Guard Rail, Type 1 Reflectorized	825	Lin. Ft.	7.00	5,775.00
Flagmen	250	Hour	10.00	2,500.00
Temporary Reflective Pavement Markers	80	Each	5.00	400.00
Clearing and Grubbing			All Required	8,000.00
Removal of Structures and Obstructions			All Required	2,000.00
Embankment in Place	49,900	Cu. Yd.	3.50	174,650.00
Toe Trench Excavation	40	Cu. Yd.	12.00	480.00
Finish Roadbed and Slopes			All Required	5,000.00
Watering	250	M-Gal.	15.00	3,750.00
Treated Base Mixture	6,500	Ton	9.00	58,500.00
Cement in Treated Base Mixture	360	Ton	82.00	29,520.00
Aggregate Shoulders	1,150	Ton	8.50	9,775.00
Class "B" or Class "C" Asphalt Concrete	2,200	Ton	36.00	79,200.00
Membrane Waterproofing	1,422	Sq. Yd.	6.00	8,532.00
18-inch Culvert Pipe	48	Lin. Ft.	12.00	576.00
Guard Rail, Type 2A	300	Lin. Ft.	13.00	3,900.00
Guard Rail, Type 3	100	Lin. Ft.	28.00	2,800.00
Guard Rail Anchors, Type 1	4	Each	325.00	1,300.00
Rail End Pieces, Type C	4	Each	100.00	400.00
Type 2 Fence	2,430	Lin. Ft.	2.00	4,860.00

14' Single Gates	1 Each	725.00	725.00
Paved Culvert End Slopes	31 Sq. Ft.	19.00	589.00
Loose Riprap, Class 100	750 Cu. Yd.	12.00	9,000.00
Delineators, Type 2	20 Each	20.00	400.00
Roadside Seeding and Mulching	2 Acre	500.00	1,000.00
			$442,117.00

Anticipated Items		
Permanent Pavement Striping	All Required	$ 1,000.00
Remove Pavement Striping (Exist. & Temp.)	All Required	500.00
		$ 1,500.00
	SUBTOTAL	$443,617.00
	Engineering	59,888.00
	TOTAL	$503,505.00

Type Code X081
Structure Br. #1917A (Sta. 2166+97 to 2170+24)

Mobilization	(54%)	All Required	$ 31,320.00
Temporary Protection and Direction of Traffic	(54%)	All Required	405.00
Bridge Removal Work		All Required	15,840.00
Structure Excavation	215 Cu. Yd.	17.00	3,655.00
Furnish Pile Driving Equipment		All Required	18,000.00
Furnish HP 12x53 Steel Piling	1,900 Lin. Ft.	17.40	33,060.00
Furnish HP 14x73 Steel Piling	1,600 Lin. Ft.	24.00	38,400.00
Drive Steel Piles	2,908 Lin. Ft.	0.50	1,454.00
Structural Concrete, Class 3300 (414 Cu. Yd.)		All Required	88,000.00
4'x50'/55' Prestressed Slabs	44 Each	2,965.00	130,460.00
4'x105'/110' Prestressed Box Beams	11 Each	11,510.00	126,610.00
Reinforcement (39,500 lb.)		All Required	16,400.00
Reinforced Concrete Bridge Panel End Panels	185 Sq. Yd.	51.00	9,435.00
		SUBTOTAL	$513,039.00
		Engineering	69,260.00
		TOTAL	$582,299.00

Length of Roadway -------------- 0.431
Length of Structure ------------ 0.061
TOTAL LENGTH 0.492 mile

Cost of Roadway Per Mile -------$1,168,225.05

SUMMARY OF FUNDS (80%)

Description	Total Cost	Federal Funds	State Funds
Roadway	$ 503,505.00	$ 402,804.00	$100,701.00
Structure	582,299.00	465,839.00	116,460.00
TOTAL	$1,085,804.00	$ 868,643.00	$217,761.00

Group 1	100%	
Contract No.	9373	
Prefix:	124-1984	(PE)
	124-1064	(Constr.)

Pudding River Bridge
Hillsboro-Silverton Highway
Marion County

State Responsibility (Nonparticipating Items)

Furnishing and Installing Mailbox Posts	3 Each	135.00	$	405.00

9373

February 15, 1984

Mercer Industries, Inc.
PO Box 10166
Portland, OR 97210

CON 5
#9373

Attention: Thomas D. Bond
Corporate Counsel

Gentlemen:

Thank you for your letter and Release of Bond Claim dated January 31, 1984.

You state this is in reference to the Ross Bros. Construction, Inc., Contract No. 9373 for work on the Pudding River Bridge Section of the Hillsboro-Silverton Highway in Marion County.

The claim amount was $1,786 and was filed on November 23, 1983.

This information will be noted in our records.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

RWG:kjm
cc: Ross Bros. Construction, Inc.
3501 Brooklake Rd., N.
Salem, OR 97303

Safeco Insurance Company
4101 SW Kruse Way
Lake Oswego, OR 97034

NOTED ON C...
2-15-84 kjm

MERCER
INDUSTRIES, INC.

MERCER INDUSTRIES, INC.
2636 N.W. 26th AVE., PORTLAND, OREGON 97210
P.O. BOX 10166
AREA CODE 503 226-2511
AN EQUAL OPPORTUNITY EMPLOYER

January 31, 1984

Oregon State Highway Dept.
Robert Gormsen
Commission Services
Room 121
Transportation Bldg.
Salem, OR 97310

Re: Pudding River Bridge
Oregon State Highway Contract No. 9373
Bond Claim of Mercer Industries, Inc. for $1,786.00

Dear Sir:

Enclosed is our Release of Bond Claim regarding the above entitled matter.

Very truly yours,

MERCER INDUSTRIES, INC.

Thomas D. Bond
Corporate Counsel

TDB:sd

Encl.

cc: Ross Brothers Construction, Inc.
Safeco Insurance Co. of Oregon, c/o K. L. & K. Associates

RECEIVED
FEB 1 1984
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

RELEASE OF BOND CLAIM

To: Norma Paulus
Secretary of State
Salem, OR 97310

$1,786.00

Mercer Industries, Inc. hereby releases its claim against the Bond taken from Safeco Insurance Co. of America as surety, and Ross Brothers Construction, Inc. as principal, with respect to materials Mercer furnished Ross Brothers for the work to be performed by Ross Brothers known as the Pudding River Bridge, Oregon State Highway Contract No. 9373.

Dated this 31 day of January, 1984.

Mercer Industries, Inc.

By: Thomas D. Bond
Corporate Counsel

COPY

RECEIVED
FEB 1 1984
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

9373

F

STATE OF OREGON
Highway Division - Region 2

INTEROFFICE MEMO
378-2626

TO: W. E. Schwartz
ASSISTANT STATE HIGHWAY ENGINEER

DATE: February 2, 1984

FROM: Gerald W. Wimer Gerald W. Wimer
REGION 2 CONSTRUCTION ENGINEER

SUBJECT: Engineering Overrun
E. McMinnville Inter. Contract 9659 (36-1090)
Thorton Cr. Br. Contract 9601 (21-1013)
Wallace Br.-Willamina ECL Contract ~~9548~~ (127-1002) 9362
Pudding R. Br. Contract 9373 (124-1064)

In your January 16 letter, you noted that the subject projects not only overran the original project authorization, but also incurred what you described as excessive engineering.

In reviewing with Project Managers Charles W. Elroy and Arvey D. Nelson, I find that all of the charges were appropriate. Please see their attached January 26 and January 31 reports.

Each of these projects sustained a substantial change during the project. All redesign engineering costs were charged to the construction engineering. It might be well to have a separate identification of engineering costs for substantial changes.

We could also require the contractor to do more materials testing. However, this would just change where the costs are charged, and not truly reduce overall costs.

Each of the Project Managers lists some other lesser possibilities. I think the significant item is that we continue to exert every effort possible at all levels to work toward engineering cost reduction. I believe one of the most significant increases in our engineering costs comes from our more detailed documentation requirements.

If I can provide any more detail on this matter, please let me know.

GWW/cal
Attachment

cc: C. O. Fredrickson
C. W. Elroy
A. D. Nelson

RECEIVED
STATE HWY ENGR
FEB 2 '84
REFER TO
FOR
Info | Inves | R/D | D/R | Sign | Act | File

y- Fredrickson
2/17

G. Wimer - You are now in a position
to look at these documentation require-
ments & assess whether it is necessary
to document & check to the extent we do.
I have some reservations about the Region
reviewer program & to the degree we do
all this work. I also have some questions
about our perception of inspection. I would
like to talk to you about this general subject when you have had a chance

STATE OF OREGON

INTEROFFICE MEMO

TO: C. O. FREDRICKSON
REGION II ENGINEER

DATE: JANUARY 31, 1984

FROM: ARVEY D. NELSON
PROJECT MANAGER

SUBJECT: ENGINEERING OVERRUNS
PUDDING RIVER BRIDGE
CONTRACT NO. 9373

EAST McMINNVILLE INTERCHANGE
CONTRACT NO. 9659

REGION 2 ENGINEER
RECEIVED
FEB 0 1 1984
RLE
RE RCE RME RTE ROE
DLE GEO RSO INV FILE

ATTN: G.W. WIMER

Engineering charges at East McMinnville are $45,000.00. This engineering cost being 15% of the increased project authorization of $300,050.00 and 116% over the original engineering authorization of $20,793.15.

Engineering charges at Pudding River are $117,500.00. This engineering cost is 14% of the increased project authorization of $1,290,660.00 and is 106% over the original engineering authorization of $86,135.49.

It appears engineering charges to both projects are appropriate.

As you are aware major plan revisions with both projects are responsible for the increased engineering costs.

A recommendation to avoid reoccurances of this nature would be to recognize and acknowledge that plan changes as well as increasing contract costs & extending contract time also increase engineering costs. A suggestion would be to code engineering charges to reflect plan revision costs.

9373

C. O. Fredrickson
Region 2 Engineer

January 16, 1984

W. E. Schwartz
Assistant State Highway Engineer

Overrun of Project Authorization
Contract No. 9659 (36-1090)
Contract No. 9601 (21-1013)
Contract No. 9548 (127-1002)
Contract No. 9373 (124-1064)

The reports on expected overrun recently submitted on these projects indicate engineering charges incurred which are excessive and are out of proportion to the amount of contract work. All four involve considerable state funding to pick up the amount beyond the federal participation limit for construction engineering.

Please review this matter to ascertain that the engineering charges are indeed appropriate. I would like to have your recommendation as to what steps can be taken to avoid future occurrences of this nature.

HHP:mk sl

cc H. S. Coulter
C. T. Keasey
Bryant Jackmond

(Rev. 10-68)

OREGON STATE HIGHWAY DEPARTMENT

Expected Overrun of Project Authorization

Project PUDDING RIVER BRIDGE Date 1/3/84

Highway HILLSBORO-SILVERTON Contract No. 9373

County MARION Kind of Work Grading, Paving & Structure Contractor Ross Bros. Construction C

	Authorized	Estimated	
Contract Amount	972,572.00	1,002,000.00	
Anticipated Items	1,500.00	2,960.00	
Contingency (4½%)	112,300.00	108,200.00	
Engineering	93,128.00	177,500.00	
Credits			
PROJECT COST	1,179,500.00	1,290,660.00	
NET INCREASE $		111,160.00	+9.4%

MAJOR OVERRUNS AND UNDERRUNS (Describe Briefly)

(Indicate whether contract (C), anticipated (A), or unanticipated (U). (List all unanticipated items)	Expected Amount	Net Change
Engineering	177,500.00	84,372.00
(C) Bid Item #18 A.C. Pavement	128,450.00	49,250.00
(U) P.A. #5 Joint Repair	7,500.00	7,500.00

Principal reasons for overruns (Continue on reverse side): SEE EXPLANATION ON BACK

INSTRUCTIONS: A report on this form is to be submitted if and when it becomes evident that the project cost will exceed the original project authorization by more than five per cent and again if and when it becomes evident that the project cost will exceed by more than five per cent a subsequently approved increased project authorization. Submit five copies to Salem. After having been noted by the Deputy or Assistant State Highway Engineer, one copy will be sent to the Division Engineer and one copy to the Resident Engineer.

Submitted by ______ Resident Engineer

Noted by ______ Construction or Bridge Engineer

Confirmed by ______ Division Engineer

Noted by ______ Deputy or State Highway Engineer

EXPLANATION OF OVERRUNS:

The engineering overrun is due in part to:

1. Bridge construction problems involving cofferdam work, river bank slippage and bridge bent movement, which created bridge design revisions and caused additional extra work, which in turn required added engineering demands.

2. This project, due primarily to the numerous revisions, remained open over two winter seasons and carried a crew that did not have other significant active work under contract.

The A.C. pavement bid item quantity of 2,200 tons overran 62% for an in-place quantity of 3,568 tons, without apparent explanation as only the plan roadway section was constructed. There was a minimal increased A.C. section at the bridge bents to compensate for excessive deck slab camber, however, we feel the bid item quantity did not include the stage construction paving which resulted in an underestimated bid quantity.

An improper mastic expansion joint was constructed through the bridge parapet rail sections over the bridge bent deck joints. After construction and acceptance, concrete space has developed in the parapet rail sections at the bridge deck joints. By extra work the defective expansion joints will be removed and properly replaced.

93

FORM 81-734-3001

OREGON STATE HIGHWAY DIVISION

FIELD ENGINEER'S WEEKLY REPORT

FOR CONSTRUCTION PROJECTS ONLY
CONSTRUCTION AND BRIDGE SECTION

SECTION: PUDDING RIVER BRIDGE

WEEK ENDING: 1-14-84

SECTION PREFIX: 124-1064

HIGHWAY: HILLSBORO/SILVERTON

COUNTY: MARION

NAME OF JOB: PUDDING RIVER BRIDGE

KIND OF WORK: GRADING, PAVING, STRUCTURE

CONTRACTOR: ROSS BROS. CONSTRUCTION, INC.

CONTRACT NUMBER: 9373

FEDERAL AID PROJECT NUMBER: BRF-75(8)

DATE OF CONTRACT: 9/30/81

DATE WORK STARTED: 10/5/81

ESTIMATED COMPLETION DATE:

AVERAGE FORCE ON PROJECT FOR THE WEEK: MEN: 2 SUPERVISION:

SPECIFIED WORK DAYS:

SPECIFIED CALENDAR DAYS: 350 + 88

WORK DAYS USED:

CALENDAR DAYS USED: 350+87

SPECIFIED COMPLETION DATE:

PERCENT OF TIME ELAPSED: 100

PROJECT AUTHORIZATION: $1,179,500.00

EXCLUSIVE OF ENGINEERING: $1,086,372.00

ENGINEERING AUTHORIZATION: $86,135.49

PERCENT OF CONTRACT COMPLETED BASED ON ESTIMATED COST: 100

ESTIMATED COST OF COMPLETED PROJECT, EXCLUSIVE OF ENGINEERING: $1,290,660.00

ENGINEERING COST TO DATE: $175,000.00

PERCENT OF CONTRACT COMPLETED BASED ON TOTAL AUTHORIZATION: 100

ESTIMATED PERCENT: +9.4%

PERCENT OF AUTHORIZATION: 203%

DATE PROJECT WAS COMPLETED: 6-14-83

ESTIMATED PERCENT COMPLETE (ROADWORK)

CLEARING	DRAINAGE	GRADING	BASE	OIL AND/OR PAVE.	MAT'L. PROD.		
100	100	100	100	100	---------		

	GRADING	SURFACING	MAINTENANCE MATERIALS	OIL & BITUMINOUS MACADAM	PAVING
MILES IN PROJECT					
MILES PARTIALLY COMPLETED					
MILES COMPLETED					
TOTAL ESTIMATED QUANTITIES (CONTRACT)	49,900 cy	6,500 ton			2,200 ton
TOTAL QUANTITIES CORRECTED TO DATE					
ESTIMATED QUANTITIES MOVED OR PLACED TO DATE	49,600	5,340			3570
AVERAGE DAILY QUANTITIES					
AVERAGE DAILY QUANTITIES NECESSARY TO COMPLETE PROJECT ON TIME					
NUMBER OF SHIFTS PER DAY					
HOURS PER SHIFT					

EQUIPMENT USED DURING THE WEEK:

ESTIMATED PERCENT COMPLETE (STRUCTURES)

BRIDGE NO.	1917A							
PERCENT	100							

	WEATHER	WORK DAYS CHARGED	HOURS DELAY	CAUSE OF DELAY
SUNDAY	************			
MONDAY				
TUESDAY				K
WEDNESDAY				
THURSDAY				
FRIDAY				CONSTRUCTION SECTION
SATURDAY	************			

GENERAL DESCRIPTION OF ACTIVITIES FOR THE WEEK

SUNDAY	
MONDAY	NO ACTIVITY
TUESDAY	CONTRACTOR STARTED WORK ON PA #5 - PARAPET RAIL EXPANSION JOINT REPAIR, REMOVAL OF AFFECTED AREA.
WEDNESDAY	COMPLETED REMOVAL OF AFFECTED PARAPET RAIL SECTIONS, STARTED REFORMING.
THURSDAY	COMPLETED FORMING. POURED CONCRETE IN AFFECTED AREAS.
FRIDAY	REMOVED FORMS, STARTED FINISH WORK.
SATURDAY	

REMARKS

CONTRACT COMPLETE EXCEPT MINOR PAPERWORK & PA #5 COMPLETION.

SIGNED ARVEY D. NELSON, PROJ. MANAGER

LOCATION SALEM

PRIME RESIDENT SUBMIT 2 COPIES WHEN BRIDGES AND GRADING BOTH ARE INVOLVED, SUBMIT 3 COPIES.

9373

bc Fred D. Miller
R. W. ermsen
C. T. asey

V. E. Skoog
C. O. Fredrickson
George Bell

F

Consent Calendar
#7a

VICTOR ATIYEH
GOVERNOR

Department of Transportation
STATE HIGHWAY DIVISION

IN REPLY REFER TO
FILE NO.

DATE: January 9, 198~~3~~4

TO: Oregon Transportation Commission

CON

FROM: H. S. Coulter
State Highway Engineer

SUBJECT: Request for Increase in Project Authorization
Pudding River Bridge Section
Hillsboro-Silverton Highway, Marion County
Contract No. 9373

This federal-aid bridge replacement project is basically complete and it is now apparent that the final cost will exceed the project authorization by $111,160 or 9.4 percent. The authorization was previously increased at the meeting on September 29, 1982 because of added costs of foundation revisions and design changes. The present overrun is due to increased costs of paving items, joint repair and construction engineering.

Insufficient quantities of asphalt concrete paving material were provided in the contract to construct the project to the planned line and grade. The quantity required for stage construction paving was apparently omitted. The overrun of this item added approximately $49,250 to the cost of the project.

An improper mastic expansion joint was constructed through the bridge parapet rail sections over the bridge deck joints. After construction and acceptance, space has developed in the parapet rail sections at the bridge deck joints. The defective joints will be removed and properly replaced and are expected to add $7,500 to the cost of the project.

The balance of the overrun is in the construction engineering. With the initial bridge foundation and footing work, construction problems were encountered which caused project delay, plan revisions and design changes. The result was to extend the contract work a full year and to cause additional engineering costs to be incurred by several units in addition to the field crew, including charges made against the project by Region, Bridge, and Materials Sections. Extending the contract time period by one year added more than $84,000 to the cost of the construction engineering on the project.

There are sufficient funds available in the category of work and all the increase except $10,526 is eligible for federal participation.

I recommend that the authorization be increased by $111,160 to a new total of $1,290,660. This matter will be on the consent calendar for the January 18 meeting.

HHP:mk sl

9373

STATE OF OREGON **INTEROFFICE MEMO**

Highway Construction 378-6318 FILE: CON 5

TO: W. E. Schwartz
Ass't. State Highway Engineer

DATE: January 6, 1984

FROM: O. B. Jackmond
O. B. Jackmond
Contract Administration Engineer

NOTED
W. E. SCHWARTZ

NOTED
H.C.CO

SUBJECT: Request for Increase in Project Authorization
Pudding River Bridge Section
Hillsboro-Silverton Highway, Marion County
Contract No. 9373

This federal aid bridge replacement project is basically complete and it is now apparent that the final cost will exceed the project authorization by $111,160 or 9.4 percent. The authorization was previously increased at the meeting on September 29, 1982 because of added costs of foundation revisions and design changes. The present overrun is due to increased costs of paving items, joint repair and construction engineering.

Insufficient quantities of asphalt concrete paving material were provided in the contract to construct the project to the planned line and grade. The quantity required for stage construction paving was apparently omitted. The overrun of this item added approximately $49,250 to the cost of the project.

An improper mastic expansion joint was constructed through the bridge parapet rail sections over the bridge deck joints. After construction and acceptance, space has developed in the parapet rail sections at the bridge deck joints. The defective joints will be removed and properly replaced and are expected to add $7,500 to the cost of the project.

The balance of the overrun is in the construction engineering. With the initial bridge foundation and footing work, construction problems were encountered which caused project delay, plan revisions and design changes. The result was to extend the contract work a full year and to cause additional engineering costs to be incurred by several units in addition to the field crew, including charges made against the project by Region, Bridge, and Materials Sections. Extending the contract time period by one year added more than $84,000 to the cost of construction engineering on the project.

There are sufficient funds available in the category of work and all the increase, except $10,526, is eligible for federal participation.

Attached is a rough draft letter to the Transportation Commission requesting an increase of $111,160.00. Also attached is a copy of the Expected Overrun of Project Authorization form.

OBJ:HHP:mk

Attach.

cc: C. O. Fredrickson
R. D. Church
Arvey Nelson
D. E. Swan

81-125-1387

9373 CL 83-264

5

VICTOR ATIYEH
GOVERNOR

Department of Transportation

TRANSPORTATION BUILDING, SALEM, OREGON 97310

FILED
DEC 1 1983
NORMA PAULUS
SECRETARY OF STATE

November 29, 1983

IN REPLY REFER TO
FILE NO.:
CON 5
#9373

Mercer Industries, Inc.
PO Box 10166
Portland, OR 97210

Attention: Thomas D. Bond
Corporate Counsel

Gentlemen or Ladies:

This will acknowledge your letter and Notice of Claim dated November 23, 1983, concerning the following Highway Division contract:

FILED BY:	Mercer Industries, Inc.
AMOUNT:	$1,786.00 not including interest
FOR:	Materials
AGAINST (Prime contractor)	Ross Bros. Construction, Inc.
CONTRACT NO.:	9373
PROJECT:	Pudding River Bridge, Hillsboro-Silverton Highway, Marion County
SURETY:	Safeco Insurance Company of America
AGENT:	K L & K Associates, Inc.

Dec 2, 1983
Gjm

We will advise the surety and the contractor of the receipt of this claim. We will also forward it to the Secretary of State for filing.

Please advise this office when your claim has beenppaid.

Sincerely,
ORIGINAL SIGNED
ROBERT W. GORMSEN
Robert W. Gormsen
COMMISSION SERVICES

RECEIVED
DEC 2 1983
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

cc: Safeco Insurance Company of
America
4101 SW Kruse Way
Lake Oswego, OR 97034

Ross Bros. Construction, Inc.
3501 Brooklake Rd., N.
Salem, OR 97303

✓ bc: Secretary of State: Please acknowledge receipt of the attached claim on the enclosed copy of this letter.

MERCER
INDUSTRIES, INC.

MERCER INDUSTRIES, INC.
2636 N.W. 26th AVE., PORTLAND, OREGON 97210
P.O. BOX 10166
AREA CODE 503 226-2511
AN EQUAL OPPORTUNITY EMPLOYER

November 23, 1983

Mr. Robert Gormsen
Commission Services
Oregon State Highway Division
Room 121 - Transportation Building
Salem, OR 97310

Re: OSHD Contract #9373
Pudding River Bridge
Bond Claim of Mercer Industries, Inc. for $1,786.00,
Not Including Interest

Dear Mr. Gormsen:

Attached is our "NOTICE OF BOND CLAIM" regarding the above referenced job. Please provide as required by Oregon revised statutes appropriate notice of our bond claim to the Secretary of State, the prime contractor, and to the prime's surety.

Thank you for your cooperation and assistance.

Very truly yours,

MERCER INDUSTRIES, INC.

Thomas D. Bond
Corporate Counsel

TDB:sd

Attachment

RECEIVED
NOV 25 1983
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

REINFORCING STEEL ■ ARCHITECTURAL BUILDING PRODUCTS ■ GLASS ■ RESIDENTIAL BUILDING PRODUCTS ■ CONCRETE ACCESSORIES

NOTICE OF BOND CLAIM

TO: Norma Paulus
Secretary of State
Salem, Oregon 97310

NOTICE HEREBY IS GIVEN that the undersigned, MERCER INDUSTRIES, INC., has a claim for materials furnished to ROSS BROS. CONSTRUCTION, INC. in the sum of $1,786.00, not including interest, against the bond taken from SAFECO INSURANCE COMPANY OF AMERICA as surety, and ROSS BROS. CONSTRUCTION, INC., as principal, for the work to be performed by ROSS BROS. CONSTRUCTION, INC., known as Pudding River Bridge, Oregon State Highway Contract No. 9373. The material supplied by MERCER INDUSTRIES, INC., consisted of steel reinforcing bar and accessories.

DATED this 23 day of November, 1983.

MERCER INDUSTRIES, INC.

By ________________
Thomas D. Bond
Corporate Counsel

RECEIVED
NOV 25 1983
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

93

S

July 20, 1983

CON

Ross Bros. Const., Inc.
3501 Brooklake Rd. N
Salem, Oregon 97305

Time Extension Request
Pudding River Bridge
Contract No. 9373
FAP No. BRF-75(8)

Your request for additional contract time in which to complete the above project has been carefully reviewed. A contract time adjustment of an additional 88 calendar days is granted due to the performance of extra and additional work under this contract.

The adjusted contract time for completion of this project is 438 calendar days. This will eliminate all liquidated damages under this contract.

W. E. Schwartz, P.E.
Assistant State Highway Engineer
for Operations

RDC:mk st

bc H. S. Coulter
C. T. Keasey
C. O. Fredrickson w/att.
Arvey Nelson w/att.
FHWA w/att.
Bob Church

124-1004

STATE OF OREGON
Highway Division - Region II

INTEROFFICE MEMO
378-2626

TO: C. T. Keasey
CONSTRUCTION ENGINEER

DATE: July 6, 1983

FROM: Gerald W. Wimer Gerald Wimer
REGION 2 CONSTRUCTION ENGINEER

CE
CAE
FOE
OCS
SCS
EZO
RECEIVED
JUL 7 1983
CONSTRUCTION SECTION
OM
CA
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TC
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CP

SUBJECT: Time Extension Request
Pudding River Bridge
Hillsboro-Silverton Highway
Contract 9373

Ross Brothers Construction, Inc., by the attached formal request, asked that the specified 350 calendar days (cd) be increased by 191 cd to a new total of 541 cd. The formal request contains the consent of surety and is accompanied by a sheet explaining how Ross Brothers arrived at the 191 cd. Former Project Manager Warren Mueller, in his attached April 6, 1983, letter of analysis and its attachments, justifies 121 cd. Project Manager Arvey Nelson, in his attached June 22, 1983, letter of review and its attachment, justifies 120 cd, the difference being that it only took one day to complete Order for Extra Work No. 2. Either number is more than enough to cover the 438 cd it took to complete the project, which is 88 cd over the authorized 350 cd.

Overrun of the riprap quantities covered by P.A. No. 1 justifies three cd. It took one day to backfill the coffer dam at Bent No. 2 under Order for Extra Work No. 2. These four days are clearly justified. We also owe the contractor time to tie Bent Nos. 3 to 6 under Order for Extra Work No. 1. It took 31 cd between May 13, and September 14, 1982. All but ten of these cd overlap with P.A. No. 4. Price Agreement No. 4 involved design changes to Bent Nos. 1, 2, and 3. Those design changes occurred between February 10, and July 25, 1982. The portion from February 10 to March 15, 1982, a total of 34 cd, is better justified under P.A. No. 3 increasing the pile length. Between March 15 and May 20, 1982, these piling were on hand at Brooks and this time should not be authorized except for three cd on May 7, 10, and 11, 1982, for welding the tips. That leaves 60 calendar work days when work was performed or weekends from May 20 to July 25, 1982, that should be authorized under P.A. No. 4 or the overlapping 21 cd from OEW No. 1. Although we may owe some time for P.A. No. 2 which added drainage and a gate, the contractor did not ask for this time and I cannot justify the nine cd recommended by Messrs. Mueller and Nelson.

In summation, this office recommends a 111 cd extension, or more than enough to cover the 88 cd to eliminate all liquidated damages on this project. During these 111 cd, undoubtedly some contract work was performed that we do not owe the contractor time for. It is reasonable to consider it amounts to the equivalent of the difference between the 111 cd and the 88 cd. Therefore, this office recommends a net extension of 88 cd.

GW/rgb
attch.

cc: Arvey Nelson w/o attch.

7-15-83

W. E. Schwartz —

I concur with Region and recommend a time extension of 88 C.D. which will eliminate all liquidated damages

O.B. Jackman

9373

files

ROSS BROS. CONSTRUCTION, INC.

GENERAL CONTRACTOR
3501 BROOKLAKE ROAD N.
SALEM, OREGON 97303
393-5885

EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER

December 16, 1982

Woodburn Backhoe Service
Norman J. Toepher
15177 Union School Rd., N. E.
Woodburn, OR 97071

Re: OSHD Contract 9373
Pudding River Bridge

Dear Mr. Toepher:

Enclosed please find our check in the amount of $1,254.75 which has been issued jointly to Stadeli Bros Construction and yourself in payment of your claim of November 23, 1982 on the above mentioned project.

Mr. Stadeli has endorsed the check over to you so this should clear his account with you for the specified job. We trust you will find this to be in order; however should you have any questions please feel free to contact our office.

Thank you.

Very truly yours,

ROSS BROS CONSTRUCTION INC.

Steven M. Ross
Vice President

SMR:LB
enc
cc: K/L & K Associates
✓Dept of Transportation
Stadeli Bros Construction

[illegible]ED
1-4-83
fn

RECEIVED
DEC [illegible] 1982
COM[illegible] [illegible]CES
DEPARTMENT OF TRANSPORTATION

CL-82-234
9373

files

VICTOR ATIYEH
GOVERNOR

Department of Transportation
TRANSPORTATION BUILDING, SALEM, OREGON 97310

FILED
DEC 13 1982
NORMA PAULUS
SECRETARY OF STATE
IN REPORTING REFER TO
FILE NO..

December 10, 1982

Woodburn Backhoe Service, Inc.
15177 Union School Rd., N.E.
Woodburn, OR 97071

RECEIVED
DEC 14 1982
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

CON 5
#9373

Attention: Norman J. Toepfer

Gentlemen:

This will acknowledge your letter of November 23 filing a claim concerning the following Highway Division contract:

FILED BY: Woodburn Backhoe Service, Inc.

AMOUNT: $1,254.75

FOR: Materials

AGAINST: (Prime Contractor) Ross Bros. Construction, Inc.

CONTRACT NO.: 9373

PROJECT: Pudding River Bridge, Hillsboro-Silverton Highway, Marion County

SURETY: Safeco Insurance Company

AGENT: KL & K Associates, Inc.

We will advise the surety and the prime contractor of the receipt of this claim. We will also forward it to the Secretary of State for filing. It is our policy not to make direct payments to claimants. You may wish to contact the surety, whose address is listed below.

Please advise this office when your claim has been paid.

Sincerely,

Robert Gormsen

Robert W. Gormsen
COMMISSION SERVICES

cc: Safeco Insurance Company
4101 S.W. Kruse Way
Lake Oswego, OR 97034

Ross Bros. Construction, Inc.
3501 Brooklake Road, N.
Salem, OR 97303

NOTED ON CARD
12-20-82 js

bc: ✓ Secretary of State - Please acknowledge receipt of the attached claim on the enclosed copy of this letter.

WOODBURN BACKHOE SERVICE, INC.

NORMAN J. TOEPFER

*~~275 SO. PACIFIC HWY.~~
WOODBURN, OREGON 97071

981-~~4020~~
6027

RESIDENTIAL COMMERCIAL INDUSTRIAL PONDS OILING & PAVING SEWER SYSTEMS SITE PREPARATION

Woodburn, Oregon
November 23, 1982

Dept. of Transportation
121 Transportation Bldg.
Salem, Oregon 97310

Gentlemen:

I am writing to present a Claim for materials furnished to the Pudding River Bridge site on the Hillsboro-Silverton Highway - Contract #9373.

The dirt materials for this job were secured from me by Stadeli Construction for Ross Bros., Construction, Contractor.

Dirt Materials furnished by Norman J. Toepfer ending November, 1981	38,500 yards
Dirt Materials paid for by Stadeli Constr. ending November, 1981	35,000 yards
Unpaid Dirt Materials - per your Progress Report- 3,500 cu. yards @ $.30 per yard	$1,050.00
Interest computed at 1½% per month (13 mo. @ 1½% - 19% 11/81 - 12/82)	204.75
Total amount of Claim........................	$1,254.75

I am requesting payment of the above Claim be made to:

Norman J. Toepfer
15177 Union School Rd., N.E.
Woodburn, Oregon 97071

Sincerely,

N J Toepf

Norman J. Toepfer

RECEIVED
NOV 30 1982
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

9373

p

November 18, 1982

Mr. Norman J. Toepfer
15177 Union School Road, N.E.
Woodburn, OR 97071

COM 5
#9373

Dear Mr. Toepfer:

This is in response to your letter of November 9 requesting documents to substantiate the number of yards furnished to the site on Contract No. 9373 for work on the Pudding River Bridge.

Attached are copies of Estimates 000 and 001 which indicates that the embankment quantity is shown as 35,000 and then changed to 38,500. If you have any questions concerning this, please contact Warren Mueller, Project Manager on the contract.

You also ask for help in securing the balance of payment due you. Under Oregon Law, you may file a claim against a contractor for labor and materials. You may do this by writing a letter to us (121 Transportation Building, Salem, OR 97310) stating the total amount due you, contractor's name and project description. We will file the claim with the Secretary of State, prime contractor and his surety.

It is not our policy to make direct payments to claimants. The performance bond put up by the contractor and his surety is to assure payment. You may wish to contact the surety directly. It is Safeco Insurance Company, 4101 S.W. Kruse Way, Lake Oswego, OR 97034.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

FN:is
Attachments

bc: Warren Mueller

9 2 32/50

Woodburn, Oregon
November 9, 1982

Robert Gorsem
Dept. of Transportation
Salem, Oregon 97310

Dear Sir:

I am writing to you regarding Project #9373 Pudding River Bridge, State Highway 214.

I have been advised by the State Highway Accounting Division that the Dirt Materials measure on this site was 38,500 yards. We have been paid for 35,000 yards. We are seeking payment on the unpaid portion @ $.30 a yard plus interest from date of the original billing. A am submitting copies of billings that have been sent to Ross Bros., Construction and Stadeli Construction. I have contacted both firms numerous times, by phone, with no results.

I am writing to seek you [redacted]p in [redacted] [redacted]ts substatiating the number of yards furnished to the site and [redacted]

Your help in this matter will be appreciated.

Sincerely,

N J Toepf

Norman J. Toepfer
15177 Union School Rd., N.E.
Woodbufn, Oregon 97071
Phone: 981-6027

NJT:mpt

Enc.

RECEIVED
NOV 12 1982
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

STATEMENT

FROM Norman J. Toepfer
15177 Union School Rd., NE
Woodburn, Oregon 97071 Oct. 5, 19 82
TO Stadeli Pump & Construction
ADDRESS 1205 N. Second St.
CITY Silverton, Oregon
TERMS

Attached billing of $5740.00 Paid

Please furnish documents to substatiate Oregon State Highway Department measurements, as requested on the attached.

Please remit any additional amount due for dirt materials.

cc: Ross Bros., Inc.

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WOODBURN BACKHOE SERVICE, INC.

NORMAN J. TOEPFER

~~215 SO. PACIFIC HWY.~~
WOODBURN, OREGON 97071
15177 Union School Rd., N.E.

981-4020

RESIDENTIAL COMMERCIAL INDUSTRIAL PONDS OILING & PAVING SEWER SYSTEMS SITE PREPARATION

November 23, 1981

Ross Bros., Inc.
3501 Brooklake Rd., N.E.
Salem, Oregon

Stadell Pump & Construction
1205 N. Second St.
Silverton, Oregon

Job: State Highway 214 Bridge Construction. Dirt Removal from 15177 Union School Rd., N.E., Woodburn.

CAT TIME - without operator 71 Hours @ $45.00 pr. hr.	$3195.00
CAT TIME - with operator 44 Hours @ $55.00 pr. hr.	2420.00
CAT HAULING	125.00
Total to remit........................	$5740.00

Payments to be made payable to Stadell Pump & Construction and Norman J. Toepfer.

Payment of removed dirt materials to be made payable to Norman J. Toepfer. Payment to be substantiated by copies of Oregon State Highway Department measurement documents.

Norman J. Toepfer
15177 Union School Rd., N.E.
Woodburn, Oregon 97071

RECEIVED
NOV 12 1982
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

TERMS: 30 day basis. 1½% Int. per month assessed from date of billing.

9373

L.

VICTOR ATIYEH

Department of Transportation
STATE HIGHWAY DIVISION

IN REPLY REFER TO
FILE NO.: CON

AGENDA
SEP 29 1982

1A-8 (H)

DATE: September 9, 1982

TO: Oregon Transportation Commission

FROM: H. S. Coulter
State Highway Engineer

SUBJECT: Request for Increase in Project Authorization
Pudding River Bridge Section
Hillsboro-Silverton Hwy., Marion County
Contract No. 9373

This federal-aid bridge replacement project is nearing completion and it now appears that the final cost will exceed the project authorization by $93,235.76 or 8.6 percent.

An overrun of foundation piling lengths was necessary due to inadequate subsurface information. Piling quantities were essentially doubled for both footings of the main span, thus adding $43,540 to the cost of the project. Design changes required to accomodate soil movement at the site of the main span supports and of the westerly end bent incurred an additional $65,610 of increased cost to the project.

There are sufficient funds available in the category of work and all the increase is eligible for federal participation.

I recommend that the authorization be increased by $93,235.76 to a new total of $1,179,500.00. This matter will be on the consent calendar for the September 29 meeting.

OBJ:mk st

bc Fred D. Miller
R. W. Gormsen
C. T. Keasey
V. E. Skoog
C. O. Fredrickson
George Bell

Form 734-3123

9373

L

STATE OF OREGON **INTEROFFICE MEMO**
Highway Construction 378-6318 FILE: CON 5

TO: W. E. Schwartz, P.E., P.L.S.
Ass't. State Highway Engineer

DATE: September 9, 1982

RECEIVED
STATE HWY ENGR
SEP 9 '82
REFER TO
FOR
Info [illegible] R/D D/R Sign Act File

FROM: O. B. Jackmond
O. B. Jackmond, P.E., P.L.S.
Contract Administration Engineer

SUBJECT: Request for Increase in Project Authorization
Pudding River Bridge Section
Hillsboro-Silverton Hwy., Marion County
Contract No. 9373

This federal-aid bridge replacement project is nearing completion and it now appears that the final cost will exceed the project authorization by $93,235.76 or 8.6%.

An overrun of foundation piling lengths was necessary due to inaccurate subsurface information. Piling quantities were essentially doubled for both footings of the main span, thus adding $43,540 to the cost of the project. Design changes required to accomodate soil movement at the site of the main span supports and of the westerly end bent incurred an additional $65,610 of increased cost to the project.

There are sufficient funds available in the category of work and all the increase is eligible for federal participation. PCRB approval is not required.

Attached is a rough draft letter to the Transportation Commission requesting an increase of $93,235.76. Also attached is a copy of the Expected Overrun of Project Authorization form.

OBJ:HHP:mk

Attach.

cc: C. O. Fredrickson
Warren Mueller
R. D. Church
D. E. Swan

H.W. COULTER

81-125-1387

Contains Recycled Materials

9373

Silverton, OR
Appeal Tribune
(Cir. W. 5,131)

OCT 8 1981

Allen's P.C.B Est. 1888

Silverton

Citizens can make difference

To the editor: 706

It was only a cryptic note from Dodge Reports, a McGraw-Hill construction monitoring service. What it said was that a bid had been awarded for construction of a new Pudding River bridge on Highway 214 between Woodburn and Mt. Angel.

What a joy! A group of interested people willing to spend some time at hearings can have an effect on funding priorities for worthy projects.

Let us also be thankful for a system of state government, and our State Department of Transportation in particular, that establishes the fora where interested citizens can be heard, their testimony evaluated, and recommendations made on the basis of these facts. They won't always please us, but they did give us the opportunity to be heard. We should be doubly thankful.

Donald M. Lowe
Silverton

9373

1 [illegible] ✓
Anderson
2 Adams
(Cy) Macnab
Edwards
Turpin
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SEP 28 1984
ROAD DESIGN SECTION

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N. E. MANN

PUDDING RIVER BRIDGE

JOB NARRATIVE

Warren E. Mueller
Project Manager

Arvey D. Nelson
Project Manager

A preconstruction conference was held October 5, 1981 in the Region Office. The contractor was informed that we estimated that the rip rap quantities would be more than showed on the bid item. The contractor was asked if he had any objections to increasing the quantity at his unit bid price. He had no objection but later thought he should have been paid at truck measure rate. A Price Agreement was made and signed by the contractor.

The contractor started work on October 5, 1981 with the installation of signs and clearing & grubbing. P.G.E. crews relocated power lines while the grading sub-contractor installed fills for the end bents. A detour was constructed on the Mt. Angel end. The fill was held back on the Woodburn end and constructed on the following year.

The detour consisted of 6" aggregate shoulder material and 2" of A.C.. This probably would have been sufficient in summer weather but when the rains started the fill softened and an extra 2" of A.C. was added to strengthen the surface. With the starting of the rain, mud was being washed off the fill sides onto the temporary surface.

State Crews were called & they sanded the area until it could be cleaned. The contractor then placed bales of straw along the edge of the fill which stopped the silt from going on to the pavement but allowed the filtered water to drain across the pavement.

In August 1982, the west stage detour was constructed which allowed the completion of phase 2 fill.

The sub-contractor had hauled crushed material from Stayton to an area about 1 mile east of the job. At this location he set up a portable C.T.B. Plant with electronic controls. He also set up a portable scale for weighing the material. A.C. paving for Stage Surfacing Phase II was completed September 15 and traffic routed over the new bridge. The centerline was delineated with Bi-directional reflective pavement markers. The edge of the Stage Surfacing was delineated with temporary guardrail. The sub-contractor then completed the remainder of the fills while the contractor removed the old structure.

Remainder of C.T.B. was placed and the top wearing surface paved with the completed roadway open to traffic October 12, 1982.

Structure work started November 24, 1981 with excavation at bent 6, but no further work was done until December 7 when pile driver and leads came to the job. On December 10 we drove 6 piles at bent #6. The plans called for an order length of 70 ft., but we only obtained 60 ft. penetration with a bearing of 70 tons.

The contractor moved to bent's 4, & 5 and drove 60' piles. The order length was again 70' but since Ross Bros. had elected to use 60' piles he would have to splice to get 70'. The driven length averaged about 50' but the total length piles to cut off was over 70' and one was 110'. Piles at bent #4 were similar with about 70' of pile used.

On January 18, 1982 they moved to bent #3 and drove 2,50' piles on the 19th. The contractor then moved back to work on bent's 5, & 6, then on February 8, 1982 moved back to bent #3.

The contractor excavated to approximate elevation of 108. Pile cut off is 106. He then welded a template on the first 2 piles driven in January. Drove 14 piles on February 9 approximatly 40'. They did not reach bearing. Another 50' of pile was spliced on and the pile was driven and bearing reached with the use of about 89' of pile.

In a conference with Region Bridge & Construction Division with FHWA concuring it was decided to use the piles for bent #2 and reorder new piles in a 100' order length for bent #2. The contract called for Buy America. We had specified HP 14 X 73 bearing piles. These piles were available in foreign steel but not in domestic. The contractor ordered to purchase the new pile for bent #2. Estimated delivery time is 2 months, as the piles would have to be rolled in the steel mill in Pittsburg.

The contractor had hoped to excavated the footing without using a cofferdam but could not pump the water as fast as it came in. He then decided to construct a 3 sided cofferdam. When he started pumping he found that the river side of the dam was moving in so he braced to one of the driven piles in the center of the group. He had started excavation when all of a sudden the bank on the shore side slumped into the excavation. They then drove some piles and placed some crane mats on edge to use as a barrier. As the contractor pumped the shore side, material moved under the bottom of the mats like toothpaste. He then decided that he would have to place steel sheets across the open side of the cofferdam. In doing this he had 2 sizes of sheets. Starting at the end of each wing he drove the additional sheets toward the center. When he reached the center the sheets did not match and were not vertical. This left a triangular slot through which material continued to push into the excavation.

When the excavation was completed and we were able to shoot lines into the cofferdam we found that the material which had slumped into the excavation had moved the line of piles toward the river.

Bridge Section was contacted and many ideas were presented. The final being, to pour the bent on the piles and widen the top of the cap to allow a change in bearing placement. The contractor had tied all of the wall steel in one large section, flat on the ground. When they attempted to place this into the bent they had just picked it up and were over bent #4 when the wired holding the bars came loose & it dropped bending many of the #8 & #4 bars. This mess had to be untied and the salvagable material used to construct the vertical reinforcement in place. Fortunately we were able to borrow from bent #2 to replace the bent material.

The contractor made concrete poures to the bottom of the cap. During this time the river levels had been going up and down with the rains. Each time the river rose the material around the bent would become saturated. When the river dropped the bank would slump and move towards the river. We found that not only was the ground around the cofferdam moving but the cofferdam itself was moving. The poured concrete had also moved towards the river.

It was decided that we would try tieing bent #3 to bent #6 with 3 stress cables. Holes were drilled in bent #3 about 1 ft. under the cap bottom and through bent #6 cap. A steel bearing beam was fabricated to transfer stresses on bent #3. At bent #6 it was agreed that the cap with its steel & piling would not need a bearing beam.

Morse Bros. Co., of Harrisburg was contacted to pull the stress cables. They had 3 jacks with a manifold which allowed stressing of all cables at the same time. On May 26, 1982 they stressed the cable to 20,000 lbs. each and moved the bent back about 1 1/2 inches.

With all the problems at bent #3 it was decided to do some changes at bents 1 & 2. We would drive four more battered piles at bent #1. We would leave stress cables in place at bent #3 & #6 until all beams were set & grouted. We would delay pouring of impact panel at bent#6 until all beams are set. We would leave cofferdam sheet piles in place at bent #2 and leave cofferdam unfilled until we were sure the ground had stabilized, then backfill.

At bent #3 we would backfill the river side of the bent with rip rap and leave the back side with natural backfill. At Bent 1, & 2 we would place 1" plastic tubes to be used to tie bent 2 to 1 if movement required tieing bent 2.

Sheet piles were removed from bent #3 and driving of cofferdam at bent #2 started June 3, 1983. By June 9th all 50' piles had been driven and some reached bearing at this penetration. One had gone 91' and was at 30 to 35 ton bearing. I instructed the inspector to continue driving on some of the 50' piles with bearing. These piles on redriving then broke through the state in which they had obtained bearing. We then continued to the 90 + foot length. At this point we were getting refusal on piles driven and left overnight. It was therefore suggested we drive all piles to the 90' penetration.

The concrete was poured for the shaft and we noted some movement toward the river but it seemed to stabilize. The cap was poured & beams placed. After all beams were in place and grouted we cut the cable holding bent #3, to #6 with no measurable movement.

The cofferdam at bent #2 had a strut through the center of the bent which was cut out. This caused the cofferdam to shift toward the river but with the interior of the cofferdam not backfilled there was no pressure transmitted to the bent shaft.

The decision to leave the cofferdam in place and not to backfill was was the right decision. We then decided to wait until the area between bent 1, & 2 had stabilized. The plan was to fill the cofferdam with 3/8-0 material with a riprap capping. The contractor suggested a 5 sack mix placed with a concrete pump, as the quickest way to do the backfill.

CONCLUSIONS:

Grading & paving were well planned. Only minor problems occurred at the time of paving to switch traffic from the old to new.

Bridge Design should have specified concrete piles which would have been much easier to install than the concrete encased piles. Also they would have reached bearing at a higher elevation. Bents 2, & 3 could have been constructed without disturbing the ground. The changing angle at the ends of each beam was very hard to set and hold. Had this bridge been placed on a tangent, problems during construction would have been minimized.

The placing of straw bales along the toe is a good method for erosion containment and should be considered in future contracts.

PUDDING RIVER BRIDGE

ADDITION

Since Warren Mueller's retirement at Price Agreement has been negotiated with the contractor to correct concrete spall which developed in the parapet rail section at the bridge bent transverse deck joint locations.

The parapet rail was constructed with 1/4" mastic joints placed at right angles to the roadway. The mastic terminated 8" above the deck elevation as is shown on standard drawing #27155.

Pudding River Bridge is constructed on a 15 degree skew. Spall occurred in the parapet rail at the mastic mismatch between the 90° rail mastic and the pre-stress slab span skewed deck joints.

Construction common sense should have dictated to both the contractor and the State inspector that the rail mastic at the bents should be installed parallel to the deck joint. We find with our inquiry, however, that the rail mastics were all placed at 90° because thats the way they were shown on the plans.

I would suggest including a typical section detail of a skewed mastic parapet rail installation with the contract plans would have prevented our joint concrete spall problem.

One other item of note is the telephone conduit attachment along the edge of the precast slab beams just below the parapet scupper deck drains. See section

A-A detail plan drawing #36133.

The problem with the conduit installed at the scupper flow line is that debris from the deck drainage collect at the conduit and build up to restrict the scupper flow. The debris trapped along the bridge side also contributes to an unsightly bridge site. A solution would be to raise the conduit elevation or possibly offset the conduit from the bridge side eliminate the debris problem.

All other aspects of the bridge construction are functioning very adequately. The bridge site today remains a neat looking structure with well balanced design dimensions.

Arvey D. Nelson
PROJECT MANAGER

ADN:DG:mm

STATEMENT OF OVERRUNS AND UNDERRUNS

1 Versteeg
~~Anderson~~
2 Adams
(G) Macnab
Edwards
Terpin
Trout
Waters

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SEP 28 1984
ROAD DESIGN SECTION

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SECTION: Pudding River Bridge
HIGHWAY: Hillsboro-Silverton
COUNTY: Marion

CONTRACT #: 9373
PREFIX #: 124-1064
F.A.P. #: BRF 75(8)

Item	Contract Amount	Semi-Final Amount	%(+ or -)
Bid Items	955,561.00	1,003,063.08	
Anticipated Items	1,500.00	2,962.09	
Contingencies	43,067.75	108,923.47	
Engineering	86,135.49	182,500.00 (est.)	
Increased Authorization 9/29/82	93,235.76		
Increased Authorization 1/18/84	111,160.00		
TOTAL	1,290,660.00	1,304,948.64	+ 1.1%

All substantial changes were evaluated and only those listed below meaningfully affected the total project cost. (Items Noted + or - $2,000.00)

INDIVIDUAL OVERRUNS AND UNDERRUNS

No.	Item	Contract Quantity	Final Quantity	%(+ or -)
7	Flagmen	250 hr.	805.2	+ 221.0

The estimate flagging time was not adequate to protect the public during construction causing this item to overrun.

14	Watering	250 M Gal.	29.4	- 88.2

Embankment material containing near optimum moisture required only minimal watering causing this item to underrun.

15	Treated Base Mixture	6500 ton	5339.8	- 17.8

Existing pavement at each end connection was not removed causing this item to underrun

16	Cement in Treated Base Mixture	360 ton	240.28	- 33.2

Not as much cement required as estimate due to underrun in C.T.B. quantity

17	Aggregate Shoulders	1150 ton	1980.12	+ 72.2

Detour quantity not included in original quantity

18	Class B or C Asph. Conc.	2200 ton	3568.03	+ 62.2

The connections at each end of project were made by using A.C. to cover existing pavement rather than cutting out and using C.T.B., and the 2 additional mailbox turn-outs caused this item to overrun.

28 Loose Rip Rap Cl 100 750 cu.yd. 989.41 + 31.9

Quantity was under-estimated on original estimate

38 Structural Concrete 100 % 103.12 + 3.12

Additional concrete required due to design changes outlined in P.A.# 4

Price Agreements

P.A.#3 Steel Piling + $ 42,400.00

Bearing was not achieved at plan elevation, additional piling were required

P.A#4-4 Drive Sheet Piling + $ 8,600.00

As required for P.A.# 4-5

P.A.#4-5 RZ10 Sheet Piles + $ 29,771.06

Sheet piles left in place as form for Bent# 4-5

P.A.#4-6 Standby Time + $ 3,100.00

Crane required to stand-by until design change was completed and required materials obtained

P.A.#5 Bridge Parapet Joint Repair + $ 7,500.00

Work required to correct concrete spawl caused by plan detail omission at mastic joint between rail and deck

Force Accounts

E.W.O.#1 Stabilize Bent # 3 + $ 8,293.49

Work required to stop movement of Bent#3 caused by adjacent bank movement

E.W.O.#2 Backfill Bent # 2 + $ 3,697.62

Work required to maintain stability of embankment around Bent# 2

ARVEY NELSON PROJECT MANAGER

9373

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
Region 2
2960 E. STATE STREET, SALEM, OREGON 97310 PHONE 378-2626

September 15, 1981

Russell Nebon, Director
Marion County Planning Dept.
220 High St. N.E.
Salem, OR 97301

Dear Mr. Nebon:

To comply with the Conditions set forth in the Flood Plain Development Permit Case No. (FPDP) 81-7 for Pudding River Bridge, M.P. 40.78, Hillsboro - Silverton Highway (State Hwy. 214) in Marion County, I certify on behalf of the State of Oregon, Department of Transportation, Highway Division, that the Pudding River Bridge Project meets all conditions of this permit. All design and construction is being supervised by registered, professional engineers as follows:

Condition I - Flood levels will not be significantly increased from the existing condition during the base flood discharge.

Condition II - The proposed structure's deck (floor), utility, and sanitary facilities are all more than one foot above high water elevation.

Condition III - The proposed new construction and substantial improvements are designed to withstand any natural flooding condition to prevent flotation, collapse, and lateral movement.

Condition IV - The proposed structure construction below flood elevation is being constructed of concrete and reinforcing steel materials, which will be resistant to flood damage. Roadway fill slope will be riprapped where necessary to control erosion.

Condition V - The new construction and improvement - is designed to minimize flood damage. The opening under the structure is large enough to not significantly back up flood water and columns are

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placed far enough apart so debris will not hang up between the columns.

If more information is needed, contact us at the East Salem Highway Building, 2960 E. State Street, Salem, or phone 378-2626.

Sincerely,

ORIGINAL SIGNED BY GERALD WIMER

Gerald Wimer
REGION CONSTRUCTION ENGINEER

GW/bah

cc: Bob Royer
Hal Versteeg
Warren Mueller

9373

L.

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

9-2-81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. BRF-75(8)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Marion

3. FROM
Dale E. Wilken, Administrator
FHWA - Oregon Division
Salem, Oregon

4. PROGRAM NO.

5. ITEM NO. 00132

6. TO
Mr. H. S. Coulter
State Highway Engineer
Oregon State Highway Division
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 9-2-81

8. FEDERAL ROUTE NUMBER Primary 75

9. STATE ROUTE NUMBER Secondary 140

10. GENERAL LOCATION:

Pudding River Bridge Section (BR No. 1917A)

11. GENERAL DESCRIPTION OF WORK

One structure

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☒ xx CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ xx OTHER *(Specify)*

Permanent Pavement Striping	S.F.	$1,000
Remove Striping	S.F.	$ 500

13. REMARKS

After concurrence in award, you are authorized to proceed with those items listed above as shown in your estimate.

Mr. Swan's August 31, 1981 request and certifying statements are accepted.

PS&E documents for the subject project have been reviewed and are approved at a total estimated cost of $1,334,562, Federal funds $1,067,649.

A signed copy of the Title Sheet is returned herewith.

(This is a 20% limitation Project.)

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REFER TO
Moehring

[illegible] 9-3-81

DATE 9-2-81

15. SIGNATURE OF APPROVING OFFICIAL

16. TITLE for Division Administrator

PR-1240
2-79) PREVIOUS EDITIONS MAY BE USED

8-27-81

9373

NOTICE OF DECISION
FLOOD PLAIN DEVELOPMENT PERMIT CASE NO. (FPDP)81-7

Notice is hereby given that the Planning Director for Marion County has APPROVED the following described conditional use Floodplain development permit subject to certain conditions. The findings and conclusions on which the Director based his decision are noted below.

APPLICATION: Application of State of Oregon Transportation Commission to replace an existing bridge structure over the Pudding River in an EFU (Exclusive Farm Use) zone and within the Flood Plain Overlay Zone (Section 178.050 of the Marion County Zoning Ordinance) on property located at Wilco Highway (State 214) at Pudding River Bridge (Mile Post 40.78) (Sec. 21, T5S, R1W) Woodburn

FINDINGS AND CONCLUSIONS:

1. The Oregon Department of Transportation is planning to realine and replace the bridge on a portion of the Wilco Highway (State Highway 214) where it crosses the Pudding River. The portion to be realined is about 2600 feet in length.

2. The majority of the project is within the designated 100 year Flood Plain of the Pudding River. Within the 100 year Flood Plain, prior to any construction or fill, a Flood Plain Development Permit must be obtained from Marion County.

3. The plans and information submitted indicate that the elevation of new roadway will be at 133 feet above mean sea level. It will require 49,800 cubic yards of fill to elevate the road to this height.

4. From information received from the Army Corps of Engineer's a year ago, for a Flood Plain Development Permit on an adjoining parcel, the estimated height of the 100 year flood would be 131 feet above mean sea level (Flood Plain Development Permit Case No. 80-9).

5. The area to be filled is of an uneven terrain with the lowest existing ground elevation being 116 feet above mean sea level.

6. There is not an identified floodway on this portion of the Pudding River. However, for the purposes of the Flood Plain Management program, a floodway shall be designated when the base flood level is three or more feet above the land surface.

7. Since there is greater than a three foot differential between the regulated flood elevation (131 feet) and the land surface (116 feet), much of the project area is in the designated floodway. There are specific requirements and conditions which must be met in order to erect structures or fill.

8. Provided these requirements are met, it would appear that this request would be in conformance with the Marion County Flood Plain Overlay Zone.

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CONDITIONS:

1. Prior to any construction or fill, the Marion County Planning Department must receive a certification by a registered professional engineer or architect demonstrating that encroachment shall not result in any increase in flood levels during the occurance of the base flood discharge.

2. New construction and substantial improvement of any commercial, industrial or other non-residential structures shall either have the lowest floor, including basement, elevated to one foot above the level of the base floor elevation or, together with attendant utility and sanitary facilities, shall have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy as certified by a registered professional engineer or architect that the standards of this subsection are satisfied.

3. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.

4. All new construction and substantial improvements below base flood level shall be constructed with materials and utility equipment resistant to flood damage as determined and certified by a registered professional engineer or architect.

5. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

PROCEDURE: The Marion County Zoning Ordinance provides that flood plain or greenway development permit applications be considered first by the County Planning Director. If the Planning Director is satisfied that the application clearly conforms with all Marion County land use policies and regulations he approves the application. Otherwise, the Director must deny the application. Any interested person may appeal the Director's decision. The appeal must be in writing and be received in the Marion County Planning Department, 220 High Street NE, Salem by September 7, 1981. A public hearing is held on appeals. The Hearings Officer or the Planning Commission considers the application on the basis of the evidence presented at the hearing. The Director's previous decision does not prejudice the Hearings Officer's consideration. If you have any question about this application or the decision please call 588-5038 or visit the County Planning Office at the above address.

Russell Nebon
Russell Nebon, Director
Marion County Planning Department

August 27, 1981
Date

BROWN/bj

REGION 2 ENGINEER
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☐ RLE SEP 2 1981 ☐ RBE
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9373

L.

U.S. Department of Transportation
Federal Highway Administration

Memorandum

THE OREGON DIVISION - SALEM

Subject: Oregon Project BRF-75(8)
Pudding River Bridge
Hillsboro - Silverton Highway
Salvage of I-Beams

Date: August 18, 1981

From: Division Administrator

Reply to Attn. of: HFO.2-OR

To: Mr. H. S. Coulter, State Highway Engineer
Oregon State Highway Engineer

As setforth in Mr. Wallace's letter of August 11, 1981, I concur that the steel I-beams from the 47 year old existing structure become the property of the State without any transfer of funds for salvage.

G. K. Hossner
for Dale E. Wilken

RECEIVED
STATE HWY ENGR
AUG 21 '81
REFER TO Walt Hart
FOR

Info	Inves	R/D	D/R	Sign	Act	File

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1/21

9373

L.r

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:

DES 23
1917A

August 11, 1981

TO: Dale E. Wilken
Division Administrator
Federal Highway Administration

NOTED
E. S. HUNTER

FROM: Walter J. Hart
Bridge Engineer

ORIGINAL SIGNED
L. L. WALLACE

L. L. Wallace
Assistant Bridge Engineer

SUBJECT: Pudding River Bridge
Hillsboro-Silverton Highway
Marion County
Bridge 1917A

Plans for the subject project call for removal of the existing structure after completion of the new structure on new alignment.

The existing steel I-beams are to be salvaged by the contractor and become the property of the State. There are eight 50-ft. steel I-beams to be salvaged.

These are of no value to anyone but the State Maintenance Forces, except as scrap metal, because the existing bridge was built 47 years ago. The scrap value will be offset by the cost to the State to remove rust from and to clean and paint the I-beams.

Your concurrence is requested that the steel I-beams become the property of the State without any transfer of funds for salvage.

GDA:jrb

~~cc: E.~~ S. Hunter
D. H. Moehring
C. O. Fredrickson

RECEIVED
TECHNICAL SERVICES
AUG 17 '81
REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

Form 734-3122

9373

L.

U.S. Department of Transportation
Federal Highway Administration

Memorandum

THE OREGON DIVISION - SALEM

Subject: Oregon Project BRF-75(8)
Pudding River Bridge
Hillsboro-Silverton Hwy., Marion County

Date: August 7, 1981

From: Division Administrator

Reply to Attn. of: HBR-OR

To: Mr. H. S. Coulter, State Highway Engineer, ODOT

Mr. Hart's August 6 letter satisfies the concerns in our letter of July 21 on the Pudding River Bridge.

We approve the project and you may proceed with advertising.

for Dale E. Wilken

cc:
OSHD (W J Hart, Br)

RECEIVED
STATE HWY ENGR
AUG 11 '81
REFER TO
FOR
Info Inves R/D D/R Sgn Act File

9373

L.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

DES 23
1917A

In Reply Refer to
File No.:

TO: Mr. Dale Wilken
Division Administrator
Federal Highway Administration

August 6, 1981

FROM: Walter J. Hart ORIGINAL SIGNED
Bridge Engineer WALTER J. HART

NOTED
E. S. HUNTER

SUBJECT: Pudding River Bridge
Pudding River Bridge Section
Hillsboro-Silverton Highway
Marion County

Please refer to your memorandum of July 21, 1981 on the subject project. A bridge length of 319 feet was selected rather than the shorter alternate length of 260 feet, because we felt that reducing the existing structure length from 533 feet to a new structure length of 319 feet would be less detrimental to the local residents upstream from the bridge site. The additional opening area will be of benefit in case of a debris problem.

The hydraulic report indicates that the longer structure will reduce the possibility of downstream erosion, and that the backwater will extend to approximately 1800 feet upstream. We therefore request your approval of the proposed structure.

cc ~~E.~~ S. Hunter
D. H. Moehring
Lyle Watson
C. O. Fredrickson
Environment

RECEIVED
TECHNICAL SERVICES
AUG 7 '81
REFER TO
FOR
Info | Inves | R/D | D/R | Sign | Act | File

. 9373

140

ENVIRONMENTAL REVIEW CHECKLIST

ALL CLEAR 7/28 81

Donald L

1 [illegible]

Sept. 3, 1981 Bid Letting ______ All Clear Deadline

SECTION Pudding River Bridge
Highway Hillsboro-Silverton
County Marion Region II
Type of Work G-P-Str. Funds HBR
State___ Consultant Plans Avail.___Yes ___No

DSL Conditions ✓
statewide noise ✓
Marion Co Flood Plain Permit

	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR
DOCUMENTS:					
EIS	☒				
Negative Declaration	☒				
Project Assessment		☒			☒
Write-off Letter	☒				
PERMITS:					
Division of State Lands		☒			
D.O.G.M.I.	☒				
Corps of Engineers		☒			
Coast Guard	☒				
Co. Conditional Use	☒				
NPS Air Pollution	☒				
NPS Water Pollution	☒				
CULTURAL:					
Cultural Survey		☒			☒
Cultural Salvage	☒				
NOISE:					
Noise Study		☒			☒

9373

L.

U.S. Department
of Transportation
Federal Highway Administration

Memorandum

THE OREGON DIVISION - SALEM

Subject: Oregon Project F-75(4)
Pudding River Bridge
Marion County

Date: July 21, 1981

From: Division Administrator

Reply to Attn. of: HPD.3-OR

To: Mr. H. S. Coulter, State Highway Engineer, ODOT

Mr. Wallace's memorandum of June 3, 1981, submitted preliminary plan data for this structure.

We have reviewed the submission and wonder why the 319 foot bridge length was selected for this site instead of a shorter bridge as mentioned in the Hydraulic Report by D. W. Bryson, dated March 16, 1981. It is stated that the next bridge downstream is only 269 feet long.

There were several other questions regarding specific design details that we resolved with the designer and we have no further questions in this area.

For Dale E. Wilken

cc:
OSHD (W J Hart, Br)

RECEIVED
STATE HWY ENGR
JUL 27'81
REFER TO Hart
FOR

Info	Inves	R/D	D/R	Sign	Act	File
					X	

7/27

9373

L.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.: PRO 6-2

July 13, 1981

TO: Dale E. Wilken
Division Administrator
Federal Highway Administration

Original Signed By
D. E. Swan

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 00132
Project No. BRF-75 (8)
Pudding River Bridge Section
Marion County

Attached support data consists of PR-1 forms and project maps for the subject project.

This project is expected to be funded from the 20% of the FY'81 limitation withheld from distribution until after August 1.

A copy of the State Clearinghouse A-95 review conclusions was forwarded previously.

JLG/lms
Attachments

cc: C. O. Fredrickson (Region 2)
General Files

Form 734-3122

9373

L.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:

DES 23
1917A

June 3, 1981

Dale Wilken, Division Administrator
Federal Highway Administration
The Equitable Center, Suite 100
530 Center Street
Salem, OR 97301

NOTED
E. S. HUNTER

Pudding River Bridge
Pudding River Bridge Section
Hillsboro-Silverton Highway
Marion County

Enclosed are two reduced prints of Drawing Nos. 35893 and 30818 which are the preliminary plan and elevation and vicinity map for the subject structure. Also enclosed are two copies of the Foundation and Hydraulic Reports. The alignment and roadway width are in accordance with the standards governing the project.

This structure is on a new alignment with a 40'-0" roadway which allows for two 12-foot lanes and two 8-foot shoulders. The 1978 Average Daily Traffic was 3,550. The main span of 107 feet for the new structure lines up with the main 100-foot span of the upstream railroad structure, and the bottom of the structure is 2'-6" above high water for debris clearance because of previous experience on the existing highway structure which has had debris problems almost every winter in the 50-foot river spans.

The estimated cost of this structure, including an allowance for engineering and contingencies, is $831,000.

We request your approval of our preliminary plan and your concurrence that this project is eligible for FA funding.

Walter J. Hart
Bridge Engineer

L. L. Wallace
Assistant Bridge Engineer

GDA:jrb
Enclosures

bc: E. S. Hunter
D. H. Moehring
Bud Mann /w/ 1 set encls.
C. O. Fredrickson /w/ 1 set encls.
Environment /w/ 1 set encls.

L. L. Wallace

RECEIVED
TECHNICAL SERVICES
JUN 4'81
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Form 734-3122

9373 1-27-81 L

U. S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION **LETTER OF APPROVAL AND/OR AUTHORIZATION**	FEDERAL AID PROJECT NO. F-75(5) STATE PROJECT NO. See below

FROM: E. J. Valach, Acting Division Admin FHWA - Oregon Division	PROGRAM NO. ITEM NO. 00132	COUNTY NAME Marion PROGRAM STAGE (Check) ☐ 1. ☐ 2.

TO:

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

RECEIVED
STATE HWY ENGR
FEB 5 '81
REFER TO
Moelming
FOR
Info | Inves | R/D | D/R | Sign | Act | File

DATE PS&E APPROVED	DATE AUTHORIZATION EFFECTIVE 1/27/81	FEDERAL ROUTE NUMBER Primary 75 STATE ROUTE NUMBER Secondary 140

GENERAL LOCATION:

Pudding River Bridge Section

GENERAL DESCRIPTION OF WORK:

Right of Way

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

PRELIMINARY ENGINEERING TO DETERMINE
☐ LOCATION ONLY
PRELIMINARY ENGINEERING FOR SURVEY AND PLAN
☐ PREPARATION
☐ OTHER *(Specify)*

☒ ACQUISITION OF RIGHT-OF-WAY
CONSTRUCTION - ADVERTISE FOR RECEIPT
☐ OF BIDS
☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of 1/15/81 you are now authorized to proceed with all phases of right of way acquisition for files 51736 through 51740 as shown on R/W map 9B-18-13 at a TEC of $26,500 Federal Funds $23,359. Federal participation is limited to that right of way actually incorporated in the final location of the subject project.

DATE 1/27/81	SIGNATURE OF APPROVING OFFICIAL G. K. [illegible]	TITLE for Acting Division Administrator

FORM PR-1240 (REV. 5-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U. S. GOVERNMENT PRINTING OFFICE: 1978-631-655

9373

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to File No.: PRO 6

January 15, 1981

TO: G. L. Green, Division Administrator
Federal Highway Administration

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 00132
Project No. F-75(5)
Pudding River Bridge Section
Marion County

Enclosed is data consisting of PR-1 forms, sketch maps & right of way map 9B-18-13 for the subject project.

I request the following:

1) Authorization to proceed with all phases of right of way acquisition at an estimated total cost of $26,500 with an obligation of $23,359 in federal funds. The right of way to be acquired is as outlined in red on right of way map 9B-18-13 and does not involve relocation assistance.

A copy of the State Clearinghouse A-95 review comments has been previously forwarded.

CL:bke
Enc.

cc: J. Boyd
F. Lowe
General Files

Form 734-3122

9373

140

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

FILE:

INTER-OFFICE CORRESPONDENCE
Salem, Oregon
October 24, 1980
29

FROM: F. W. Yarbrough
Soils Engineer

TO: Duane Christensen
Final Design Engineer

SUBJECT: Pudding River Bridge Section
Hillsboro-Silverton Highway
Marion County
Soils Engineer's Report

One drill hole at each end of the subject bridge has been reviewed. Standard penetration tests and soil descriptions give a fair notion of the foundation strength.

The west abutment foundation is safely stable for the approach fill. The east abutment fill should be made in stages to avoid overstressing the foundation. Sixteen feet of fill may be placed as rapidly as desired. No fill should then be added above 16-feet until 20 days waiting time has elapsed after filling to 16-feet. Then, six more feet may be added. If the waiting time can be tolerated, no counterbalance will be required.

Fifteen feet of fill and pavement will cause about 0.7-feet of settlement, total. Twenty feet will cause about 0.9-feet settlement. About half of the settlement will occur during fill placing. If the pavement is constructed after the fill has been in place six months, about 0.2-feet settlement will take place afterward. If a surcharge fill is placed on the east abutment grade fill, five feet high above finish grade and forty feet long and left in place for six months, then no bump should develop at the abutment after paving. No surcharge is needed at the west abutment if compacted fill is used in the approach.

10-29-80
Above reco. to be incorporated into the project
DWC
Impact panels will be installed.

FWY:af

cc: Frank Terpin

REFERRED TO
Beard
✓ Stoudenmeyer
Mann
Cole
Watson
Eriksen
Leu
Dorn
Hager
Due
[✓ Return] ~~Discuss~~ Do File Copy
BY FINAL DESIGN ENGINEER

[illegible]

1 Versteeg
Anderson
2 Christensen DWC
Olson
3 Sullivan JWS
Terpin
Trout
Wakerlig

RECEIVED
OCT 27 1980
ROAD DESIGN SECTION

Do Not File ☐
Return To
Bring
Action

9373

U. S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

9-12-80

FEDERAL AID PROJECT NO. -75(4)

STATE PROJECT NO. See below

PROGRAM NO.

COUNTY NAME Marion

ITEM NO. 00132

PROGRAM STAGE *(Check)* ☐ 1. ☐ 2.

FROM:
G. L. Green, Divison Administrator
FHWA - Oregon Division

TO:
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

RECEIVED
STATE HWY ENG
SEP 16 '80
REFER TO
[illegible]
FOR

Info	Inves	R/D	D.R	Sgn	Act	File

9-16

DATE PS&E APPROVED

DATE AUTHORIZATION EFFECTIVE 9/12/80

FEDERAL ROUTE NUMBER Primary 75

STATE ROUTE NUMBER Secondary 140

GENERAL LOCATION:

Pudding River Bridge Section

GENERAL DESCRIPTION OF WORK:

Preliminary Engineering

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

PRELIMINARY ENGINEERING TO DETERMINE
☐ LOCATION ONLY

PRELIMINARY ENGINEERING FOR SURVEY AND PLAN
☒ PREPARATION Including utility preparation work
TEC $40,000-F.F. $36,053

☐ OTHER *(Specify)*

☐ ACQUISITION OF RIGHT-OF-WAY

CONSTRUCTION - ADVERTISE FOR RECEIPT
☐ OF BIDS

☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested by Mr. Swna's PEA dated 9/4/80.

DATE 9/12/80

SIGNATURE OF APPROVING OFFICIAL

TITLE for Division Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U. S. GOVERNMENT PRINTING OFFICE: 1975-631-888

9373

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

Intergovernmental Relations Division
155 Cottage ST . S.E.
Salem, Oregon 97310, Phone 378-3732
Toll Free Number - 1-800-452-7813

APPLICANT: DOT, Highway Division

PROJECT TITLE: Pudding River Bridge Marion

DATE: July 8, 1980.

The state has reviewed your project and reached the following conclusions:

NOTED
H.S. COULTER

☒ No significant conflict with the plans, policies or programs of state government have been identified ~~and your proposal is endorsed as presented.~~

☒ Relevant comments of state agencies are attached and should be considered in the final design of your proposal.

☐ Potential conflicts with the plans and programs of the state agency(s) have been satisfactorily resolved. No significant issues remain.

☐ Significant conflicts with the plans, policies or programs of state government have been identified and remain unresolved. The final proposal has been reviewed and the final comments and recommendations of the state are attached.

RECEIVED
STATE HWY ENGR
JUL 10 '80
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

ATTACHMENT

cc: G.L. GREEN
H.S. COULTER ✓
F.E. TERPIN
J.B. BOYD
J.H. VERSTEEG
GARY POTTER
W.J. HART
AERONAUTICS DIVISION
B.L. GIFFORD
REG. ENGR.:(2)C.O. FREDRICKSON
DIS. ENGR.:(3)R.A. KUEHN

NOTICE TO FEDERAL AGENCY

The following is the officially assigned State Identifier Number:

8006 2 590

This number should be used on all correspondence and particularly on SF 240 as required by OMB A-95.

BEN GIFFORD

6-11-80

A copy of this notification and attachments, if any, must accompany your application to the federal agency as required by OMB A-95. Comments of the appropriate local reviewing agencies will be submitted to you separately and must also be included.

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

Intergovornmental Relations Division
155 Cottage ST NE
Salem, Oregon 97310, Phone: 378-3732

PNRS STATE REVIEW

Project #: 8006 2 590 Due Date: JUL 0 4 1980

To Agency Addressed: If you intend to comment but cannot respond by the return date, please notify us immediately. If no response is received by the due date, it will be assumed that you have no comment and the file will be closed

PROGRAM REVIEW AND COMMENT

To State Clearinghouse: We have reviewed the subject Notice and have reached the following conclusions on its relationship to our plans and programs:

( ) It has no adverse effect.

( ) We have no comment.

( ) Effects, although measurable, would be acceptable.

( ) It has adverse effects. (Explain in Remarks Section)

( ) We are interested but require more information to evaluate the proposal. (Explain in Remarks Section)

(X) Please coordinate the implementation of the proposal with us.

(X) Additional comments for project improvement. (Attach if necessary)

REMARKS (Please type or print legibly)

COMMENTS ATTACHED

Agency Fish & Wildlife By
Environmental Management Section 6/30/80

PNRS 8006 - 2 - 590

The Oregon Department of Fish and Wildlife has no objection to the Pudding River Bridge Project in Marion County provided the following conditions are observed during construction:

1) Adequate measures are taken to minimize turbidities which could arise during construction.

2) No pollutants of any type are allowed to enter the waterway (ie. petroleum products, fresh concrete, silt).

3) Sails disturbed by the project are stabilized and revegetated.

4) All project debris is removed from the stream.

5) In-water work is confined to the low flow period of July 1 to September 15.

This project should be coordinated with Joe Wetherbee and Jim Heintz, district fish and wildlife biologists. Mr. Wetherbee and Mr. Heintz can be contacted at 2487 Lancaster Drive N.E., Salem, Oregon 97303, telephone number 378-6925.

We appreciate the opportunity to review and comment on this project proposal.

cc: Wetherbee/Heintz
Dick Lantz

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

JUN 20 1980

Intergovernmental Relations Division
155 Cottage ST NE
Salem, Oregon 97310, Phone: 378-3732

RECEIVED
JUN 16 1980
DIVISION OF STATE LANDS

PNRS STATE REVIEW

Project #: [illegible] 500 Due Date: JUL [illegible] 1980

To Agency Addressed: If you intend to comment but cannot respond by the return date, please notify us immediately. If no response is received by the due date, it will be assumed that you have no comment and the file will be closed

---

PROGRAM REVIEW AND COMMENT

To State Clearinghouse: We have reviewed the subject Notice and have reached the following conclusions on its relationship to our plans and programs:

( ) It has no adverse effect.

( ) We have no comment.

( ) Effects, although measurable, would be acceptable.

( ) It has adverse effects. (Explain in Remarks Section)

( ) We are interested but require more information to evaluate the proposal. (Explain in Remarks Section)

( ) Please coordinate the implementation of the proposal with us.

(✓) Additional comments for project improvement. (Attach if necessary)

If the project would require the removal, fill or alteration of 50 cubic yards or more of material within the banks of the waterway(s), we urge the applicant to apply for state fill or removal permits well in advance of construction deadlines to prevent unnecessary project delays. Specific information on the need for permits may be obtained from the Division of State Lands' office at 1445 State Street, Salem, OR 97310. Phone 378-3805.

Thank you for the opportunity to comment on this project.

Agency Lands By

9373

140

NOTE: SHADED AREAS
TO BE COMPLETED
IN SALEM OFFICE

LOCATION PROSPECTUS
OREGON DEPARTMENT OF TRANSPORTATION
LOCATION UNIT

7-1-80

DATE

PREFIX

1 - IDENTIFICATION

PROJECT NAME: Pudding River Bridge

HIGHWAY NAME: Hillsboro-Silverton

HIGHWAY NUMBER: 140

REGION	ADMINISTRATIVE DISTRICT	COUNTY	CITY
2	3	Marion	—

LENGTH	MILEPOST NUMBER		
0.4	40.6 TO 41.0	☒ RURAL	☐ URBAN

LOCAL GOVERNMENT PROJECT? ☐ YES ☒ NO

IF YES, UNIT OF GOVERNMENT

TYPE OF FUNDS: ☐ FAI ☒ FAP ☐ FAS ☐ STATE ☐ FAUS ☐ OTHER

METHOD OF CONSTRUCTION: ☒ CONTRACT ☐ STATE FORCE ☐ OTHER

TYPE OF WORK: ☒ GRADING ☒ PAVING ☒ STRUCTURE ☐ SIGN ☐ SIGNAL ☐ ILLUMINATION ☐ ROADSIDE IMPROVEMENT ☐ OTHER

PROJECT DESCRIPTION

The westerly end of project is approximately 1,100 feet westerly from the existing bridge, milepoint 40.6. The easterly end is approximately 600 feet easterly from the existing bridge, milepoint 41.0. The length of the project is 0.4 mile.

The purpose of the project is to update the 1975 survey and complete the roadbed and bridge design to bring the project to contract.

REFERRED TO
Beard
Stoudenmeyer
Cole
Mann
Erikson
Watson ✓ W
Hager
Leu
Dorn
[✓ Return] Discuss Do File Copy Due
BY FINAL DESIGN ENGINEER

2 - TRAFFIC DATA

EXISTING AVERAGE DAILY TRAFFIC (YEAR-VOLUME): 1979 - 3,650

PROJECTED AVERAGE DAILY TRAFFIC (YEAR-VOLUME):

LEVEL OF SERVICE		A	B	C	D	E	F
	EXISTING	☐	☐	☐	☐	☐	☐
	PROPOSED	☐	☐	☐	☐	☐	☐

DESIGN SPEED (MPH)	DESIGN STANDARDS	TRAFFIC ANALYSIS		
55	AASHTO *	☒ LIGHT	☐ MEDIUM	☐ HEAVY

* deviation from standards applies to shoulder width only.

1 Vorsteeg
Anderson
2 Christensen
3 Olson
Sullivan
Terpin
Trout
4 Wakerlig

RECEIVED
JUL 08 1980
ROAD DESIGN SECTION

Do Not File ☐
Return To
Bring Up /
Action

APPROVED
Frank E. Perpin
Location Engineer
Date 7/1/80

FORM 734-1730 (12-78) Page 1

3 - FEATURES

	EXISTIN UMBER AND WIDTH	P OSED NUMBER AND WIDTH
TRAVEL LANES	two - 10'	two - 12'
SHOULDERS	two - 6'	two - 4' *
MEDIANS	-	-
PARKING LANES	-	-
SIDEWALKS	-	No
BIKEWAYS	-	shoulder bikeway
INTERCHANGES	-	-
OTHER:	-	-

* minimum AASHTO standards - two - 8'

	YES	NO	MAYBE
Channelization	☐	☒	☐
Frontage Roads	☐	☒	☐
Traffic Signals	☐	☒	☐
Signing	☐	☒	☐
Illumination	☐	☒	☐
Structures	☒	☐	☐
Stage Construction	☐	☒	☐
Pedestrian Crossing	☐	☒	☐
Rest Area	☐	☒	☐
Truck Scale Site	☐	☒	☐
Landscaping	☐	☒	☐
Drainage	☒	☐	☐
River Pudding	☒	☐	☐
Stream	☐	☒	☐
Storm Sewer	☐	☒	☐
Sanitary Sewer	☐	☒	☐
Right of Way	☒	☐	☐
Simple Acquisition	☒	☐	☐
Complex Acquisition	☐	☒	☐
Relocations	☐	☒	☐

	YES	NO	MAYB
Right of Way (cont.) Improvements	☐	☒	☐
Access Control	☐	☒	☐
Railroad Crossing	☐	☒	☐
At Grade	☐	☒	☐
Separated	☐	☒	☐
Railroad Encroachment	☐	☒	☐
Permits	☒	☐	☐
Conditional Use	☐	☒	☐
Flood Plain	☒	☐	☐
Irrigation District	☐	☒	☐
Water District	☐	☒	☐
Drainage District	☐	☒	☐
Div. of State Lands	☒	☐	☐
Dept. of Geology & Min. Ind.	☐	☒	☐
Corps of Engineers	☒	☐	☐
Coast Guard	☐	☒	☐
DEQ NPS Air Pollution	☐	☒	☐
DEQ NPS Water Pollution	☐	☒	☐
Building	☐	☒	☐
Fish & Wildlife Approval	☐	☒	☐

3 - FEATURES (cont.)

		NO	MAYBE
Agreements (City-County Etc.)	☐	☒	☐
Environmental Assessment	☒	☐	☐
Statewide Assessment	☐	☒	☐
Negative Declaration	☐	☒	☐
Environmental Impact Statement	☐	☒	☐
4-F Statement	☐	☒	☐
Citizen Advisory Committee	☐	☒	☐
Public Hearing ______	☒	☐	☐
Borrow Source	☒	☐	☐
Material Source	☐	☒	☐
Utilities	☒	☐	☐

Type ______

	YES	NO	MAYBE
Hydraulics Study	☒	☐	☐
Soils Investigation	☒	☐	☐
Airport Clearance	☐	☒	☐
Economic Analysis	☐	☒	☐
Requires Field Survey	☐	☐	☒
Old Survey Available	☒	☐	☐
Requires Vicinity Map	☐	☐	☒
Requires Photogrammetry	☐	☒	☐
Requires Reconnaissance Survey	☐	☒	☐
Reconnaissance Available	☐	☒	☐
Design Review	☒	☐	☐

4 - WORK ITEMS

	TO BE PERFORMED BY		
	APPLICANT	STATE	CONSULTANT
PRELIMINARY ENGINEERING	☐	☒	☐
RIGHT-OF-WAY	☐	☒	☐
CONSTRUCTION ENGINEERING	☐	☒	☐

5 - DURATION TIMES (MONTHS)

	FLOAT	ACTIVE
RECONNAISSANCE SURVEY	( )	N/A
DRAFT ENVIRONMENTAL IMPACT STATEMENT	( )	N/A
CORRIDOR APPROVAL	( )	N/A
FIELD SURVEY	(10)	1
PRELIMINARY DESIGN	( )	N/A
DESIGN APPROVAL/FINAL EIS	( )	N/A
RIGHT-OF-WAY DESCRIPTIONS	( )	1
RIGHT-OF-WAY ACQUISITION	( )	6.0
P.S. & E. DOCUMENTS	( )	7.0
RECOMMENDED CONSTRUCTION DATE	1981 (Region)	F 3Q '81 (Salem)

6 - SUGGESTED BASE DESIGN

ITEM	NEW WORK	OVER EXISTING
From survey made in 1975		
Asphaltic Concrete	3.5"	1.5"
Lime or Cement Treated Subgrade	10"	

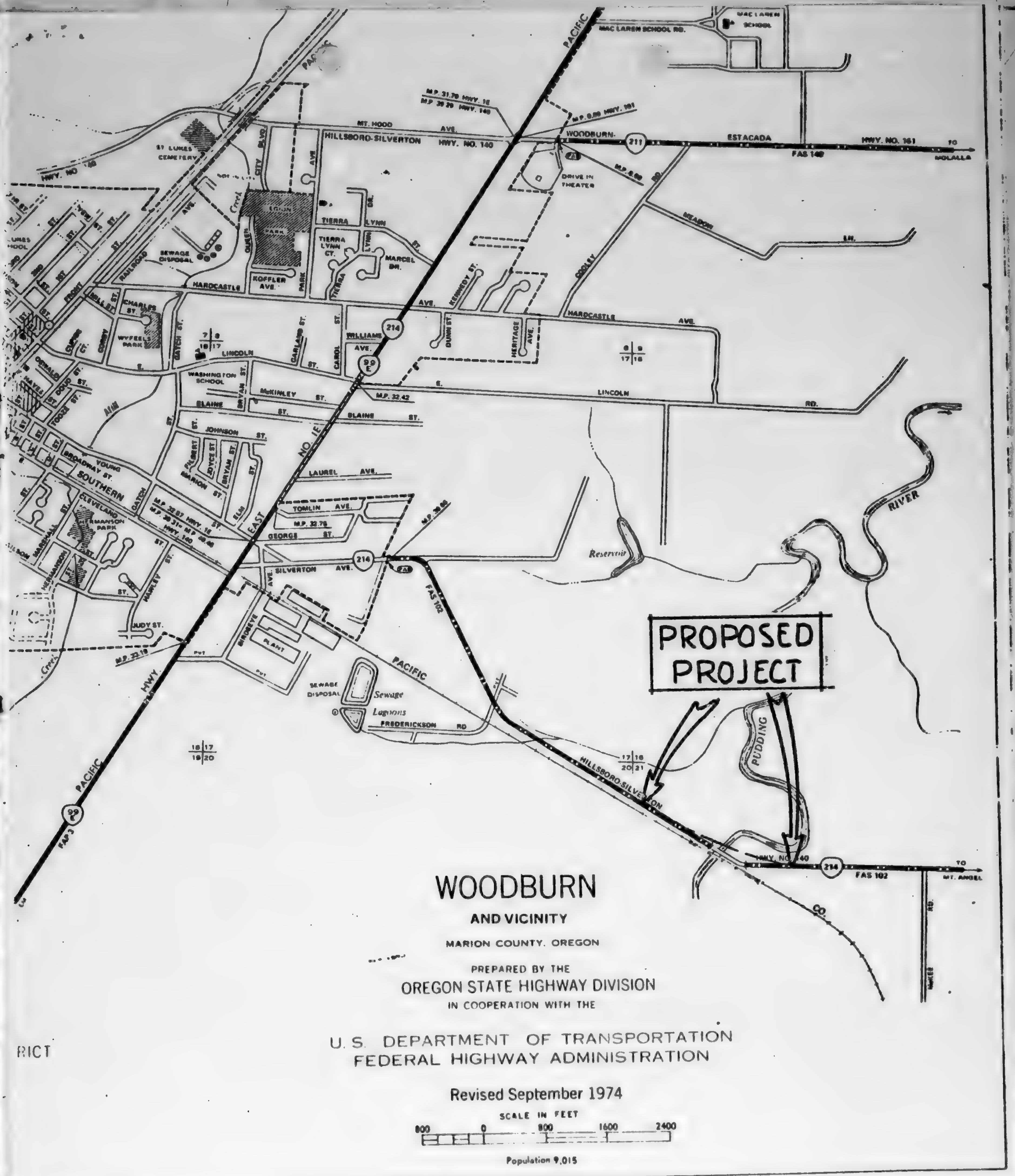
7 - TYPICAL SECTION AND LOCATION

Attach 8½ x 11 inch sheets for general location map and typical section (roadway & structure).

8 - PROJECT COST ESTIMATES

	REGION	SALEM
PRELIMINARY ENGINEERING	$ 6,000	$ 40,000
RIGHT OF WAY		6,500
TRAFFIC CONTROL		
ILLUMINATION		
STRUCTURES		1,444,000
RAILROAD		
ROADWAY		500,000
OTHER ______________		
ENGINEERING & CONTINGENCIES		Incl. Above
PROJECT TOTAL	1,600,000	1,991,400

SUBMITTED BY ______________________________


PACIFIC
MAC LAREN SCHOOL
MAC LAREN SCHOOL RD.
M.P. 31.79 HWY. 1E
M.P. 39.29 HWY. 140
M.P. 0.00 HWY. 161
MT. HOOD AVE.
HILLSBORO-SILVERTON HWY. NO. 140
WOODBURN-ESTACADA HWY. NO. 161
211
FAS 140
TO MOLALLA
ST. LUKES CEMETERY
HWY. NO. 140
DRIVE IN THEATER
M.P. 0.90
MEADOW LN.
COOLEY
SEWAGE DISPOSAL
LEGION PARK
TIERRA LYNN
TIERRA LYNN CT.
MARCEL DR.
HARDCASTLE AVE.
KOFFLER AVE.
KENNEDY ST.
HARDCASTLE AVE.
CHARLES ST.
WYFFELS PARK
GATCH ST.
GARLAND ST.
CAROL ST.
WILLIAMS
214
DUNN ST.
HERITAGE AVE.
99E
LINCOLN
E. LINCOLN RD.
WASHINGTON SCHOOL
McKINLEY ST.
M.P. 32.42
BLAINE ST.
JOHNSON ST.
BRYAN ST.
MARION ST.
LAUREL AVE.
BROADWAY ST.
YOUNG ST.
SOUTHERN
CLEVELAND
HERMANSON PARK
EAST
TOMLIN AVE.
M.P. 32.76
GEORGE ST.
M.P. 32.97 HWY. 1E
M.P. 39.31 = M.P. 39.40 HWY. 140
SILVERTON AVE.
FAS 102
JUDY ST.
BIRDSEYE
PLANT
M.P. 33.18
HWY.
Creek
PACIFIC
SEWAGE DISPOSAL
Sewage Lagoons
FREDERICKSON RD.
Reservoir
RIVER
PUDDING
HILLSBORO-SILVERTON
HWY. NO. 140
214
FAS 102
TO MT. ANGEL
CO.
PACIFIC
FAP 3
RICT

PROPOSED PROJECT

WOODBURN

AND VICINITY

MARION COUNTY, OREGON

PREPARED BY THE
OREGON STATE HIGHWAY DIVISION
IN COOPERATION WITH THE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

Revised September 1974

SCALE IN FEET
800 0 800 1600 2400

Population 9,015

9373

Form FHWA 121 (6/79)

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

THE OREGON DIVISION - Salem
UNITED STATES GOVERNMENT

memorandum

Subject: Oregon Project F-75(-)
Pudding River Bridge
Hillsboro-Silverton Hwy.
Marion County

Date: June 17, 1980

From: G. L. Green, Division Administrator

Reply to Attn. of: HFO.2-OR

To: Mr. G. A. Potter, Manager, Environmental Section, OSHD

NOTED
E. S. HUNTER

The subject project category request submitted with your June 6, 1980, letter has been reviewed.

We concur with your finding that the proposed project should be classified as Category 3, Categorical Exclusion.

The proposed standards, design, and other specific details contained in the project category request will be subject to future reviews at the appropriate stage during project development.

Original Signed By
P. V. RIEDL
Environmental Coordinator
Engineer

G. L. Green

cc:
✓OSHD (E S Hunter, Tech Svcs)
OSHD (Env, Reg II)

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TECHNICAL SERVICES
JUN 1 '80
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FOR

Info	Inves	R/D	D/R	Sign	Ret	

9373

L,

(#2)

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6-5

June 11, 1980

TO Executive Department
Federal Aid Coordination Unit

Mid-Willamette Valley Council of
Governments
200 Senator Bldg.
220 High St. NE
Salem, OR 97301

D E Swan

FROM D. E. Swan
Operation Programming Engineer

SUBJECT Notice of Intent for Federal Aid Funds
State Admin. Dist. No. 3
Section: Pudding River Bridge
Highway: Hillsboro-Silverton Hwy. OR-214
County: Marion

In accordance with Executive Memorandum 02-270-20, attached are copies of the Notices of Intent for the subject project.

Early programming of this project for advance planning in anticipation of future construction is necessary; therefore, your prompt attention to this proposal will be appreciated.

Allowing time for your review, we estimate the date of filing for federal aid funds on this project to be July 14, 1980.

BLG:dmc
Attachments
cc: G. L. Green, FHWA
H. S. Coulter ✓
F. E. Terpin
J. B. Boyd (2)
J. H. Versteeg (3)
Gary Potter
W. J. Hart
Reg. 2 Engr: C.O. Fredrickson
Dis. 3 Engr: R.A. Kuehn
Aeronautics Division
David Powers, Parks
B. L. Gifford

RECEIVED
STATE HWY ENGR

JUN 12 '80

REFER TO

FOR

Info	Inves	R/D	D/R	Sum	Art	File
						✓

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

NOTIFICATION OF INTENT TO APPLY FOR FEDERAL AID

For Internal Use Only	1-8] PNRS #	Page One

02 12] APPLICANT [45: Department of Transportation — 46] DIVISION [79: Highway

03 12] APPLICANT ADDRESS STREET [45: Transportation Building — 46] CITY [60: Salem — 76] ZIP [80: 97310

04 12] CONTACT PERSON [45: D.H. Moehring — 46] AREA CODE [48: 503 — 49] PHONE [55: 378 — 56] EXTENSION [59: 6563

01 12] PROJECT TITLE [71: Pudding River Bridge

11 12] PROJECT LOCATION—CITY: Hillsboro-Silverton Hwy. OR-214 — PROJECT LOCATION—COUNTY: Marion — PROJECT LOCATION [79 SEC: T: R:

SUMMARY PROJECT DESCRIPTION (ATTACH SUPPORTING DOCUMENTS AS NECESSARY—SEE INSTRUCTIONS ON BACK)

05 The proposed project is to replace a functionally obsolete bridge to minimize

06 12] maintenance costs and improve highway safety. To minimize the impacts of [71

07 12] right of way and maintain traffic during construction, only 1 build alternative [71

08 12] is being considered -- to construct the new structure adjacent to the existing [71

09 12] bridge. [71

10 12] [71

12

AMOUNT REQUESTED—FEDERAL FUNDS		NON-FEDERAL MATCHING FUNDS		OTHER	TOTAL
12] (A) Grant [19	20] (B) Other [27	28] (C) State [35	36] (D) Local [43	44] (E) FUNDS [51	52] (F) FUNDS [60
1,362,400	---	237,600	---	---	1,600,000

13 12] TYPE OF OTHER FEDERAL FUNDS (See 12B) [45 — 46] TYPE OF OTHER NON-FEDERAL FUNDS (See 12E) [79

14 12] FEDERAL PROGRAM TITLE [71: Title 23 USC Highways

15 12] FEDERAL AGENCY NAME [45: U. S. Department of Transportation — 46] FEDERAL SUB-AGENCY NAME [79: FHWA

17 **(A) TYPE OF APPLICANT:** (Check (X) the single most applicable box)

STATE ☒ 12 — INTER-STATE ☐ 13 — COUNTY ☐ 14 — CITY ☐ 15 — SCHOOL DISTRICT ☐ 16 — SPECIAL DISTRICT ☐ 17 — COMMUNITY ACTION ☐ 18 — SPONSORED ORGANIZATION ☐ 19 — OTHER ☐ 20

(B) TYPE OF ACTION: (Check (X) as many boxes as apply to this action)

NEW GRANT ☒ 21 — CONT. GRANT ☐ 22 — SUPPL'T GRANT ☐ 23 — INCREASE DURATION ☐ 24 — DECREASE DURATION ☐ 25 — CANCELLATION ☐ 26 — INCREASE DOLLARS ☐ 27 — DECREASE DOLLARS ☐ 28

(C) HAS DISTRICT CLEARINGHOUSE BEEN NOTIFIED? Yes XX 29 No ☐ 30 Date: June 11, 1980

(D) REVIEW REQUIRED by A-95: Yes ☒ 31 No ☐ 32

(E) ENVIRONMENTAL IMPACT: Yes ☐ 33 No XX 34

(F) HOUSING RELOCATION REQUIRED: Yes ☐ 35 No XX 36

(G) ESTIMATED APPLICATION FILING DATE: 41] MONTH [42: July — 43] DAY [44: 14 — 45] YEAR [46: 1980

ADDITIONAL INFORMATION—ALL APPLICANTS

I. A. Is the project consistent with the city or county comprehensive plan, zoning and subdivision ordinance? No ☐ Yes ☒

I. B. Is the proposal consistent with statewide land use goals? No ☐ Yes ☒

I. C. Is the proposal consistent with state and regional plans? No ☐ Yes ☒

II. Will the project have an impact on a neighboring jurisdiction? No ☒ Yes ☐

If so, is the project consistent with the comprehensive plan for that jurisdiction? No ☐ Yes ☐

III. Explain deviations if any, from pertinent plans.

IV. Federal Catalog number (or Public Law no. and title) 20.205 Highway Planning & Construction

V. Has funding agency been notified? No ☐ Yes ☒ Date: June 11, 1980

VI. If project includes state funds (12C), identify agency Highway

STATE AGENCIES ONLY

VIII. (a) IS PROGRAM BUDGETED ☐ NON-BUDGETED ☐

(b) STATE SHARE

GENERAL FUND CASH	OTHER FUND CASH	IN KIND
$	$	$

(c) FUNDING METHOD

	FEDERAL SHARE		STATE SHARE		TOTAL	
First Year	%	$	%	$	%	$
Second Year	%	$	%	$	%	$
Third Year	%	$	%	$	%	$

(d) WILL PROGRAM REQUIRE HIRING OF NEW STATE EMPLOYEES? No ☐ Yes ☐ Number

(e) Will accounting for this grant be administered by the Executive Dept. Accounting Division? Yes ☐ No ☐

PLEASE ATTACH ANY ADDITIONAL NARRATIVE OR REMARKS

This is a Category 3 Project of Categorical Exclusion according to the new environmental quality guidelines.

F-75(-)

OREGON STATE HIGHWAY DIVISION
PROJECT CATEGORY REQUEST

A. Project Identification:

Date

Section Pudding River Bridge

City Hwy. No. 140

Highway Hillsboro-Silverton

Begin M.P. 40.6 Length 0.4

County Marion

Program Estimate $1,600,000

Region 2

Funding Source FA

(Attach Sketch Map)

B. Purpose, Need, and Description of Project (Describe Alternatives):

The proposed project is to replace a functionally obsolete bridge to minimize maintenance costs and improve highway safety. To minimize the impacts of right of way and maintain traffic during construction, only 1 build alternative is being considered -- to construct the new structure adjacent to the existing bridge.

C. Recommended Project Category and Documentation:

Project Category	Documentation
____ 1	Draft and Final EIS
____ 2	Environmental Assessment and Finding of No Significant Impact
X 3	Categorical Exclusion

Other Documentation:

☐ Wetlands Finding

☒ Cultural Resource Survey

☐ Section 106 Procedures

☐ Noise Study Report

☐ Indirect Source Construction Permit

☐ Section 4(f) Determination

Basis for Recommended Category:

A category 3 classification is recommended as no significant impacts to the social, economic or natural environmental have been identified.

D. Descriptions:

Descriptions:	Existing Facility	Proposed Facility
Number of Traffic Lanes	2	2
Median (Yes/No)	No	No
Shoulders (Yes/No, Paved, Gravel)	Gravel	Paved
Average Daily Traffic (Volume/Year)	3500 (1978)	5000
Alignment (New, Combined, Existing)		Combined
Speeds (Posted/Estimated)	55	55

(11-16-79)

E. Preliminary Assessment of Enviromental Impacts:

1. Estimated Right-of-Way Impacts:

Acres	2.5
Estimated Number of Parcels	1
Residential Relocation (No.)	0
Business Relocation (No.)	0

Approximately 2.5 acres of pastureland would be required for right of way. Proposed right of way would be an extension of existing right of way.

2. Estimated Impact on Land Use:

No changes in land use are anticipated as a result of highway construction. The Marion County comprehensive land use plan adopted April 11, 1979, designates this area as rural residential with 1 acre minimum lot size. Improvement of the existing transportation facilities would be compatible with this land use plan.

3. Estimated Impact on Traffic Volumes, Flow, Patterns, and Safety:

No changes in traffic patterns or volumes are anticipated as a result of the proposed project. Traffic flow and highway safety will be improved.

4. Estimated Impact on Rivers, Stream, Wetlands, Rare or Endangered Species or Other Natural Ecological Resources:

The proposed bridge will cross the Pudding River just northerly of the existing structure. Realignment of the approaches will require some fill in the flood plain. No wetlands or rare or endangered species have been identified. No significant impacts to other natural resources are anticipated.

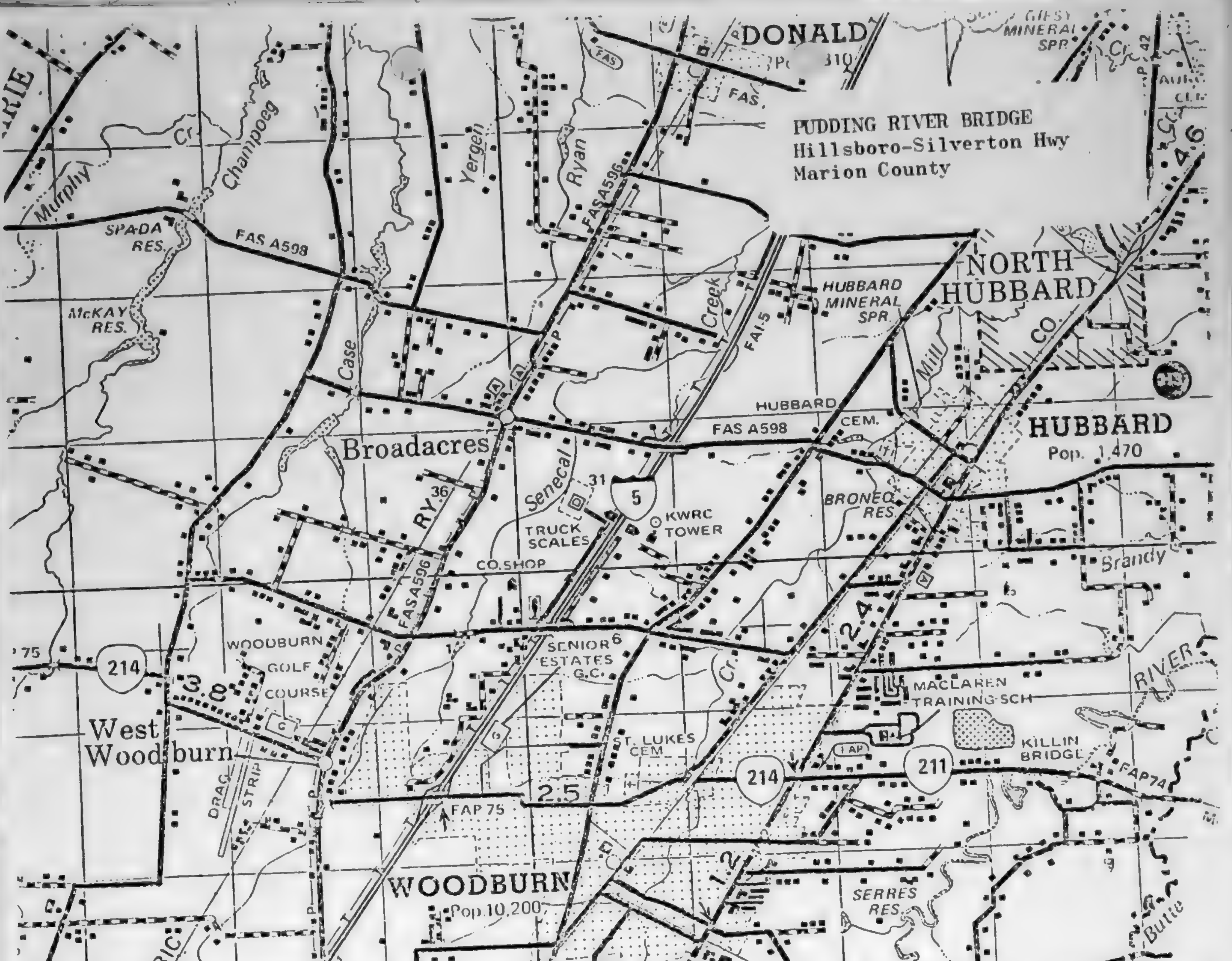
5. Estimated Impact on Parks, Historic Properties, or Other Cultural or Scenic Resources:

A cultural resource survey may be required.

6. Preliminary Identification of Areas of Critical Concern and Controversial Issues:

None identified.

Name of Preparer and Phone Number: Eddie Welsh 378-2626



PUDDING RIVER BRIDGE
Hillsboro-Silverton Hwy
Marion County

DONALD
Pop. 310
GIESY MINERAL SPR.
Murphy Cr
Champoeg
SPADA RES.
FAS A598
McKAY RES.
Yergen
Ryan
FAS A596
Case
Creek
FAI-5
HUBBARD MINERAL SPR.
NORTH HUBBARD
Mill
CO.
4.6
HUBBARD CEM.
HUBBARD
Pop. 1,470
Broadacres
Senecal
KWRC TOWER
TRUCK SCALES
CO. SHOP
BRONEO RES.
Brandy
RY
36
31
5
2.4
214
3.8
WOODBURN GOLF COURSE
West Woodburn
SENIOR ESTATES G.C.
MACLAREN TRAINING SCH
RIVER
KILLIN BRIDGE
ST. LUKES CEM.
211
FAP 74
DRAG STRIP
FAP 75
2.5
1.2
WOODBURN
Pop. 10,200
SERRES RES.
Butte
MORRIS BRI
ELECTRIC
PACIFIC
FAS A576
BELLE PASSI CEM.
FAP 26
FAP 5
6.8
McLOUGHLIN POND
3.4
FAS A594
ST. LOUIS CO PARK
PUDDING
S.P.
GERVAIS
Pop. 820
13.2
MASONIC CEM.
SACRED HEART CEM.
99E
BLUE STAR SAFETY REST AREA
Zollner
SOUTHERN
FAP 26
1,400
ORE. N
122° 55'
122° 50'

9373

4

April 23, 1980

PUB 17

Mr. Karl Eysenbach
City Administrator
City of Mt. Angel
Post Office Box 960
Mt. Angel, OR 97362

copy
Org
names

Dear Mr. Eysenbach:

Your suggestion to name the new bridge over the Pudding River the Leonard Fisher Memorial Bridge for the late Mayor of Mt. Angel is excellent.

Prior to completion of the bridge construction, I will submit a resolution to the Oregon Transportation Commission designating the bridge as the Leonard Fisher Memorial Bridge. Commission approval will constitute the formal designation.

If you desire, the City could furnish a small metal plaque to our contractor who would install it at an appropriate location. A ceremony could be sponsored by the City after construction is completed.

Let me know if you wish to proceed as indicated above.

Sincerely,

H. S. Coulter
State Highway Engineer

HSC:ia

cc Marion County Board of Commissioners

bc F. B. Klaboe
   C. O. Fredrickson
   L. E. George

MARION COUNTY

BOARD OF COMMISSIONERS

COURTHOUSE, SALEM, OREGON, 97301

COMMISSIONERS
Randall Franke, Chairman
Pat McCarthy
Harry Carson, Jr.

EXECUTIVE OFFICER
Harold F. Brauner

LEGAL COUNSEL
Frank C. McKinney

TELEPHONE 588-5212
AREA CODE 503

April 14, 1980

H. S. Coulter
State Highway Engineer
Transportation Building
Salem, Oregon 97310

Dear Mr. Coulter:

With reference to your letter of April 8 concerning naming of the new bridge to be constructed over the Pudding River on Highway 214 between Mt. Angel and Woodburn, please be advised Marion County would have no objection to having the bridge named the Leonard Fisher Memorial Bridge.

We would be pleased to honor the late Mayor of Mt. Angel.

Sincerely,

BOARD OF COMMISSIONERS

Randall Franke

Randall Franke
Chairman

RF:if

cc: Karl Eysenbach

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2.

April 8, 1980

PUB

Marion County Board of Commissioners
Courthouse
Salem, OR 97301

Gentlemen:

9373

It has been proposed by the City of Mt. Angel that when the new bridge is constructed over the Pudding River on Highway 214 between Mt. Angel and Woodburn that it be named the Leonard Fisher Memorial Bridge for the late Mayor of Mt. Angel.

We are intrigued by the proposal, but would like your reaction before taking any action.

Sincerely,

H. S. Coulter
State Highway Engineer

HSC:ia

Enc.

cc Karl Eysenbach

bc F. B. Klaboe
C. O. Fredrickson

THE CITY OF MT. ANGEL

Incorporated April 3, 1893

Area Code 503
Telephone 845-6139

P.O. Box 960

MT. ANGEL, OREGON 97362

April 2,1980

Fred Klaboe
Oregon Department of Transportation
135 Transportation Bldg.
Salem, OR 97310

Dear Sir:

From press accounts I have read that ODOT has approved its five year transportation plan, including in its improvements the Pudding River Bridge on Highway 214 between Mt. Angel and Woodburn. I would like express my thanks on behalf of all the citizens of Mt. Angel for your inclusion of this project.

It has been suggested at the Woodburn Co-ordinating Council that this project be named the Leonard Fisher Memorial Bridge. As you may know, our late mayor was involved for a good many years in trying to see that this bridge become a reality, and I feel that it would be a fitting tribute to his perseverence if ODOT could name this project in honor of him. It is unfortunate that he could not be alive to see its completion.

Please advise me on what steps might be necessary to make this tribute an actuality.

Sincerely yours,

Karl Eysenbach

Karl Eysenbach
City Administrator

Get [illegible] approval. -

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Please answer

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DOT DIRECTOR
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Silverton, OR
Appeal-Tribune
(Cir. W. 4,750)

NOV 29 1979

Allen's P. C. B. Est. 1888

NOTED
H. S. COULTER

Silverton, Mt Angel join forces in battle for highway funds

706

Silverton and Mt. Angel will get together to carry the fight to the State Department of Transportation for replacing the narrow and dangerous bridge over the Pudding River on Highway 214.

Representatives of the two cities have launched their attack a week before the Department of Transportation will be ready.

The Department of Transportation has scheduled a hearing in the Salem Library at 7:30 p.m., next Tuesday for citizen comment on needs for highway repairs and improvements.

Silverton and Mt. Angel have called in Sen. Tony Meeker to arrange advance meetings with Department of Transportation officials to lay groundwork. Meeker says there might be as much as $100 million in reserve, part of which could be used to replace the Pudding River Bridge.

The hearing Tuesday is part of the state's annual preparation for updating the Six Year Plan For Highway Improvements, the official designation of all highway projects in Oregon for funding for the next six years.

Silverton and Mt. Angel have been battling with the Department of Transportation for more than three years to get improvements to the six-mile segment of Highway 214 from Mt. Angel to Woodburn.

The battle has seen minor victories for the Mt. Angel-Silverton coalition. The greatest of those victories is the realignment of the curve where Highway 214 and Monitor-Woodburn Road meet.

The two cities gathered evidence to show that the curve and intersection was among the most hazardous in the state. The Department of Transportation responded by using federal funds designation for correcting traffic hazards to move the roadway to the east, easing the curve and banking the road for safer driving.

The history of the Silverton-Mt. Angel battle with the Department of Transportation goes back about 15 years to when the new Highway 214 was built between the two communities.

At that time the Six Year Plan called for reconstruction of the additional six miles from Mt. Angel to Woodburn. Residents of Silverton, Mt. Angel and Woodburn assumed the job was planned and ready to go. But in intervening years other highway projects in other parts of the state got the money and the Mt. Angel-Woodburn job was never done.

About three years ago community leaders in Silverton and Mt. Angel became concerned again about the highway. They brought representatives from Woodburn into the battle and together they sent their troops to Salem. They held special meetings with Department of Transportation officials, got on the agenda of the Transportation Commission, and sent a force to the hearings on the Six Year Plan.

Their efforts got the highway back onto the plan, but only in segments and only if funding became available.

The bridge over the Pudding River has been a major concern of the two cities. The efforts of the past three years have put the bridge on the Six Year Plan, but only on a "when and if" basis several years down the road.

The joint effort of the two cities is aimed at replacing the old bridge with a new one built on a new alignment to eliminate the curve.

The bridge is narrow and the curve in the middle creates an added hazard, particularly in winter when patches of black ice pock the pavement.

In the last three years at least six cars have run out of control, broken through the wooden railing and plunged into the Pudding River. Two persons have died in those accidents.

Large trucks and mobile homes being hauled from factories in Silverton and Mt. Angel have difficulty on the bridge because it is too narrow.

The Silverton-Mt. Angel task force hopes to draw a mass of residents from the two communities for the Department of Transportation hearing Tuesday evening as a show of force.

"The squeakie wheel gets the grease," said Don Lowe, president of the Silverton Area Chamber of

Allen's P. C. B. Est. 1888

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"The squeakie wheel gets the grease," said Don Lowe, president of the Silverton Area Chamber of Commerce, who has been active in the effort for the last three years.

"We want to make a squeak," he said.

9373

L.

Department of Transportation
HIGHWAY DIVISION
Region 2
2960 E. STATE STREET, SALEM, OREGON 97310 PHONE 378-2626

June 4, 1979

Donald Lowe, President
Silverton Area Chamber of Commerce
PO Box 257
Silverton, OR 97381

Dear Mr. Lowe:

The Pudding River Bridge on the Hillsboro-Silverton Highway, State Highway 214, has been the subject of a number of conversations between the users of the Hillsboro-Silverton Highway and the State Highway Division. The project is not being ignored and has certainly not been forgotten. A survey of the Pudding River Bridge and of the Hillsboro-Silverton Highway between Woodburn and Mt. Angel was made by my field crew several years ago and although no approval of this survey has been received, the information is available should it become possible to proceed on either of these projects.

The news release to which you refer covers only bridges to be built under the Special Bridge Replacement fund which is a special funding category set up for repair or replacement of bridges that are structurally deficient. An assessment of the bridges on the State highway system is made at regular intervals and the condition of these structures is compared with the condition of structures nationwide for a place on the eligibility list for this type of funding. Previous inspections of the Pudding River Bridge have not indicated that this structure was in such a condition as to be eligible for this program. A recent inspection of the structure indicates that it now may be, and it will be submitted as a candidate.

As you may know, our construction program is based upon a list of priorities officially adopted by the Transportation Commission which indicates those projects upon which we will be working for a six-year period. This program will be updated again this fall, and I urge you to discuss this project with your other governmental representatives so that if they feel

6/6 cy Mohring

it is of primary importance in this county, it can be proposed for inclusion in the Six-Year Plan.

I hope this answers the questions you had about the Pudding River Bridge and the conditions under which a project must be included in an improvement program in order to become eligible for funding. We will look forward to seeing you and the county representatives at the Six-Year Highway Improvement Program meetings. The time and place for these meetings will be announced later this summer or early this fall.

Very truly yours,

ORIGINAL SIGNED BY
C. O. FREDRICKSON

C. O. Fredrickson
REGION II ENGINEER

COF/gl
cc: H. S. Coulter ✓
bcc: Fred Klaboe

RECEIVED
STATE HWY ENGR
JUN 5 '79
REFER TO
FOR
Info Inves R/D D/R Sem Act File ✓

Dave,

This project is number 261 in the Green Pages of the Six Year Program book. It is a Federal-aid primary route. It is currently classified in FMS as a NEEDS job - prefix [redacted] PRB0001. [redacted] The sufficiency rating for it is 63.6 last year.

John Wood said it is not on the current list as either deficient or obsolete. He indicated it might be on new list in September.

Walt Hart said even if it were added to the list it would have a low priority when compared to the bridges we plan to replace.

Steve
5-22-79

"SILVERTON, OREGON . . . A BEAUTIFUL PLACE TO LIVE"

Chamber of Commerce

P. O. Box 257, 97381

Phone 873-5615

RECEIVED
STATE HWY ENGR

MAY 22'79

REFER TO
Macdrung

FOR

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		X				

5-22
cy to

May 17, 1979

C. O. Fredrickson
Region Engineer
P. O. Box 30
Salem, OR 97310

Once again, I am writing you on behalf of the Silverton Area Chamber of Commerce, its members, and many interested citizens in the area regarding the Pudding River bridge on State Highway 214 between Mt. Angel and Woodburn.

I was disturbed in reading a news release regarding 19 bridges to be built in Oregon in the next five years. I see that the Pudding River bridge was not on the list. Even more disturbing, it appears that there are projects included that were not in the preliminary six-year highway improvement program dated September 1977 (the latest copy in my files).

The Pudding River bridge project had a high priority and was so identified in the highway improvement program. What has happened? Do we need more testimony? More accidents at the bridge? More deaths, or what? Traffic increases; the bridge deteriorates; the need grows; and we keep seeing this project relegated to the "back burners". It is hard for me to believe that all 19 of the projects listed on the attached reprint represent more serious needs than the Pudding River bridge.

I am sure a delegation from Woodburn, Mt. Angel, and Silverton would be willing to discuss the matter further. May we hear from you?

Donald Lowe

Donald Lowe, President
Silverton Area Chamber of Commerce

DL/2kw4.2B22
Attachment

c: ✓Fred Klaboe
Tony Meeker
Curt Wolfer
Mt. Angel Chamber of Commerce
Woodburn Chamber of Commerce

RECEIVED
DOT DIRECTOR

MAY 21 '79

REFER TO
Rubin

FOR

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Imprint of South Falls, one of the 10 spectacular water cascades in Silver Falls State Park

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Portland, Oregon 97218
[illegible] 288-8311

Branch office:
[illegible] West Fifth
P.O. Box 10246 97440
Eugene, Oregon 97402
[illegible] [illegible]-2151

Western Equipment Co.
[illegible] North 24th St.
P.O. Box 30438
Billings, Montana 59107
[illegible] [illegible]-5500

Branch offices:
[illegible] River Dr.
P.O. Box 2507
Great Falls, Montana 59401
[illegible]-1405

[illegible] Rankin St.
P.O. Box 3387
Missoula, Montana 59807
[illegible]-2660

KOMATSU
KOMATSU AMERICA CORP

Oregon to Replace 19 Bridges

The 1978 Federal Aid Highway Act provides additional Special Bridge Replacement funds to repair the nation's aging bridge system. Spread over several fiscal years, the program will provide Oregon with approximately $35-40 million, with a matching ratio of 80 percent federal and 20 percent local unit of government.

The Oregon Transportation Commission took a major step in advancing the program today by approving 19 bridge replacement projects around the state, spaced over the next six fiscal years. Estimated cost of the 19 projects is $11 million, with the federal government to pay $8.8 million, and the state $2.2 million.

In addition to these 19 projects, there are expected to be about 10 projects on county roads and city streets that are on the federal-aid system. This also does not include the estimated $20 million for the replacement of Salem's Center Street Bridge under another phase of the program.

Under the program, work has already begun on several bridges which badly needed replacement. These include Willow Creek on the Heppner Highway in Gilliam County; Herman Creek, near Cascade Locks, in Hood River County; and Walluski on the Nehalem Highway in Clatsop County.

The projects with anticipated construction year and estimated costs:

Fiscal Year 1979

North and South Fork Coyote Creek, (Gillespie Corners), Territorial Highway, Lane County, $270,000.

Fiscal Year 1980

Hood River (Hood River) Bridge, Mt. Hood Highway (ORE35), Hood River County, $1,600,000;

Suicide Creek Bridge, Coos Bay-Roseburg Highway (ORE42), Douglas County, $100,000;

Kale Creek Bridge, Nehalem Highway (ORE202), Clatsop County, $250,000;

Bear Creek Overflow Bridge, Coquille-Bandon Highway (ORE425), Coos County, $250,000.

Fiscal Year 1981

UPRR and Frontage Road Overcrossing (The Dalles), The Dalles-California Highway (US197), Wasco County, $750,000;

Klamath Straits Bridge, The Dalles-California Highway (US97), Klamath County, $400,000;

Juniper Canyon Bridge, John Day Highway (ORE19), Gilliam County, $100,000;

South Santiam Bridge, Santiam Highway (US20), Linn County, $650,000

Jenny Creek Bridge, Green Springs Highway (ORE66), Jackson County, $200,000;

Ash Creek Bridge, Independence Highway, Polk County, $400,000;

USRS Canal "J" Bridge, Hatfield Highway, Klamath County, $250,000;

Williamson River Bridge, Modoc Point Highway, Klamath County, $500,000.

Fiscal Year 1982

Nehalem River Bridge, Oregon Coast Highway (US101), Tillamook County, $4,000,000;

Shields Creek Bridge, Coos Bay-Roseburg Highway (ORE42), Douglas County, $200,000;

Palmer Creek Bridge, Salem-Dayton Highway, (ORE221), Yamhill County, $500,000.

Fiscal Year 1983

Holmes Creek Bridge, Coos Bay-Roseburg Highway (ORE42), Douglas County, $150,000.

Fiscal Year 1984

Courtney Creek Bridge, Halsey-Sweet Home Highway (ORE228), Linn County, $130,000;

Pony Creek Bridge, Cape Arago Highway, Coos County, $300,000. □

Bellevue Office Park Is $26 Million Job

Narod Development Corporation has announced that it will build a new office park complex in the Overlake area of Bellevue, Washington.

Narod president, J. David Mooney, states: "Construction is planned to commence this May on the $26 million 'Narod Center'. To be built in phases on the 20 acre site, the first two-story structure will total some 56,000 sq. ft. of prestige office space and restaurant annex. We plan completion of the first phase of the total 320,000 sq. ft. project by the fall of 1979."

Natural cedar siding and shake roofing will blend the structures into the green belt and surrounding parkland setting of The Center.

The location, near the 148th Avenue Northeast interchange of the 520 Freeway, offers some excellent views towards the Bellevue business district, Lake Washington and Seattle. □

Riedel Is Director of Beavers

Willamette-Western Corporation President Arthur A. Riedel has been elected to the Board of Directors of the "Beavers," a national honorary organization composed of construction industry members.

The group promotes the competitive contract system as the cornerstone of the construction industry and espouses a philosophy of practical, ethical business principles.

Riedel heads a Portland company,

9373

November 28, 1978

Mr. Ivo Bauman, Chairman
Chamber of Commerce Highway Committee
Post Office Box 406
Mt. Angel, OR 97362

Dear Mr. Bauman:

Thank you for your comments concerning our recent work north of Mt. Angel--it is always gratifying to receive compliments.

COPIED 21-3
CON 4
PUB 7

The new Highway Bill was passed by Congress and signed by the President earlier this month. The bill, as we discussed last August, was drastically reduced by the Conference substitute and there are not enough funds to provide for reconstructing the Pudding River Bridge.

Oregon received an additional $2 million for construction on federal-aid primaries. This is a step in the right direction, but these days this amount doesn't go very far. We will continue to do all we can to maintain Oregon's highway system.

Thank you again for your interest.

Sincerely,

F. B. Klaboe, Assistant
Director for Operations

bc: H. S. Coulter
E. S. Hunter
D. H. Moehring

DES:dmc srm

MT. ANGEL
TELEPHONE COMPANY

P.O. BOX 406 • MT. ANGEL, OREGON 97362 • AC 503 845-2291

LEONARD F. HUDSON
President

IVO BAUMAN
Vice-Pres., Manager

November 6, 1978

Mr. Fred Klaboe, Director
Transportation Department
Highway Building
Salem, Oregon

The residents of the Mt. Angel-Silverton area want to express our appreciation for the outstanding repair job your people have completed in the area just north of Mt. Angel. We recognise that you are doing an outstanding job with limited resources.

At the time you visited here last August you mentioned that, if a certain Bridge Bill passed Congress, we could anticipate funds for the Pudding River bridge. Did this bill pass Congress?

At different times there has also been conversation on the possibility of getting additional federal funding for Oregon primary highways. Did the recent Congress do anything to bolster our state highway funds?

Hope you have a good election day!

Sincerely,

Ivo J Bauman

Ivo Bauman, Chairman
Chamber of Commerce Highway Committee

PROJECT MANAGEMENT
PME ☑ CCE ☑ OM ☐
LGE ☐ [✓ FAE ☐] OPE ☐
NOV 17 1978
File: PM FA
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Bug handle letter

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1981 Sylvan Intchge.-Vista 9374
Ridge Tunnel Sec. of the Sunset
Hwy. (Paving, Guard Rail & Barrier)

9-374

jc

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. F-27-2(26)

2. STATE PROJECT NO.

3. FROM

Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 50087

2A. COUNTY NAME Multnomah and Washington

6. TO

7-4-87

Mr. L. W. Rulien
State Highway Engineer
102 Transportation Building
Salem, Oregon 97310

7. DATE AUTHORIZATION EFFECTIVE July 7, 1987

8. FEDERAL ROUTE NUMBER FAP 27

9. STATE ROUTE NUMBER 47

10. GENERAL LOCATION:

Sylvan Intchge - Vista Ridge (Zoo Intchge)

11. GENERAL DESCRIPTION OF WORK

Program Change

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY

☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION

☐ ACQUISITION OF RIGHT-OF-WAY

☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS

☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

☒ OTHER *(Specify)* Program Change
See Below

13. REMARKS

As requested in Mr. Potter's letter of 7/1/87 we approve the revised Preliminary Engineering costs to a TEC of $358,450; Federal Funds $315,973.

(Increase TEC $162,520; Federal Funds $143,261)

RECEIVED
STATE HWY ENGR

JUL 15 '87

REFER TO Potter

FOR

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Orig to
7/15

14. DATE 7/14/87

15. SIGNATURE OF APPROVING OFFICIAL John T. Price

16. TITLE For Division Administrator

FORM PR-1240
(Rev. 12-79)

PREVIOUS EDITIONS MAY BE USED

9372

NEIL GOLDSCHMIDT
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6-2

Date: July 1, 1987

To: Dale E. Wilken
Division Administrator
Federal Highway Administration

ORIGINAL SIGNED BY
GARY A. POTTER

From: Gary A. Potter, Manager
Program Section

Subject: Project No. F-27-2(26)
Sylvan Intchge.-Vista Ridge (Zoo Intchge.) Section
Multnomah & Washington Counties

I request approval to adjust the estimated preliminary engineering costs to reflect more accurately the scope of work, based on the attached justification.

The preliminary engineering costs are $522,095.

Approval of this request will involve revisions in financing as indicated on the enclosed copies of a revised project agreement estimate and modification of project agreement (PR-2A).

DDB:me
Attachments
cc: Paul Singer
Region 1
General Files

Form 734-3122 (1-87)

9374

Form Approved: OMB No. 2125-0529
Exp. Date 8/31/85

TO BE COMPLETED BY FHWA MONTHLY TRANSACTION NUMBER 10-18 PROJECT REPORT NUMBER MODIFICATION NUMBER 2	U.S. Department of Transportation Federal Highway Administration **MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT** 10-1-86	State OREGON County MULTNOMAH Project Number F-27-2(10)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 9, 1981, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 2,496,197	$ 2,444,027
Federal funds	$ 2,201,146	$ 2,155,143
Other revisions		

This modification is made for the following reasons: To release federal funds for use on other projects.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 1 ST day of OCT, 1986

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Manager, Program Section
(Title)

BX FOR: Larry Rulien

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 7-83)

Previous editions are obsolete

Gen Files

Oregon State Highway Division
Salem, Oregon September 22, 1986

Federal-Aid Project No. F-27-2(10)

SYLVAN INTCHGE.-VISTA RIDGE TUNNEL SECTION
SUNSET HIGHWAY
MULTNOMAH COUNTY

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6201
ROADWAY

ITEM	UNIT PRICE	ORIGINAL QUANTITY	ORIGINAL AMOUNT	REVISED QUANTITY	REVISED AMOUNT
Class "B" Asphalt Concrete Mixture	$14.00	32,000	$448,000.00	28,273.58	$395,830.00
SUBTOTAL			$448,000.00		$395,830.00

Decrease(-)	$ 52,170.00
SUBTOTAL from estimate of June 1, 1982	2,253,314.00
Subtotal	$ 2,201,144.00
Engineering	251,398.00
Total	$ 2,452,542.00
Salvage Guardrail (-)	8,515.00
TOTAL	$ 2,444,027.00

WORK RETAIN IN PROGRAM

Police Traffic Control Force Order	All Required	$ 10,000.00
Replace Traffic Damage Traffic Control Device	All Required	50,000.00

Length of Project -------------- 2.479 miles

Cost of Roadway Per Mile ------- $985,892.30

SUMMARY OF FUNDS

Description	Appn Code	Pro-Rata	Total Cost	Federal Funds	State Funds
Roadway	010	88.18%	$2,444,027	$2,155,143	$288,884

Sub Job010: 0%; SubJob 011: 100%
Contract No. C09374
Prefix: C026-1912
Prefix: C026-1019

DDB:pf

9374

L.

TO BE COMPLETED BY FHWA	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State Oregon
MONTHLY TRANSACTION NUMBER 6-79	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	County Multnomah
PROJECT REPORT NUMBER	6882	Project Number F-27-2(10)'
MODIFICATION NUMBER		

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 9, 19 81, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 2,254,073.00	$ 2,496,197.00
Federal funds	$ 1,987,641.00	$ 2,201,146.00
Other revisions		

This modification is made for the following reasons: to include increase in construction costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 8th day of June, 19 82.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By ______________________

Program Management Engineer
(Title)

XXX For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By ______________________

____
(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By ______________________
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-76)

Previous editions are obsolete

Gen. File

Oregon State Highway Division
Salem, Oregon June 1, 1982

Federal-Aid Project
No. F-27-2(10)

Sylvan Intchge.-Vista Ridge Tunnel Section
Sunset Highway
Multnomah County

REVISED PROJECT AGREEMENT ESTIMATE

Roadway (Sta. "TEB" 41+49 to Sta. 174+01.79)

Subtotal of previous estimate of October 7, 1981 $2,011,190.00

Previous Estimate

Cold Plane Pvt. Removal	5,100 Sq. Yd.	4.00	$ 20,400.00
Class "B" Asphalt Conc. Mix	32,100 Ton	14.00	448,000.00
Asphalt Cement in Mixture	2,600 Ton	165.00	429,000.00
Steel Sheet Piling	3,024 Lin. Ft.	27.00	81,648.00
Early Set Concrete	215 Cu. Yd.	90.00	19,350.00
			$ 998,398.00

Revised Estimate

Cold Plane Pvt. Removal	7,892 Sq. Yd.	4.00	$ 31,568.00
Class "B" Asphalt Conc. Mix	32,472 Ton	14.00	454,608.00
Asphalt Cement in Mixture	2,625 Ton	165.00	433,125.00
Steel Sheet Piling	7,805 Lin. Ft.	27.00	210,735.00
Early Set Concrete	255 Cu. Yd.	90.00	22,950.00
General Excavation (P.A. #6)	2,654 Cu. Yd.	9.00	23,886.00
Cement Treated Base (P.A. #6)	2,465 Ton	12.00	29,580.00
Slope Aggr. for Uncurbed Section (P.A. #6)	1,648 Ton	15.00	24,720.00
Cement in Treated Base (P.A. #6)	110 Ton	85.00	9,350.00
			$1,240,522.00
		Increase	$ 242,124.00
		SUBTOTAL	2,253,314.00
		Engineering	251,398.00
		TOTAL	$2,504,712.00
		Salvage Guard Rail	8,515.00
		TOTAL	$2,496,197.00

Work Retained in Program Status

Police Traffic Control Force Order	All Required	$	10,000.00
Replace Traffic Damage Traffic Control Device	All Required		50,000.00

Length of Project	2.479 mi.
Cost of Roadway Per Mile	$1,006,937.07

Federal Funds	$2,201,146.00
State Funds	295,051.00
TOTAL	$2,496,197.00

Group 1	100%
Contract No.	9374
Prefix:	26-1912
Prefix:	26-1019

9374

STATE COPY

L,

.TO BE COMPLETED BY FHWA

10-98

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

FEDERAL-AID PROJECT AGREEMENT

10/9/81

STATE Oregon

COUNTY Multnomah

PROJECT NO. F-27-2(10)

The State, through its Highway Agency, having complied, or hereby agreeing to comply, with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) the Regulations issued pursuant thereto and, (3) the policies and procedures promulgated by the Federal Highway Administrator relative to the above designated project, and the Federal Highway Administration having authorized certain work to proceed as evidenced by the date entered opposite the specific item of work, Federal funds are obligated for the project not to exceed the amount shown herein, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends only to project costs incurred by the State after the Federal Highway Administration authorization to proceed with the project involving such costs.

PROJECT TERMINI

Sylvan Intchge.-Vista Ridge Tunnel

PROJECT CLASSIFICATION OR PHASE OF WORK	EFFECTIVE DATE OF AUTHORIZATION	APPROXIMATE LENGTH *(Miles)*
HIGHWAY PLANNING AND RESEARCH (HP & R)		
PRELIMINARY ENGINEERING		
RIGHTS-OF-WAY		
CONSTRUCTION	9-2-81	2.479

OTHER *(Specify)*

FUNDS PRO RATA 88.18%

ESTIMATED TOTAL COST OF PROJECT $2,254,073.00	FEDERAL FUNDS $1,987,641.00

The State further stipulates that as a condition to payment of the Federal funds obligated, it accepts and will comply with the applicable provisions set forth on the reverse hereof.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Exec. Asst. to State Hwy. Engr.
(Title)

XX By For: H.S. Coulter

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Date executed by Division Administrator OCT 9 1981

FORM PR-2 (REV. 10-75) PREVIOUS EDITIONS ARE OBSOLETE

AGREEMENT PROVISIONS

1. RESPONSIBILITY FOR WORK

a. Except for projects constructed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in compliance with the approved plans and specifications or project proposal which, by reference, are made a part hereof.

b. With regard to projects performed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in accordance with the terms of its approved Certification, or exceptions thereto as may have been approved by the Federal Highway Administration.

2. HIGHWAY PLANNING AND RESEARCH (HP&R) PROJECT. The State highway agency will (a) conduct or cause to be conducted, under its direct control, engineering and economic investigations of projects for future construction, together with highway research necessary in connection therewith, pursuant to the work program approved by the Federal Highway Administration and (b) prepare reports suitable for publication of the result of such investigations and research, but no report will be published without the prior approval of the Federal Highway Administration.

3. PROJECT FOR ADVANCE ACQUISITION OF RIGHTS-OF-WAY. In the event that actual construction of a road on this right-of-way is not undertaken by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

4. PRELIMINARY ENGINEERING PROJECT FOR PREPARATION OF RIGHT-OF-WAY PLANS OR FOR PREPARATION OF CONSTRUCTION PLANS, SPECIFICATIONS AND ESTIMATES. In the event that right-of-way acquisition for, or actual construction of the road for which this preliminary engineering is undertaken is not started by the close of the fifth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

5. INTERSTATE SYSTEM PROJECT. (a) The State highway agency will not add or permit to be added, without the prior approval of the Federal Highway Administration any points of access to, or exit from, the project in addition to those approved in the plans and specifications for the project. (b) The State highway agency will not permit automotive service stations, or other commercial establishments for serving motor vehicle users, to be constructed or located on the right-of-way of the interstate system. (c) The State highway agency will not after June 30, 1968, permit the construction of any portion of the Interstate Route on which this project is located, including spurs and loops, as a toll road without the written concurrence of the Secretary of Transportation or his officially designated representative. The term 'toll road' does not include toll bridges or toll tunnels.

6. PROJECT FOR CONSTRUCTION IN ADVANCE OF APPORTIONMENT. (a) This project authorized pursuant to 23 U.S.C. 115 as amended, will be subject to all procedures and requirements, and conform to the standards applicable to projects on the system on which located, financed with the aid of Federal funds. (b) No obligation of previously apportioned Federal funds is created by this agreement, its purpose and intent being to provide that, upon application by the State highway agency, and approval thereof by the Federal Highway Administration, any Federal-aid funds of the class designated by the project number prefix, apportioned to the State under 23 U.S.C. 104 subsequent to the date of this agreement, may be used to reimburse the State for the Federal share of the cost of work done on the project.

7. STAGE CONSTRUCTION. The State highway agency agrees that all stages of construction necessary to provide the initially planned complete facility, within the limits of this project, will conform to at least the minimum values set by approved AASHTO design standards applicable to this class of highways, even though such additional work is financed without Federal-aid participation..

8. BOND ISSUE PROJECT. Construction, inspection and maintenance of the project will be accomplished in the same manner as for regular Federal-aid projects. No present or immediate obligation is created by this Agreement against Federal funds, its purpose and intent being to provide aid to the State, as authorized by 23 U.S.C. 122, for retiring maturities of the principal indebtednesss of the bonds referred to below. When the State requests Federal reimbursement to aid in the retirement of such bonds, the request will be supported by the appropriate certification required by 23 CFR Part 140, Subpart F, and Volume 1, Chapter 4, Section 8 of the Federal-Aid Highway Program Manual or the alternative State procedure set forth in the State's Certificate, and payment of the authorized Federal share will be made from appropriate funds available. If in any year there is no unobligated balance of any apportioned Federal funds available from which payments hereunder may be made, there will be no obligation on the part of the Federal Government on account of bond maturities for that year. Funds available to the highway agency for this project are the proceeds of bonds issued by the governmental unit indicated on the attached tabulation, pursuant to the authority and in the amounts by date of issue and beginning date of maturities set forth therein.

9. SPECIAL HIGHWAY PLANNING AND RESEARCH PROJECT. The State Highway agency hereby authorizes the Federal Highway Administration to charge the State's pro rata share of costs incurred against funds apportioned to the State under 23 U.S.C. 307 (c), as amended. In the event a project is financed with both Federal-aid funds and State matching funds, the State agrees to advance to The Federal Highway Administration the State matching funds for its share of the estimated cost. For a National Pooled Fund study, the State hereby assigns its responsibility for the work to the Federal Highway Administration. For an Intra-Regional Cooperative Study, the State hereby assigns its responsibility for the work to the lead State for the study.

10. PARKING REGULATION AND TRAFFIC CONTROL. The State highway agency will not permit any changes to be made in the provisions for parking regulations and traffic control as contained in the agreement between the State and the local unit of Government referred to in the paragraph on "Additional Provisions," without the prior approval of the Federal Highway Administration, unless the State determines, and the Division Administrator concurs, that the local unit of Government has a functioning traffic engineering unit with the demonstrated ability to apply and maintain sound traffic operations and control.

Oregon State Highway Division
Salem, Oregon October 7, 1981

Federal Aid Project
No. F-27-2(10)

Sylvan Intchge.-Vista Ridge Tunnel Section
Sunset Highway
Multnomah County

PROJECT AGREEMENT ESTIMATE

Type Code 6201
Roadway (Sta. "TEB" 41+49 to Sta. 174+01.79)

Mobilization		All Required	$ 35,000.00
Temporary Protection and Direction of Traffic		All Required	40,000.00
Temporary Signs	707 Sq. Ft.	4.00	2,828.00
Temporary Barricades	4 Each	60.00	240.00
Temporary Plastic Safety Markers	350 Each	10.00	3,500.00
Flagmen	2,400 Hour	10.00	24,000.00
Sequential Arrow Signs	4 Each	1,500.00	6,000.00
Neon Advance Warning Signs	2 Each	8,000.00	16,000.00
Portable Changeable Message Signs	2 Each	32,000.00	64,000.00
Removal of Structures and Obstructions		All Required	30,000.00
Cold Plane Pavement Removal	5,100 Sq. Yd.	4.00	20,400.00
Trench Excavation	1,257 Cu. Yd.	16.00	20,112.00
Granular Backfill	845 Cu. Yd.	14.00	11,830.00
Aggregate Shoulders	50 Ton	30.00	1,500.00
Class "B" Asphalt Concrete Mixture	32,000 Ton	14.00	448,000.00
Class "C" Asphalt Concrete Mixture in Leveling	9,000 Ton	14.00	126,000.00
Asphalt Cement in Mixture	2,600 Ton	165.00	429,000.00
Membrane Waterproofing	5,430 Sq. Yd.	8.00	43,440.00
Asphalt in Tack Coat	65 Ton	220.00	14,300.00
Steel Sheet Piling	3,024 Lin. Ft.	27.00	81,648.00
12-inch Sewer Pipe	3,005 Lin. Ft.	8.00	24,040.00
15-inch Sewer Pipe	610 Lin. Ft.	10.00	6,100.00
18-inch Sewer Pipe	50 Lin. Ft.	30.00	1,500.00
Extra for Pipe Under Pavement	3,665 Lin. Ft.	12.00	43,980.00
Early Set Concrete	215 Cu. Yd.	90.00	19,350.00
Concrete Manholes	6 Each	1,500.00	9,000.00
Drop Manholes	1 Each	5,000.00	5,000.00

Concrete Inlets, Type G-[illegible]	22 Each	500.00	11,000.00
Guard Rail, Type 2A	7,488 Lin. Ft.	4.00	29,952.00
Guard Rail, Type 3	300 Lin. Ft.	12.00	3,600.00
Guard Rail Anchors, Type 1	16 Each	300.00	4,800.00
Extra for Guard Rail Bridge Connections	6 Each	300.00	1,800.00
Rail End Pieces, Type B	8 Each	50.00	400.00
Rail End Pieces, Type C	7 Each	150.00	1,050.00
Concrete Curbs	12 Lin. Ft.	30.00	360.00
Concrete Islands	20 Cu. Yd.	120.00	2,400.00
Concrete Barrier	13,138 Lin. Ft.	20.00	262,760.00
Concrete Barrier, Non Standard	50 Lin. Ft.	60.00	3,000.00
Adjusting Manholes	58 Each	200.00	11,600.00
Adjusting Inlets	88 Each	200.00	17,600.00
Adjusting Boxes	23 Each	100.00	2,300.00
Mono-Direction Crystal Type 1 Markers	1,300 Each	4.00	5,200.00
White Type 2 Markers	5,200 Each	2.50	13,000.00
			$1,897,590.00

Anticipated Items		
Permanent Pavement Striping	All Required	$ 7,000.00
Temporary Pavement Striping	All Required	10,000.00
Asphalt Cement Adjustment	All Required	95,000.00
On-the-Job Trainees (2-2,000 hr. X $0.80)	All Required	1,600.00
		$ 113,600.00
	SUBTOTAL	$2,011,190.00
	Engineering	251,398.00
	TOTAL	$2,262,588.00
Salvage Guard Rail	All Required	(8,515.00)
	TOTAL	$2,254,073.00

Work Retained in Program Status		
Police Traffic Control Force Order	All Required	$ 10,000.00
Replace Traffic Damage Traffic Control Device	All Required	50,000.00

Length of Project -------------- 2.479 miles
Cost of Roadway Per Mile -------$912,701.89

Federal Funds (88.18%)----------$1,987,641.00
State Funds -------------------- 266,432.00
TOTAL $2,254,073.00

Group 1	100%
Contract No.	9374
Prefix:	26-1912 (PE) 26-1019 (Const.)

Sylvan Intchge.-Vista Ridge Tunnel Section
Sunset Highway
Multnomah County

State Responsibility (Non Participating Items)

State Responsibility for Damages	All Required	$	10,000.00

937

STATE COPY

U.S. Department of Transportation
Federal Highway Administration

FINAL ACCEPTANCE REPORT

REGION NO. 10	REPORT NO. 3	COUNTY Multnomah	DIVISION Oregon
DATE OF REPORT 5-24-85	REPORT MADE BY T. P. Lowe, Area Engineer		PROJECT NO. F-27-2(10)
COMPLETION DATE (Actual) 6-7-82	ACCEPTANCE DATE BY CONRTACT AGENCY July 24, 1984	TIME ELAPSED 50 %	CONTRACT TIME 300 Calendar Days

LOCATION
Sylvan Interchange - Vista Ridge Tunnel Section, Sunset Highway

The FHWA-47, Statement of Materials and Labor Used by Contractors on Highway Construction Involving Federal Funds, has been submitted. (Projects over $500,000)
A copy of the State's materials certificate is attached to the Division office copy of this report.
There is compliance with section 1.23 of the Regulations pertaining to encroachments on the right-of-way.

REMARKS: *The project has been completed in reasonably close conformity with the approved plans and specifications including authorized changes and extra work.*

SYLVAN INTERCHANGE - VISTA RIDGE TUNNEL SECTION
SUNSET HIGHWAY
Grading and Paving

This project provided for median drainage, barrier, and paving of the subject section of the highway.

The final cost of $2,440,003.00 underran the original authorization by five percent.

- TPL -

NOTED
W. E. SCHWARTZ

Cy
6/3

RECEIVED
STATE HWY ENGR
MAY 31 '85
REFER TO
Fredrickson
FOR

Info	Inves	R/D	D/R	Sign	Act	File

ACCEPTANCE OF PROJECT IS RECOMMENDED		ACCEPTED BY FEDERAL HIGHWAY ADMINISTRATION	
SIGNATURE Original Signed by T. P. LOWE		SIGNATURE Original Signed by G. K. HOSSNER Field Operations Engineer	
TITLE Area Engineer	DATE MAY 29 1985	TITLE Field Operations Engineer	DATE MAY 30 1985

FORM FHWA 1446B (Rev. 2-84) PREVIOUS EDITIONS MAY BE USED.

9374

November 19, 1984

Industrial Indemnity Company
421 SW Sixth Avenue
Portland, OR 97204

CON 5
#9374

Gentlemen or Ladies:

On October 19, 1984, we notified you of the final contract amount on Contract No. 9374 with R. A. Hatch Company for work on the Sylvan Interchange-Vista Ridge Tunnel Section of the Sunset Highway in Multnomah County. In that letter we stated the final contract amount was $2,156,176.71. This amount was incorrect and should have been $2,156,176.31. The force account amount remained the same of $53,394.67.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

cc: R. A. Hatch Co.
PO Box 6179
Bend, OR 97708

Corroon & Black of Oregon
PO Box 8699
Portland, OR 97207

bc: C. O. Fredrickson
Walt Hart
E. L. Hardt

FKN:kjm

9374

t

October 19, 1984

Industrial Indemnity Company
421 SW Sixth Avenue
Portland, OR 97204

CON 5
#9374

Gentlemen or Ladies:

On October 4, 1984, we wrote to you concerning release of final payment on Contract No. 9374 awarded to R. A. Hatch Co. for work on the Sylvan Interchange-Vista Ridge Tunnel Section of the Sunset Highway in Multnomah County.

The total contract amount is $2,156,176.71 including $53,394.67 for work performed under force account.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

kjm
cc: R. A. Hatch Co.
PO Box 6179
Bend, OR 97708

Corroon & Black of Oregon
PO Box 8699
Portland, OR 97207

bc: C. O. Fredrickson
Walt Hart
E. L. Hardt

9374

REPORT OF ACTION UNDER DELEGATED AUTHORITY BY

ASSISTANT STATE HIGHWAY ENGINEER

10-3-84

On behalf of the Commission and under delegated authority, the following contracts were accepted as being completed according to specifications:

Contractor and Contract No.	Section and County	Acceptance Date
Douglas S. Coats, Inc. Contract No. 9376	Elgin Section Union County	9/17/84
Fabricators, Inc. Contract No. 9522	Clackamas Rd.-Oatfield Rd. Clackamas County	9/25/84
R. A. Hatch Co. Contract No. 9374	Sylvan Intch.-Vista Ridge Tunnel Multnomah County	9/25/84
Eterna-Line Corp. Contract No. 9412	City of Salem Pavement Markins Marion County	9/25/84
Stach Const. Co., Inc. Contract No. 9716	Trail Creek Bridge Jackson County	9/26/84
R. A. Hatch Co. Contract No. 9747	SW Hood Ave.-SW Terwilliger Ave. Multnomah County	9/26/84
Fabricators, Inc. Contract No. 9486	Chemawa Rd.-Greenwood Dr. Marion County	9/28/84
Dan D. Allsup Const. Contract No. 9616	Devils Punch Bowle Park Slide Lincoln County	9/28/84
Cherry City Electric, Inc. Contract No. 9699	Santiam Hwy. @ Wheeler St.(Lebanon) Linn County	9/28/84

EXPENDITURE RECAP

	ABOVE PROJECTS	FY TO DATE
Original Authorization	$5,670,184.67	$28,305,979.82
Anticipated Costs	$6,197,734.69	$31,387,775.21
% Overrun (Underrun)	+9.3%	+10.9%

October 3, 1984

W. E. Schwartz, P.E.
Asst. State Highway Engineer

9374

[illegible]104
LEG N

STATE OF OREGON

INTEROFFICE MEMO X-File = 47

[redacted]

TO: E. L. Hardt
C. O. Fredrickson
L. E. George

DATE: ~~July 25, 1984~~
8-20-84

FROM: Don
Donald L. Trout
Final Project Coordinator

SUBJECT: Litigation Relating to an Accident on
Sylvan Intchg-Vista Ridge Tunnel
Contract No. 9374
Sunset Highway
Multnomah County

6
CSH MRE OE OPM CE
TCS RECEIVED ME
US AUG - 8 1984 PDM
CSA Metro Region TAM
SO PA EM BUD LM

Attached is a letter from our attorney, Mr. John C. McLean, requesting the "complete file" of information relating to this construction project. The accident as I understand happened in the eastbound lanes approximately 1/2 mile west of the Sylvan Exit.

Please gather any and all records, correspondence, photos, diaries, etc. on this construction project. You may send this to me in Room 200 of the State Transportation Building and I will get all of it to the attorneys. Please send it to me by August 6, 1984.

DLT:bn
Atch.

m cc: R. L. Schroeder - This accident probably does not involve Maintenance, but if you do have anything please send it to me.

Rec'd - Const Files
Traffic "
Maint. reply
General files
Spec's work files
Road Design files

8/9/84
DISCUSSED WITH HARWOOD -
NOTIFIED TROUT THAT FILES WERE
AVAILABLE IN BARTEL'S OFFICE AND
REGION OFFICE FOR REVIEW BY PLAINTIFFS
ATTNY.

Aug 20, 1984
Don Trout
I talked to McLean and he
agreed would be better to leave
project and region records
at Bartels office and here
in Milwaukie. He will advise
[illegible] Attorney & locate.
D. Harwood

81-125-1387

STATE OF OREGON
ROAD DESIGN SECTION

INTER OFFICE MEMO
LEG

DATE: August 9, 1984

TO: John C. McLean
Assistant Attorney General

FROM: Donald L. Trout
Final Project Coordinator

SUBJECT: Schwab v. R. A. Hatch Co, et al
Multnomah County Cir Ct No. A8405-02910
Claim No. 125-073-L13463
Sylvan Interchange-Vista Ridge Tunnel Sec.
Sunset Highway
Multnomah Co.
Contract No. 9374

In response to your request dated July 6, 1984 to Mr. Jack Sollis, here are the following records:

2 ea	Contract & Bond for Highway Construction
6 ea	Contract Plans "As Constructed"
1 ea	Standard Specifications 1974
1 ea	Folder Specifications files
1 ea	Letter from Maintenance Section
1 ea	Folder Road Design Office files
1 ea	Bundle Construction Office Records
1 ea	Folder Traffic Section files
1 ea	Folder General Files Correspondence

The Metro Region office will contact you directly regarding the inspection of the records they have.

When you are through with the material we are sending, please return it to me for return to the appropriate offices.

DLT:bn
Encls. (one box)

cc: E. S. Hunter
Jack Sollis
E. L. Hardt

RECEIVED
STATE HWY ENGR
AUG 9 '84
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

9371

STATE OF OREGON

INTEROFFICE MEMO

TO:
E. L. Hardt
C. O. Fredrickson
L. E. George

DATE: July ~~25~~ 26, 1984

FROM:
Donald L. Trout Don
Final Project Coordinator

SUBJECT:
Litigation Relating to an Accident on
Sylvan Intchg-Vista Ridge Tunnel
Contract No. 9374
Sunset Highway
Multnomah County

Attached is a letter from our attorney, Mr. John C. McLean, requesting the "complete file" of information relating to this construction project. The accident as I understand happened in the eastbound lanes approximately 1/2 mile west of the Sylvan Exit.

Please gather any and all records, correspondence, photos, diaries, etc. on this construction project. You may send this to me in Room 200 of the State Transportation Building and I will get all of it to the attorneys. Please send it to me by August 6, 1984.

DLT:bn
Atch.

cc: R. L. Schroeder - This accident probably does not involve Maintenance, but if you do have anything please send it to me.

7/26/84
cc: Don Trout ✓ - Both Maintenance and Legal have checked files for possible accident/incident reports and find nothing.

Versteeg
Anderson
Adams
Macnab
Edwards
Terpin
Trout ✓
Wakerlig

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JUL 26 1984
ROAD DESIGN SECTION

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MAINTENANCE ENGINEER
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JUL [illegible] 1984
FOR MMS ME HOE MSM MOC AG SME OSE PC LE TA

81-125-1387

9374

STATE OF OREGON **INTEROFFICE MEMO**

TO: Jack Sollis, AIC
Transportation Section

DATE: July 6, 1984

FROM: John C. McLean
Assistant Attorney General

NOTED
JACK L. SOLLIS

SUBJECT: Schwab v. R. A. Hatch Co, et al.
Mult. Co. Cir. Ct. No. A8405-02910
Claim No. 125-073-L13463

Enclosed is a copy of a complaint filed in the above case. As can be seen, it grows out of a motor vehicle accident alleged to have occurred May 17, 1982, between the Cedar Hills and Sylvan Exits on state highway 26 at a time when the R. A. Hatch Co. was a construction contractor on a highway project there. The State is a named insured on the contractor's liability policy. I have accordingly demanded that the contractor's insurance company defend us here but no response has been received to that demand as yet.

In the meantime plaintiff's attorney has asked that I produce for his informal inspection the "complete file" of the State of Oregon involving that construction project. Sooner or later we would be obliged to produce those records, so I would appreciate your arranging for them either to be sent to me or else collected somewhere in Salem for review by the attorney. I realize that the designation "complete file" is very broad and that if I insisted upon a formal request for production I could then demand more specificity, but I would hope that the general designation would suffice for us to obtain what is needed.

lm

NOTED
E. S. HUNTER

7-23-84

Don Trout
Please handle.
ESH

RECEIVED
STATE HWY ENGR

JUL 19 '84

REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

Contains Recycled Materials

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Attorneys for: plaintiffs

IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF MULTNOMAH

ERWIN SCHWAB and MARY ANN SCHWAB, Plaintiffs, vs. R. A. HATCH CO., an Oregon corporation; STATE OF OREGON; ANDREW GIBSON EDGAR; and JOHN DOE 1-10. Defendants.	)	A8405-02910 No. COMPLAINT--Personal Injury, Loss of Consortium

FIRST CLAIM FOR RELIEF

I

At all material times herein, plaintiff Erwin Schwab and plaintiff Mary Ann Schwab were and are husband and wife.

II

At all material times herein, defendant R. A. Hatch, Co. was an Oregon corporation doing business in this state as a construction contractor. At all material times herein defendants John Doe 1-10 were construction contractors in the State of Oregon. At all material times herein defendant State of Oregon was acting by and through the State Highway Division (Road Maintenance--Western Division).

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/////

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JUL 10 1984

III

On or about May 17, 1982, plaintiff Erwin Schwab was traveling east on State Highway 26 between the Cedar Hills and Sylvan exits. At that time and place, plaintiff Erwin Schwab's vehicle was struck from the rear by another vehicle which was in turn struck by a third vehicle driven by defendant, Andrew Gibson Edgar.

IV

At all material times herein defendant State of Oregon was undertaking a highway repair project on Highway 26 in the eastbound lanes near the Sylvan exit (hereinafter referred to as "project").

V

At all material times herein, defendant R. A. Hatch Co. was a construction contractor for the project and was responsible for traffic control.

VI

At all material times herein defendants John Does 1-10 were construction contractors and subcontractors on the project and were responsible for traffic control.

VII

The proximate cause of the collision and injury to plaintiff Erwin Schwab was the negligence of defendant R. A. Hatch Co., defendant State of Oregon and defendants Does 1-10 in failing to properly control traffic approaching

/ / / / /

the project and failing to adequately warn plaintiff Erwin Schwab of the danger of collision in the project area.

VIII

The proximate cause of plaintiff Erwin Schwab's injuries was the negligence of defendant Edgar in one or more of the following particulars:

(1) Failure to keep a proper lookout:

(2) Failure to keep his vehicle under proper control:

(3) Excessive speed.

IX

As a proximate result of defendants' negligence, plaintiff Erwin Schwab suffered permanent injury to his left knee and a myocardial infarction all to plaintiff Erwin Schwab's general damage of $100,000.

X

As a proximate result of defendants' negligence, plaintiff Erwin Schwab incurred medical expenses of $8,883.87 and lost wages of $5,470.40.

XI

On or about November 3, 1982, plaintiffs caused to be mailed by Certified Mail, Return Receipt Requested, a Notice of the within claim to the State of Oregon pursuant to ORS 30.275.

/////

/////

SECOND CLAIM FOR RELIEF

XII

Plaintiff Mary Ann Schwab realleges the facts of paragraph I through XI.

XIII

As a proximate result of defendants' negligence, plaintiff Mary Ann Schwab suffered a loss of consortium by being deprived of plaintiff Erwin Schwab's aid, society, compansionship and comfort to her general damage in the amount of $10,000.

WHEREFORE, plaintiffs pray for judgment as follows:

1. On the First Claim for Relief in favor of plaintiff Erwin Schwab for $14,354.27 in special damages and $100,000 in general damages;

2. On the Second Claim for Relief in favor of plaintiff Mary Ann Schwab for $10,000 in general damages;

3. For plaintiffs' costs and disbursements incurred herein; and

4. For such further and other relief as this court deems just.

WILLNER, BENNETT, HARTMAN
& TAUMAN, P.C.

Charles S. Tauman, OSB# 77371
of Attorneys for Plaintiffs

9374 10-6-83 47 N

STATEMENT OF OVERRUNS AND UDERRUNS

Project: Sylvan Inter.-Vista Ridge Tunnel
Highway: Sunset
County: Multnomah

Contract No: 9374
Prefix No: 26-1019
F.A. Number: F-27-2(10)

Item No.	Items	Unit	Original*	Semifinal	+or-
	Bid Items	$	2,151,539.04	1,921,327.24	-11
	Anticipated Items	$	183,600.00	27,480.23	-85
	Contingencies	$	80,000.00	275,624	+345
	Engineering	$	178,704.71	224,905.53	+26
	Liquidated Damages	$	0.00	0.00	0
	Credits	$	16,320.00	9,334.05	-43
	Total	$	2,577,523.75	2,440,003.74	-5

* This includes all additional authorizations

All substantial changes were evaluated and only those listed meaningfully affected the total project cost.

Individual Overruns and Underruns

P.A.#6	Adding climbing lane $	0.00	94,612.70	N/A
	Add fourth lane on Westbound lanes for use as a climbing lane			
P.A.#10	Adding retaining wall and turnout	0.00	66,762.50	N/A
	Widen shdr and turnout for safety			

1 Versteeg ✓
Anderson
2 Adams
kw Cy Macnab
Stoudenmeyer
Terpin
Trout
Wekerlig

RECEIVED
OCT 06 1983
ROAD DESIGN SECTION

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Bring Up
Action

J W Cochell
J.W.Cochell Project Manager Date

93074

S

August 12, 1983

TRA

copy TRA 7-6-1 Beaverton

#9424

James E. Bellarts
2330 SE Brookwood Ave. #108
Hillsboro, OR 97123

You asked for answers to questions regarding (1) the computerized signal system at SW 110th and Canyon Road, and (2) the traffic signal at 209th and Tualatin Valley Highway.

The vehicle detection referred to in Mr. Schwartz' letter of May 10, 1982 was replaced in late summer 1982. This restored normal operation of the intersection at 110th. Sometime between June 10 and August 9, 1983, vandals destroyed the pedestrian push buttons at the 110th intersection. This caused the 110th Avenue signal to turn green and provide for the pedestrian time to cross the Tualatin Valley (TV) Highway whether there was a vehicle or a pedestrian there or not. This situation was corrected on Wednesday, August 10 by our signal maintenance crews.

The signals on the TV Highway are set to progress (favor) the eastbound movement from Highway 217 through the 110th and 107th intersections during the majority of the day. There are periods during the afternoon rush when westbound traffic is greater and is progressed.

The reconstruction of the north approach of SW 209th at the TV Highway intersection was a Washington County project that included excavating a portion of the roadway through which the vehicle detection wires for the traffic signal were located. Until the detection wires are replaced, the signal is programmed to turn green for the 209th, and left turn traffic, whether a vehicle is there or not. Washington County is hiring a private contractor to replace the detection. They anticipate the detection will be restored within 30 days.

Response time by our field engineers and maintenance personnel to situations such as the vandalized push buttons and the operation of the traffic signals can be greatly increased by contacting directly our Metro Region office in Milwaukie. Mr. Lee Gunderson, at 653-3097, can respond directly to any problems or questions concerning the traffic signal operation.

H. S. Coulter
State Highway Engineer

cc Governor Victor Atiyeh

ELH:b st

bc W. E. Schwartz   Fred D. Miller
E. L. Hardt

1859

VICTOR ATIYEH
GOVERNOR

OFFICE OF THE GOVERNOR
STATE CAPITOL
SALEM, OREGON 97310

August 3, 1983

James E. Bellarts
P. O. Box 1791
Portland, OR 97207

Dear Mr. Bellarts:

Thank you for your letter of July 30, 1983 and the copy of the letter you sent to our State Highway Engineer, Scott Coulter.

By copy of this letter I am asking that Mr. Coulter provide me the same information he will be sending you. Mr. Coulter, I know, will be as responsive to you as he can, but I too will be interested.

Thank you for the supportive words. They are truly appreciated.

Sincerely,

Victor Atiyeh
Governor

cc: Scott Coulter

RECEIVED
STATE HWY ENGR
AUG 12 '83
REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

JAMES E. BELLARTS
P.O. BOX 1791
PORTLAND, OR 97207

July 30, 1983

H. Scott Coulter
State Highway Engineer
140 Transportation Building
Salem, Oregon 97310

Dear Mr. Coulter:

Judging by the enclosed letter to the editor of the Hillsboro Argus, I am not the only person concerned with the poor system of traffic control in the Beaverton area, especially as concerns the Tualatin Valley Highway and Southwest Canyon Road.

I wrote to you somthing over a year ago, after receiving a sarcastic, insulting letter from the Mayor of Beaverton in reply to a letter that I wrote to him about the problem. He states that the signals are controlled by your Division.

I am especially concerned with the so called computerized signal and S.W. 110th and Canyon Road, which appears to be set to cause eastbound traffic which has passed through the signals at the Highway 217 interchange to have to stop after moving about one block. This signal turns red with no cross traffic having activated it, and appears to serve no purpose except to slow down the flow of traffic and waste what must surely amount to thousands of gallons of gasoline each year. My earlier letter was replied to with information that the problem was caused by a contractor reconstructing the cross street. The construction has been completed for more than a year, and the problem still exists.

The signal at S.W. 209th and Tualatin Valley Highway is now a problem in the same way. Construction at this intersection has been completed for some time, and the signal does little more than block traffic and waste gasoline.

As long as state taxes are wasted on such poorly planned and senseless projects as these [not to mention the Marquam Bridge, where two multilane highways meet and merge into a narrower highway than either coming into it, on a curve on a bridge; and where tax money was wasted in constructing an exit that goes nowhere (originally for the Mt. Hood Freeway, which bureaucracy decided, despite the wishes of the people, was unnecessary); the narrowing of the lanes of Canyon Road to allow the two right hand lanes to end half way up a 6% grade hill, merging slow traffic into narrowed high traffic volume lanes; and countless others], I will not be inclined to support or vote for any increased traffic division funds or increased gasoline taxes.

I especially solicit your comments on the problem at S.W. 110th and Canyon Road a year after the original evasion.

Very Truly Yours,

James E. Bellarts

James E. Bellarts

Res: 2330 S.E. Brookwood Ave. #108
Hillsboro, OR 97123

cc: John W. Rost
Governor Vic Atiyeh

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8/12

RECEIVED
STATE HWY ENGR

AUG 2 '83

REFER TO
Ed Hardt
FOR

Info	Inves	R/D	O/R	Sign	Act	File
		X				

Worst system

To the Editor: In traveling through many cities in the U.S. over many years, I've determined it would be very difficult to find any city with a traffic control system worse than the one in Beaverton.

To pass through the main thoroughfare is an enlightening experience. Normally, traffic signals are set to accommodate a reasonable rate of speed, say, 30 mph. In that way, traffic can flow along at a steady pace. But not in Beaverton.

The engineers who developed that system evidently did their planning in free time over lunch. That is the best time for people to doodle on napkins.

End result? Try driving through Beaverton toward Portland and see if you don't agree.

John W. Rost
1356 SE 28th, Hillsboro

9374

B

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

11 - 3 - 82

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. F-27-2(10)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Multnomah

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 80356

6. TO

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 8/30/82

8. FEDERAL ROUTE NUMBER Primary 27

9. STATE ROUTE NUMBER Primary 47

10. GENERAL LOCATION:

Sylvan Interchange - Vista Ridge Tunnel

11. GENERAL DESCRIPTION OF WORK

Construct concrete curb, sidewalks, sidewalk ramp paving, move luminaire pole and signing

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED ON ~~AN AGREED PRICE AND/OR~~ FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

Contingent upon modification of Project Agreement if additional funds are required, I approve the advance authorization date of 8/30/82 as requested in Mr. Keasey's letter of 11/24/82 as being in the public interest for the use of State Forces to proceed with the above work. State Force Order No. 7 is approved for a TEC of $5,000 Federal Funds $4,409.

RECEIVED
STATE HWY ENGR
DEC 2 '82
REFER TO [illegible]
FOR
Info | Invest | R/D | D/R | Sign | Act | File

12/3

14. DATE 11/30/82

15. SIGNATURE OF APPROVING OFFICIAL G. K. Hessner

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-78) PREVIOUS EDITIONS MAY BE USED

9374

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

11-23-82

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. F-27-2(10)

2. STATE PROJECT NO. See below

B

2A. COUNTY NAME Multnomah

3. FROM

Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 80356

6. TO

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 10/22/82

8. FEDERAL ROUTE NUMBER Primary 27

9. STATE ROUTE NUMBER Primary 47

10. GENERAL LOCATION:

Sylvan Interchange - Vista Ridge Tunnel

11. GENERAL DESCRIPTION OF WORK

Furnish and install additional permanent signing

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED ON ~~AN AGREED PRICE AND/OR~~ FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

Contingent upon modification of your project agreement if additonal funds are required, I approve the advance authorization date of 10/22/82 as requeted in Mr. Keasey's letter of 11/17/82 as being in the public interest for the use of State Forces to proceed with the above work. State Force Order No. 5 is approved for a TEC of $4,000 Federal Funds $3,527.

RECEIVED
STATE HWY ENGR
NOV 30 '82
REFER TO [illegible]
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Orig to
11/30

14. DATE 11/23/82

15. SIGNATURE OF APPROVING OFFICIAL G K Hossner

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9374

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OREGON STATE HIGHWAY DIVISIO

FIELD ENGINEER'S WEEKLY REPORT

FOR CONSTRUCTION PROJECTS ONLY
CONSTRUCTION AND BRIDGE SECTION

Sylvan Intchge.-
Vista Ridge Tunnel

10-2-82

SECTION PREFIX 26-1019

HIGHWAY Sunset

COUNTY Multnomah

NAME OF JOB Sylvan Intchge.-Vista Ridge Tunnel

KIND OF WORK Grading and Paving

CONTRACTOR R.A. Hatch Co.

CONTRACT NUMBER 9374

FEDERAL AID PROJECT NUMBER F-27-2(10)

DATE OF CONTRACT Sept 29, 1981

DATE WORK STARTED 11-11-81

ESTIMATED COMPLETION DATE

AVERAGE FORCE ON PROJECT FOR THE WEEK

MEN 4 SUPERVISION 1

SPECIFIED WORK DAYS 300

WORK DAYS USED 149

SPECIFIED CALENDAR DAYS

CALENDAR DAYS USED

SPECIFIED COMPLETION DATE

PERCENT OF TIME ELAPSED 49.67

PROJECT AUTHORIZATION $2,577,523.75

EXCLUSIVE OF ENGINEERING $2,378,819.04

ESTIMATED COST OF COMPLETED PROJECT EXCLUSIVE OF ENGINEERING $2,435,189.13

ESTIMATED PERCENT Overrun 2 %

PERCENT OF CONTRACT COMPLETED BASED ON ESTIMATED COST 100

ENGINEERING AUTHORIZATION $178,704.71

ENGINEERING COST TO DATE $126,903.91

PERCENT OF AUTHORIZATION 71.01%

PERCENT OF CONTRACT COMPLETED BASED ON TOTAL AUTHORIZATION 96.2

DATE PROJECT WAS COMPLETED 6-7-82

ESTIMATED PERCENT COMPLETE (ROADWORK)

CLEARING	DRAINAGE	GRADING	BASE	PAVE	MAT L PROD	"GM" Barrier	Sheet piling
	100	100		100		100	100

	GRADING	SURFACING		OIL & BITUMINOUS MACADAM	PAVING
MILES IN PROJECT					2.5
MILES PARTIALLY COMPLETED					2.5
MILES COMPLETED					41,000
TOTAL ESTIMATED QUANTITIES (CONTRACT)					38,579
TOTAL QUANTITIES CORRECTED TO DATE					38,579
ESTIMATED QUANTITIES MOVED OR PLACED TO DATE					
AVERAGE DAILY QUANTITIES					
AVERAGE DAILY QUANTITIES NECESSARY TO COMPLETE PROJECT ON TIME					
NUMBER OF SHIFTS PER DAY					

HOURS PER SHIFT

EQUIPMENT USED DURING THE WEEK

One blade , One roller , Four trucks , One broom

ESTIMATED PERCENT COMPLETE (STRUCTURES)

BRIDGE NO								
PERCENT								

	WEATHER	WORK DAYS CHARGED	HOURS DELAY	CAUSE OF DELAY
SUNDAY	No Time Charged			
MONDAY				
TUESDAY				
WEDNESDAY				
THURSDAY				
FRIDAY				
SATURDAY				

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RECEIVED
OCT 6 1982
CONSTRUCTION SECTION

CP

GENERAL DESCRIPTION OF ACTIVITIES FOR THE WEEK

SUNDAY	
MONDAY	No Activity
TUESDAY	Laying CTB in Shld of climbing lane Rt. 81+50 to 91+00
WEDNESDAY	Capped lower inlet @ 82+00 Tying steel & making forms for retaining wall
THURSDAY	Tying steel & forming for retaining wall on "WB" 82+50 - 85+50 RT
FRIDAY	Installing forms for retaining wall
SATURDAY	

REMARKS

Work started on P.A. #10 and E.W.O.#3 on Monday Sept 20, 1982

Construction
Region
File
FHWA

SIGNED LOCATION Sylvan

PRIME RESIDENT SUBMIT 2 COPIES WHEN BRIDGES AND GRADING BOTH ARE INVOLVED SUBMIT 3 COPIES

9374

L.

U. S. DEPARTMENT OF TRANSPORT ON
FEDERAL HIGHWAY ADMINISTR ON

9-14-82

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. F-27-2(10)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Multnomah

3. FROM

Dale E. Wilken, Division Administrator
FHWA Oregon Division
Salem, Oregon

4. PROGRAM NO.

5. ITEM NO. 80356

6. TO

Mr. H. S. Coulter, State Highway Engineer
Oregon State Highway Division
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 7-21-82

8. FEDERAL ROUTE NUMBER Primary 27

9. STATE ROUTE NUMBER Primary 47

10. GENERAL LOCATION:

SYLVAN INTERCHANGE - VISTA RIDGE TUNNEL

11. GENERAL DESCRIPTION OF WORK

Install signing for the closure of Highlands Road on-ramp to the Sunset Highway.

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED ON ~~AN AGREED PRICE AND/OR~~ FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

I approve the advance authorization date of 7-21-82, as requested in Mr. Keasey's letter of 9-2-82 as being in the public interest for the use of State Forces to proceed with the above work. State Force Order No. 4 is approved to a TEC of $1,200; Federal Funds $1,058.

RECEIVED
STATE HWY ENGR
SEP 16 '82
REFER TO Moehring
FOR
Info Inves R/D D/R Sign Act File

Orig 9/16

14. DATE 9-14-82

15. SIGNATURE OF APPROVING OFFICIAL Valach

16. TITLE for Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

7374

OREGON STATE HIGHWAY DIVISION

FIELD ENGINEER'S WEEKLY REPORT

FOR CONSTRUCTION PROJECTS ONLY
CONSTRUCTION AND BRIDGE SECTION

Sylvan Intchge.- Vista Ridge Tunnel		July 10, 1982
		SECTION PREFIX 26-1019
	HIGHWAY Sunset	COUNTY Multnomah
NAME OF JOB Sylvan Intchge.-Vista Ridge Tunnel	KIND OF WORK Grading and Paving	
CONTRACTOR R.A. Hatch Co.	CONTRACT NUMBER 9374	FEDERAL AID PROJECT NUMBER F-27-2(10)
DATE OF CONTRACT Sept 29, 1981	DATE WORK STARTED 11-11-81	ESTIMATED COMPLETION DATE
AVERAGE FORCE ON PROJECT FOR THE WEEK MEN 0 SUPERVISION 0	SPECIFIED WORK DAYS 300	WORK DAYS USED 149
	SPECIFIED CALENDAR DAYS	CALENDAR DAYS USED
	SPECIFIED COMPLETION DATE	PERCENT OF TIME ELAPSED 49.67
PROJECT AUTHORIZATION $ 2,332,823.75		PERCENT OF CONTRACT COMPLETED BASED ON ESTIMATED COST 100
EXCLUSIVE OF ENGINEERING $ 2,166,328.55	ENGINEERING AUTHORIZATION $ 166,495.20	PERCENT OF CONTRACT COMPLETED BASED ON TOTAL AUTHORIZATION 96.2
ESTIMATED COST OF COMPLETED PROJECT EXCLUSIVE OF ENGINEERING $ 2,085,504.8	ENGINEERING COST TO DATE $ 107,200	DATE PROJECT WAS COMPLETED June 7, 1982
ESTIMATED PERCENT UNDERRUN 3.8%	PERCENT OF AUTHORIZATION 63.8%	

ESTIMATED PERCENT COMPLETE (ROADWORK)

CLEARING	DRAINAGE	GRADING	BASE	PAVE.	MAT'L PROD	"GM" Barrier	Sheet piling
100	100	100		100		100	100

	GRADING	SURFACING	Agg. Shoulders	OIL & BITUMINOUS MACADAM	PAVING
MILES IN PROJECT			2.5		2.5
MILES PARTIALLY COMPLETED					
MILES COMPLETED					
TOTAL ESTIMATED QUANTITIES (CONTRACT)			50		41,000
TOTAL QUANTITIES CORRECTED TO DATE			0		39,000
ESTIMATED QUANTITIES MOVED OR PLACED TO DATE					39,000
AVERAGE DAILY QUANTITIES					
AVERAGE DAILY QUANTITIES NECESSARY TO COMPLETE PROJECT ON TIME					
NUMBER OF SHIFTS PER DAY					

HOURS PER SHIFT

EQUIPMENT USED DURING THE WEEK

ESTIMATED PERCENT COMPLETE (STRUCTURES)

BRIDGE NO							
PERCENT							

	WEATHER	WORK DAYS CHARGED	HOURS DELAY	CAUSE OF DELAY
SUNDAY	No Time Charged This Week			
MONDAY				
TUESDAY				
WEDNESDAY				
THURSDAY				
FRIDAY				
SATURDAY				

RECEIVED
JUL 15 1982
CONSTRUCTION SECTION
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GENERAL DESCRIPTION OF ACTIVITIES FOR THE WEEK

SUNDAY	
MONDAY	
TUESDAY	
WEDNESDAY	
THURSDAY	
FRIDAY	
SATURDAY	

REMARKS

Project is conpeleted semi-final is being conpleted.

Construction
Region
File
FHWA

SIGNED J W Cochell LOCATION Sylvan

PRIME RESIDENT SUBMIT 2 COPIES WHEN BRIDGES AND GRADING BOTH ARE INVOLVED SUBMIT 3 COPIES

SP-F216

9374

Form 81-734-1160 (Rev. 5-73)

1-P

OREGON STATE HIGHWAY DIVISION

Price Agreement

APPLYING TO EXTRA WORK AND EXTRA MATERIAL

Project Name Sylvan Interchange - Vista Ridge Tunnel **Date** July 8, 19 82

Highway Sunset **Contract No.** 9374

County Multnomah **Prefix** 26-1019

Contractor R.A Hatch Construction Co. **F. A. Project No.** F-27-2(10)

Address P.O. Box 201 ; Bend , Oergon 97709 **Price Agreement No.** 10

For the below described extra work or extra material to be performed or furnished under the contract above referred to, the contractor agrees to accept payment at the prices given herein, understanding that, except as herein otherwise provided, the work is to be performed and the material is to be furnished in accordance with the specifications which form a part of the contract and in accordance with the instructions of the engineer.

Work to be done:

Add 6 Ft. of pavement width to facilitate west bound climbing lane shoulder . Add 10ft pavement for turn out .

Locations by station numbers:

Sta 82+00 to 87+45 for 6 Ft widening
Sta 88+15 to 90+15 for 10 Ft widening

Names of pay items, estimated quantities and agreed prices:

See attached sheet which documents payments for various items to be paid under this price agreement.

Specifications, basis of measurement and other provisions: Appropriate sections of the standard Specifications for highway construction shall apply to all work and materials. These prices have been approved by Cost Analysis (Bruce Walton).

INSTRUCTIONS

After the signature of the contractor has been obtained, submit six copies (including original copy) to the Salem Office. After approval by the Assistant State Highway Engineer, approved copies will be sent to the Contractor, the Regional Engineer, and the Resident Engineer.

This order does not constitute authority for expenditure until approved by the Assistant State Highway Engineer or State Highway Engineer.

		Space to right of this line is for use of Salem Office
Project authorization	$ 2,332,823.75	
Present estimate of project cost, including $50,962.05 for work under this order	$ 2,401,467.00	
Expected ~~under-run~~ XXXXXXX over-run (amount)	$ ~~68,643.25~~	
Expected ~~under-run~~ XXXXXXXX over-run (per cent)	~~2.9%~~	

Submitted by: J W Cobell Resident Engineer

Approval Recommended: Marvin Griff Division Engineer

Approval Recommended: .... Construction Engineer or Bridge Engineer

Signed R.A. Hatch Co. Contractor
Bill Hatch Supt.

Approved: Duane O. Christensen ~~Deputy State Highway Engineer,~~ Assistant State Highway Engineer or Office Engineer
for Cmsn.
8/26/82

DS 8-27-82

SP*79403-734

Form 734-3049X (Rev. 2-79)
OREGON DEPARTMENT
OF TRANSPORTATION

TABULATION SHEET

SHEET 1 OF 1 SHEETS

Sylvan Interchange - Vista Ridge Tunnel : Contract No. 9374
Sunset Highway : Multnomah County : [illegible] No. [illegible]-1019
Project Manager [illegible] W. Cochell

6' Shoulder Widening from 82+00 — 87+45
10' Turn out from 88+15 to 90+15

~~Item~~ No.	Item No.	Item	Unit	Quantity	Unit Cost	total
1	31001	Mobilization, Temporary Protection and Direction of Traffic	Lump Sum	100%	$4,200	4,200.00
2	31002	New Curb	Lin Ft	350.5	$7.5	2,628.75
3	31003	Remove Curb	Lin Ft	545	$2.5	1,362.50
4	31004	Half Section CM Barrier	Lin Ft	87.5	$30.00	2,625.00
5	31005	Class 'B' Asphalt Concrete	Ton	176.75	$35.65 (BP)	6,301.14
6	31016	Incr Quan B.I. 17 Asphalt Cement in Mix	Ton	11.5	$165.00	~~1,897.50~~
7	31006	Cement Treated Base	Ton	376.43	$17.85	6,719.28
8	31007	Cement in Treated Base	Ton	20.71	$85.00	1,760.35
9	31008	General Excavation	Cu Yd	401	$23.00	9,223.00
10	31009	Structural Excavation	Cu Yd	[illegible]	$23.00	774.81
11	31010	Drainage Pipe 6" Perf	Lin Ft	194.5	$8.00	1,556.00
12	31011	Special Back fill	Cu Yd	7.2	$20.00	144.00
13	31012	Structural Concrete	Cu Yd	29.4	$350.00	10,290.00
14	31013	Reinforcement	lb	1977.16	$1.00	1,977.16
15	31014	Cap Inlets	ea	2	$200.00	400.00
16	31015	Install Inlets	ea	2	$500.00 (BP)	1000.00
17	31016	Incr Quan B.I. 21 12" Sewer Pipe	Lin Ft	12	$8.00	~~96.00~~
18		~~[illegible]~~				~~[illegible].00~~
						~~59,660.55~~
					Total	50,962.05
		~~Engineering and Contingencies~~		~~Total~~		~~11,7[illegible].11~~
						~~7[illegible],785.87~~

9374

DATE: July 6, 1982

TO: Oregon Transportation Commission

FROM: H. S. Coulter
State Highway Engineer

SUBJECT: Request for Increase in Project Authorization
Sylvan Interchange-Vista Ridge Tunnel
Sunset Highway, Multnomah County
Contract No. 9374

This project is nearing completion and the need for an increase in the project authorization is apparent. The contract items are now substantially complete but it is anticipated that additional work in a shoulder area will be necessary.

A major cause for the increase of project cost was the need to add sheet piling at one of the bridges at a cost of $125,395. Also, the shoulder was widened from Vista Ridge Tunnel to the Portland Zoo to provide for a climbing lane at a cost of $97,105.

As noted above, additional shoulder work is needed and while the cost has not yet been accurately determined, it will probably cost approximately $80,000. Contingency funds originally authorized will partially offset these costs.

The increase in project cost is eligible for federal participation and sufficient funds are available in this category of work. The approval of PCRB is not required.

I recommend that the project authorization be increased by $244,700 to a new total of $2,577,523.75. This matter will be on the consent calendar for the July 14 meeting.

OBJ:st

bc Fred D. Miller
R. W. Gormsen
George Bell
Robert N. Bothman
W. E. Schwartz
C. T. Keasey
V. E. Skoog
E. L. Hardt

9374.

STATE OF OREGON
Highway Construction 378-6318

INTEROFFICE MEMO
FILE: CON 5

TO: W. E. Schwartz, P.E.
Asst. State Highway Engineer

DATE: July 1, 1982

NOTED
H.C. COULTER

FROM: O. B. Jackmond
O. B. Jackmond, P.E., P.L.S.
Contract Administration Engineer

SUBJECT: Request for Increase in Project Authorization
Sylvan Interchange-Vista Ridge Tunnel
Sunset Highway, Washington County
Contract No. 9374

This project is nearing completion and the need for an increase in the project authorization is apparent. The contract items are now substantially complete but it is anticipated that additional work in a shoulder area will be necessary.

A major cause for the increase of project cost was the need to add sheet piling at one of the bridges at a cost of $125,395. Also, the shoulder was widened from Vista Ridge Tunnel to the Portland Zoo to provide for a climbing lane at a cost of $97,105.

As noted above, additional shoulder work is needed but cost estimates of the various alternatives are not yet prepared. The work could cost as much as $100,000 or as little as $3,000 depending on the alternative selected. To avoid the possible necessity of going back to the Commission for a second increase in authorization, $80,000 should be provided for this work.

The increase in project cost is eligible for federal participation and sufficient funds are available in this category of work. The approval of PCRB is not required.

Attached is a rough draft letter to the Transportation Commission requesting an increase of $244,700. Also attached is a copy of the Expected Overrun of Project Authorization form.

OBJ:WR:mk

Attach.

cc: E. L. Hardt
James Cochell
Robert Church
D. E. Swan

RECEIVED
STATE HWY ENGR
JUL 1 '82
REFER TO
FOR

Info	Inves	R/D	D.R	Sign	Act	File

Contains Recycled Materials

9374

L

Department of Transportation
HIGHWAY DIVISION
Region I
9002 SE. McLOUGHLIN, MILWAUKIE, OREGON 97222 PHONE 653-3090

VICTOR ATIYEH
GOVERNOR

June 16, 1982

In Reply Refer To
File No

Major David L. Witt
Department of State Police
District Headquarters
P. O. Box 66009
Portland, OR 97266

NOTED
H.S.COULTER

Dear Sir:

I have the report that you forwarded from Sgt. Garland regarding the enforcement that was put forth by the Oregon State Police on the construction project which we recently did on Highway 26 near Sylvan. I'd like to express my appreciation to your organization and specifically to Lt. Schroeder and those officers who took part in this enforcement. It was a key part in the successful completion of the project. Without their presence the contractor's people and our field people would have been exposed to very hazardous working conditions with potentially very tragic results. I'm aware of the fact that since part of the project lay within the city of Portland that this created some administrative problems in your providing this enforcement, and I'm especially grateful because of that.

Thank you very much.

Sincerely,

ORIGINAL SIGNED BY
EDWARD L. HARDT

Edward L. Hardt
Metro Region Engineer

cc Superintendent Williams
ODOT Director Miller
Highway Engineer Coulter
Lt. Schroeder
Project Manager Cochell

RECEIVED
STATE HWY ENGR
JUN 18 '82
REFER TO
FOR
Info | Inves | R/D | D/R | Sign | Act | File

734-1850

9374

L.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

May 10, 1982

NOTED
H. S. COULTER

In Reply Refer to
File No.:

CON

copy
TRA 7-6-1
Beaverton
#9424

James E. Bellarts
P. O. Box 1791
Portland, Oregon 97207

You asked for answers to questions regarding (1) a project on the Tualatin Valley Highway west of Murray Road in Washington County, (2) the traffic signal on SW 110th Avenue on Canyon Road in Beaverton, and (3) narrowing of the traffic lanes on the Sunset Highway between the Vista Ridge tunnels and Sylvan.

The project on the Tualatin Valley Highway west of Murray Road is a public project financed by the Beaverton Urban Renewal Agency and contracted by the Oregon State Highway Division. The purpose is to connect the Burlington Northern Railroad line to the Southern Pacific Railroad line by constructing a railroad underpass for the highway. When completed this will allow for the removal of the Burlington Northern rail lines through Beaverton, which should provide significant benefit to motorists.

The traffic signal system on Canyon Road through Beaverton does allow traffic to proceed from the 217 interchange eastbound through the 110th and 107th Avenue signals without stopping. Unfortunately, a contractor installing a water main for the City of Portland has temporarily disrupted the vehicle detection system on 110th Avenue. Until this detection is replaced, the 110th Avenue signal is programmed to turn to green, whether or not a vehicle is waiting to enter Canyon Road on a timed cycle. This, in turn, will cause vehicles on Canyon Road to stop even if there is no vehicle waiting on 110th. This situation will be corrected as soon as the water main contractor restores the detection.

After the traffic lanes on the top deck of the Marquam Bridge and the lanes on the Banfield freeway were narrowed we carefully monitored the accident experience of these two highways. We were not able to detect any increase in accidents because of the narrowed lanes. Based partly on this experience, a decision was made that the benefit of adding a truck-climbing lane to the Sunset Highway between the Vista Ridge tunnels and the zoo interchange would outweigh any disadvantages. It is not true that the same engineer designed that project as designed the top deck of the Marquam Bridge. Incidentally, after the lanes were narrowed on the top deck of the Marquam Bridge, which allowed us to add a third traffic lane, we were very pleased to find that the accident rate dropped markedly due to the solving of the congestion problem where we previously put four traffic lanes into two lanes.

I trust this information will answer your questions. If you would like further information on these specific topics, or highway matters in general in the Portland area, I would suggest you contact Mr. Ed Hardt, Metro Region Engineer, at 653-3090, who would be happy to discuss your concerns with you.

W. E. Schwartz, P.E.
Assistant State Highway Engineer
for Operations

cc: Governor Victor Atiyeh

ELH:cp st

bc: H. S. Coulter
E. L. Hardt
W. W. Geibel

JAMES E. BELLARTS
P.O. BOX 1791
PORTLAND, OR 97207

RECEIVED
STATE HWY ENGR
APR 27 '82
REFER TO S. Hergt
FOR

Info	Inves	R/D	D/R	Sign	Act	File
		X				

April 25, 1982

H. Scott Coulter
State Highway Engineer
140 Transportation Building
Salem, Oregon 97310

Dear Mr. Coulter:

In order to provide answers to questions that have been frequently asked by votors in a Legislative election campaign in which I am involved, I would like to request answers to the following questions:

1. By what authority has a public highway (Tualatin Valley Highway west of Murray Road in Washington County) been partially closed off to provide access for what appears to be an off road private construction project?

2. Why is the computerized traffic signal for the east bound lane of Canyon road at S.W. 110th Avenue in Beaverton set so cause traffic to stop after passing through the 217 interchange. This tends to block traffic movement, and is most certainly a major waste of gasoline, considering that there is never cross traffic when this light turns red.

3. After the experience of the Banfield Freeway, the danger involved to drivers on this freeway, and the number of drivers who are afraid to drive it, what logic was utilized in the decision to narrow the lanes of Canyon Road between the Vista Ridge Tunnel and Sylvan? Is it true that the same engineer designed this project that designed the top deck of the Marquam Bridge?

Thank you for your consideration.

James E. Bellarts
James E. Bellarts

P.S. I have indications that citizens are taking the above questions, and others that are becoming increasingly apparent into consideration in decisions that seem to reject approval of an increased gasoline tax.

cc: Gov. Vic Atiyeh

9374 CL-82-61

4

VICTOR ATIYEH
GOVERNOR

Department of Transportation

TRANSPORTATION BUILDING, SALEM, OREGON 97310

FILED
APR 7 1982
NORMA PAULUS
SECRETARY OF STATE

April 5, 1982

IN REPLY REFER TO
FILE NO.:
CON 5
#9374

Mr. George Rhoten
Attorney at Law
Pioneer Trust Building
Salem, OR 97301

RECEIVED
APR 7 1982
NORMA PAULUS
SECRETARY OF STATE

Dear Mr. Rhoten:

This will acknowledge your claim letter of March 31, 1982, with invoice and purchase order on behalf of Winko-Matic Signal Company for material in the amount of $31,950 plus interest against R. A. Hatch Company.

The claim states this is in reference to the R. A. Hatch Company Contract No. 9374 for work on the Sylvan Interchange-Vista Ridge Tunnel Section of the Sunset Highway in Multnomah County.

As you know, Industrial Indemnity Company through Corroon & Black of Oregon furnished the bond on this contract. We will advise the surety and the contractor of the receipt of this claim. We will also forward it to the Secretary of State for filing.

Please advise this office when your client's claim has been satisfied.

Sincerely,

Robert W. Gormsen

Robert W. Gormsen
COMMISSION SERVICES

dmc

cc: R. A. Hatch Co.
P. O. Box 201
Bend, OR 97709

Corroon & Black of Oregon
P. O. Box 8669
Portland, OR 97207

RECEIVED
APR 12 1982
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

Industrial Indemnity Company
Attn: Bond Department
421 S.W. 6th Avenue
Portland, OR 97204

bc: ✓ Secretary of State - Please acknowledge receipt of the attached claim on the enclosed copy of this letter.

RHOTEN, RHOTEN & SPEERSTRA
ATTORNEYS AT LAW
PIONEER TRUST BUILDING
SALEM, OREGON 97301

A/C 503-364-6733

GEO. A. RHOTEN
J. RAY RHOTEN
SAM F. SPEERSTRA
ERVIN W. POTTER
DAVID A. RHOTEN
GARY G. JONES
MALCOLM L. BRAND
ARTHUR B. CUMMINS, JR.
JOHN G. PHIPPS

April 1, 1982

Oregon State
Department of Transportation
Highway Division
103 Transportation Building
Salem, Oregon 97310

Attn: Mr. Robert Gormsen

Re: Winko-Matic Signal Company claim against
R. A. Hatch Company and its surety on
Division of Highways Contract No. 9374

Gentlemen:

Our letter of March 31, 1982 concerning the above matter indicates that the principal sum bears interest at 1/2% on the past due amount. This is an error.

The interest rate is 1 1/2% and the principal bears interest at that rate from January 14, 1982, which is 30 days after the date of the invoice.

Yours truly,

RHOTEN, RHOTEN & SPEERSTRA

By:

GAR:jf

cc Winko-Matic Signal Company

RECEIVED
APR 2 1982
COMMISSION SERVICES
DEPARTMENT OF TRANSPORTATION

RHOTEN, RHOTEN & SPEERSTRA
ATTORNEYS AT LAW
PIONEER TRUST BUILDING
SALEM, OREGON 97301

GEO. A. RHOTEN
J. RAY RHOTEN
SAM F. SPEERSTRA
ERVIN W. POTTER
DAVID A. RHOTEN
GARY G. JONES
MALCOLM L. BRAND
ARTHUR B. CUMMINS, JR.
JOHN G. PHIPPS

A/C 503-364-6733

March 31, 1982

Oregon State
Department of Transportation
Highway Division
103 Transportation Building
Salem, Oregon 97310

Attn: Mr. Robert Gormsen

Re: Winko-Matic Signal Company claim against
R. A. Hatch Company and its surety on
Division of Highways Contract No. 9374

Gentlemen:

We would appreciate it if you would consider this as notice of the claim of our client Winko-Matic Signal Company.

The claim is in the amount of $31,950.00 plus interest at 1/2% per month on the past due amount.

For further information and identification, there is included in this letter a copy of Winko-Matic Signal Company's Invoice No. 34507 and a copy of Purchase Order dated October 1, 1981 issued by R. A. Hatch Company. The claim is for items furnished on the Sylvan Interchange, Sunset Highway project.

The surety is Industial Indemnity Insurance Company, 421 S.W. 6th Street, Portland, Oregon 97204.

Yours truly,

RHOTEN, RHOTEN & SPEERSTRA

By:

GAR:jf

Encls. 1) cc Invoice No. 34507
2) cc Purchase Order dated 10/1/81

cc Winko-Matic Signal Company
659 Miller Road
Avon Lake, Ohio 44012
Attn: Mr. Irwin Hart, President

WINKO-MATIC SIGNAL CO.

659 Miller Road AVON LAKE, OHIO 44012 Phone: (216) 933-2122 AVON LAKE
(216) 871-3969 CLEVELAND

ILL TO
R. A. Hatch Co.
P. O. Box 201
Bend, Oregon 97701

SHIP TO ~~Address to follow~~ Portland, Oregon
R. A. Hatch
Sylvan Interchange & Sunset Hw
S.W. Quadrant
Portland, Oregon
(Next to Ore. State Maint. Yard)

INVOICE NO. 34507

PRO # ____

VOICE DATE 12/14/81	SHIPPED VIA Truck	PREPAID ☒X		GROSS WEIGHT ____	
USTOMER P.O. 6805	REQUISITION NO. ____	COLLECT ☐		# OF CTNS. ____	
ATE ENTERED 10/12/81	DATE SHIPPED 12/14/81	TERMS NET 30 days		PART. ☐	
ATE ORDER REC'D. 10/12/81	SALESMAN H. Baxter	F.O.B. SHIPPING PT. Frt. Ppd. & Allowed		COMP. ☒X	

TEM	QUANTITY ORDERED	QUANTITY SHIPPED	QTY. BACK ORDERED	DESCRIPTION	UNIT PRICE	TOTAL
1.	2	2	0	Gen II Level II Portable changeable message signs with/ 1. Cable extension for truck cab control mtg. 2. Spare driver board 3. Controller lockout 4. 20 spare matrix lamps 5. Service/Maint. manual with wiring diagrams	31950.00	$63,900.00
					TOTAL	$63,900.0
IWS# 00010 INS# I 800525606					FEB 19 PAID #4264	31950 –
IWS# 00011 INS# I 800527331				Per Oregon State Highway Division Specifications - XI Sylvan Interchange - Vista Ridge Tunnel		31950 –

PER MONTH ADDED TO PAST DUE ACCOUNTS

Terry Johnston

R. A. HATCH CO.
Post Office Box 201
BEND, OREGON 97701

(503) 382-8418

PURCHASE ORDER

Show this Purchase Order Number on all correspondence, invoices, shipping papers and packages.

6805

TO
Winko-Matic Signal Co.
c/o Harlan E. Baxter & Assoc., Inc.
P.O. Box 6453
Bellevue, WA 98007

DATE OF ORDER	REQ NO
October 1, 1981	

SHIP TO

WHEN SHIP	SHIP VIA	F.O.B. POINT	TERMS
		Portland	

QTY. ORDERED	QTY. RECEIVED	STOCK NUMBER/DESCRIPTION	UNIT PRICE	TOTAL
2		Winko-Matic Gen II Level II Portable Message Sign per specifications of OSHD Contract 9374, Sylvan Intchg-Vista Ridge Runnel, Sunset Hwy	31,950 00	63,900 00
		Please Rush		
		Consignment [illegible]		

1. Please send ________ copies of your invoice
2. Order is to be entered in accordance with prices, delivery and specifications shown above
3. Notify us immediately if you are unable to ship as specified

Authorized by
Gerald I. Johnston, Cont/VP

ORIGINAL

9374 3-23-82 L.

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. F-27-2(10)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Multnomah

3. FROM
Dale E. Wilken, Division Administrator
FHWA Oregon Division
Salem, Oregon

4. PROGRAM NO.

5. ITEM NO. 80356

6. TO
Mr. H. S. Coulter, State Highway Engineer
State Highway Division
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 3-2-82

8. FEDERAL ROUTE NUMBER Primary 27

9. STATE ROUTE NUMBER Primary 47

10. GENERAL LOCATION:
SYLVAN INTERCHANGE - VISTA RIDGE TUNNEL

11. GENERAL DESCRIPTION OF WORK
Replace damaged electrical conduit

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED ON ~~AN AGREED PRICE AND/OR~~ FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

I approve the advance authorization date of March 2, 1982, as requested in Mr. Keasey's March 16, 1982 letter as being in the public interest for the use of State Forces to proceed with the above work. State Force Order No. 2 is approved for a TEC of $1,500; Federal Funds $1,323.

RECEIVED
ST. HWY. ENGR
MAR 25 '82
REFER TO
[illegible]

Orig 3-2

14. DATE 3-23-82

15. SIGNATURE OF APPROVING OFFICIAL

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9374

L.

CON 5

DATE: November 18, 1981

TO: Dale E. Wilken, Division Administrator
Federal Highway Administration

FROM: C. T. Keasey, P.E., P.L.S.
Ass't. State Highway Engineer

SUBJECT: Notification Contract Work Started
Federal-aid Project Number
F-27-2(10)

Contract 9374, Work Started November 9, 1981

Project Sylvan Intchge.-Vista Ridge Tunnel

Highway Sunset

County Multnomah

RDC:mk

cc: R. D. Church

47

ROAD DESIGN SECTION DES 16

James Cochell
Resident Engineer

October 8, 1981

Lyle K. Watson
Acting Final Design Engineer

Variable Message Sign
Sylvan Intch.-Vista Ridge Tunnel Section
Sunset Highway
Multnomah County
Contract No. 9374

Attached are six prints of Winko-Matic Signal Company's Drawing No. 3694. Their proferred information seems to be correct and in order.

Please make appropriate distribution of the approved prints.

WGB:ja

Attachments

cc C. T. Keasey
E. L. Hardt
W. G. Beard

FORM B-30 (12-67)

Please send to
Bill Beard in
Design Off

OREGON STATE HIGHWAY DEPARTMENT

INTER-DEPARTMENT CORRESPONDENCE

2131 S.W. Scholls Ferry Road
October 5, 1981

To: L.E. George
Traffic Engineer

PROJECT: Sylvan Int.-Vista Ridge Tunnel

BRIDGE NO.:

CONTRACT NO.: 9374

TRANSMITTED HEREWITH FOR APPROVAL, 7 COPIES OF THE FOLLOWING:

1. Portable message signs - Winko-Matic Signal Co. DWG No. B-3964.
2.
3.
4.
5.

Versteeg
Anderson
Christensen
Olson
Sullivan
Terpin
Trout
Wakerlig

RECEIVED
OCT 7 1981
ROAD DESIGN SECTION

Beard

Do Not File ☐
Return To
Bring Up / /
Action

PLEASE RETURN COPIES TO:

RESIDENT ENGINEER 6 COPIES.

MATERIALS INSPECTOR ____ COPIES.

CONTRACTOR ____ COPIES.

SUBCONTRACTOR ____ COPIES.

SUPPLIER ____ COPIES.

NOTED
DWAYNE HOFSTETTER

James W. Cochell
RESIDENT ENGINEER

ENCL.

CC REGIONAL ENGINEER

NOTED
L E GEORGE

RECEIVED
OCT 6 1981
TRAFFIC ENGINEERING

R. A. Hatch Co.
General Contractors
Post Office Box 201
Bend, Oregon 97701
(503) 382-8418

October 1, 1981

Mr. James W. Cochell
Resident Engineer
Oregon State Highway Division
2131 S.W. Scholls Ferry Rd.
Portland, OR 97221

Re: OSHD Contract 9374
Sylvan Intchg-Vista Ridge Tunnel

Dear Jim:

We have just received the contracts to be signed for the above job. Although the paperwork to set up the job has not yet been taken care of, I imagine you could go ahead and approve some drawings.

Enclosed are seven copies of the portable message signs submitted to us by Harlan E. Baxter & Assoc., Inc. Please review and return these, presumably with approval, as soon as you can. This is a long-lead-time item.

Yours truly,

R. A. HATCH CO.

GB Johnston

Gerald B. Johnston
Controller/VP

GBJ:lst

enclosures (7)

9374

L.

U.S. Department
of Transportation
**Federal Highway
Administration**

Memorandum

THE OREGON DIVISION - SALEM

Subject: F-IX-HES-27-2(6)
Sylvan~~ia~~ Interchange - Vista Ridge Tunnel Section
Sunset Highway

Date: July 8, 1981

Reply to Attn. of: HFO.1-OR

From: Division Administrator

To: Mr. H. S. Coulter
State Highway Engineer, OSHD

As requested in Mr. Christensen's 6/30/81 letter, I agree to grant Federal participation in the purchase of two variable message signs to be used on the subject project during construction. Following the completion of the project, the signs will remain property of the State to be used for traffic control on future construction projects at no additional amortization charge to Federal-aid.

for Valach
Dale E. Wilken

RECEIVED
STATE HWY ENGR
JUL 10 '81
REFER TO
[illegible]
FOR

Info	Invest	R/D	D/R	Sign	Act	File

aj
7/10

9374 L.

U. S. DEPARTMENT OF TRANSPOR TION
FEDERAL HIGHWAY ADMINISTRATION

9-2-81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. F-27-2(10)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Multnomah

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 80356

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 9/2/81

8. FEDERAL ROUTE NUMBER Primary 27

9. STATE ROUTE NUMBER Primary 47

10. GENERAL LOCATION:
Sylvan Interchange - Vista Ridge Tunnel

11. GENERAL DESCRIPTION OF WORK
High type pavement

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☒ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)*
Temp. & Perm. Pavement Striping S.F $10,700
Asphalt Cement Adjustment $70,000
on the job training $1,600

13. REMARKS

After concurrence in award you are authorized to proceed with those items listed above as shown in your Estimate.

Mr. Swan's August 31, 1981 request and certifying statements are accepted.

PS&E documents for the subject project have been reviewed and are approved at a total estimated cost of $2,487,967 Federal Funds $2,193,889.

A signed copy of the Title Sheet is returned herewith.

(This is a 20% limitation project)

RECEIVED
STATE HWY ENGR.
SEP 3'81
REFER TO
Machaug

14. DATE 9/2/81

15. SIGNATURE OF APPROVING OFFICIAL

16. TITLE for Division Administrator

)RM PR-1240
ev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9374

2

U.S. Department
of Transportation
**Federal Highway
Administration**

Memorandum

THE OREGON DIVISION - SALEM

Subject: Oregon Project F-27-2(10)
Sylvan Int. - Vista Ridge Tunnel Section
Sunset Highway
Multnomah County

Date: August 18, 1981

Reply to Attn. of: HFO.1-OR

From: Division Administrator

To: Mr. H. S. Coulter, State Highway Engineer
Oregon State Highway Division

ATT: Mr. J. H. Versteeg

I concur in the proposed salvage plan outlined in your August 12, 1981 letter. I believe the salvage to be in the public interest and the established value to be fair.

G.K. Hassner
for Dale E. Wilken

RECEIVED
STATE HWY ENGR

AUG 21 '81

REFER TO
Versteeg

FOR

Info	Inves	R/D	D/R	Sign	Act	File
					X	

cy
8/21

9374

L

VICTOR ATIYEH
GOVERNOR

Oregon State Highway Division

TRANSPORTATION BUILDING, SALEM, OREGON 97310

RECEIVED
STATE HWY ENGR
AUG 13 '81
REFER TO
FOR
Info | Invest | R/D | D/R | Sign | Act | File

DES 16

August 12, 1981

Mr. Dale E. Wilken
Division Administrator
Federal Highway Administration
The Equitable Center, Suite 100
530 Center Street, N.E.
Salem, OR 97310

Dear Mr. Wilken:

Sylvan Intchge.-Vista Ridge Tunnel Section
Sunset Highway
Multnomah County

We propose to salvage approximately 27,375 feet of existing guardrail members and accompanying hardware from this project. The contractor will be permitted to use any part of the removed material which meets current standards in the construction of new guardrail.

We will specify the unused rail members, posts, and hardware remain the property of the State. The contractor will stockpile the salvaged material in the Sylvan Maintenance Yard.

The project will be credited in the amount of $0.03 per pound for the rail members and hardware salvaged. This sum was arrived at based on the scrap value of $60 per ton for the rail members and hardware delivered to Portland, Oregon.

The guardrail and median barrier was originally constructed under a 1968 contract. The posts have been in the ground for 13 years and salvage value is considered to be $0.75 per post. The guardrail blocks are valued at $0.25 each.

The estimated quantities and costs are as follows:

Guardrail and Hardware	216,000 lbs.	@ $0.03	$6,480.00
Guardrail Posts	1,780	@ $0.75	1,335.00
Guardrail Blocks	2,800	@ $0.25	700.00
		TOTAL	$8,515.00

Initially, the project will be credited for $8,275. The credit to the project will be adjusted when the actual amount of material salvaged and delivered to the stockpile site is determined.

We solicit your concurrence that it is in the public interest to salvage this material.

Very truly yours,

J. H. Versteeg
Road Design Engineer

By L.K.W.

Lyle K. Watson
Acting Final Design Engineer

bc H. S. Coulter
E. S. Hunter
D. H. Moehring
F. E. Terpin
Ed Hardt
Jack Sullivan
A. L. Hansen

ALH:ja

9374

47 N

ENVIRONMENTAL REVIEW CHECKLIST

ALL CLEAR 7 28 81

Donald L Daunt

1/2

Sept. 3, 1981 Bid Letting ________ All Clear Deadline

SECTION Sylvan Intch-Vista Ridge Tunnel
Highway Sunset
County Multnomah Region I
Type of Work O'Lay-Barrier-Safety Funds FA
State ___ Consultant ___ Plans Avail. ___Yes ___No

2 Exc

	Not Required	Required	Mitigation Required	Mitigation/Plans	ALL CLEAR
DOCUMENTS:					
EIS	☒	☐	☐	☐	☐
Negative Declaration	☒	☐	☐	☐	☐
Project Assessment	☒	☐	☐	☐	☐
Write-off Letter	☒	☐	☐	☐	☐
PERMITS:					
Division of State Lands	☒	☐	☐	☐	☐
D.O.G.M.I.	☒	☐	☐	☐	☐
Corps of Engineers	☒	☐	☐	☐	☐
Coast Guard	☒	☐	☐	☐	☐
Co. Conditional Use	☒	☐	☐	☐	☐
NPS Air Pollution	☒	☐	☐	☐	☐
NPS Water Pollution	☒	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
CULTURAL:					
Cultural Survey	☐	☒	☐	☐	☒
Cultural Salvage	☒	☐	☐	☐	☐
NOISE:					
Noise Study	☒	☐	☐	☐	☐

4374

L.

STATE OF OREGON

INTEROFFICE MEMO

Highway - Traffic 378-6537

TRA 16-5

TO: H. S. Coulter
State Highway Engineer

DATE: July 16, 1981

FROM: L. E. George
Traffic Engineer

SUBJECT: Construction Speed Zone
Sylvan Interchange - Vista
Ridge Tunnel Section
Sunset Highway
Multnomah County
US26 Hwy. No. 47 - MP

The subject contract will involve an overlay and median rail replacement. The work will be accomplished during the hours of darkness and when vehicular volume is low.

The present posted speed is 50 MPH, established in the usual manner by the State Speed Control Board. The 85% speed at the time the 50 MPH speed was established was 61 MPH. The present summer volumes are as high as 100,000 vehicles per day.

A June, 1978, summary from the permanent recorder in the Vista Ridge Tunnel (copy attached) shows the reductions in traffic during hours of darkness and particularly from midnight on.

O.R.S. 487.905(1), 2 provides the authority for the Department of Transportation to reduce speeds during construction activities which may constitute a danger to the motoring public.

This office recommends that by delegated authority that you approve a 40 MPH regulatory speed zone as follows during construction operations which interfere with the motoring public only during the hours stipulated in the contract or as approved by the engineer:

> 40 MPH from the Multnomah-Washington County Line Engineer Station 175 + 71.89 MP 70.92 to the Vista Ridge Tunnel Engineer Station 41 + 49 MP 73.43.

If you concur, please indicate your approval and forward a copy to Bob Gormsen in Commission Services and return one copy to this office.

7/28/81
noted in
HSC del.
auth report

L E George
L. E. George
Traffic Engineer

APPROVED
H S Coulter
STATE HIGHWAY ENGINEER
Date 7/21/81

GLC:rh
Attachment
cc: E. L. Hardt

orig. to [illegible]
cy [illegible]
file

81-125-1387

AUTOMATIC RECORDER TRAFFIC COUNTS

Portable ecorder ☐ manent Recorder ☒

Route or Highway No. 47 Station No. 26-002

Location Vista Ridge Tunnel

Week Beginning Traffic Comparison

Day of Week	Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.	Total	
Day	WB	EB		WB	EB		WB	EB	
Hour of Day	Wednesday 6/21/78			Saturday 6/10/78			Sunday 6/11/78		
A. M. 12-1	648	581		1314	932		1267	821	
1-2	307	254		721	530		746	605	
2-3	228	151		471	392		486	375	
3-4	132	124		308	174		222	156	
4-5	193	176		223	195		168	108	
5-6	621	544		260	320		114	156	
6-7	1549	2600		404	870		233	494	
7-8	2089	5105		700	1378		392	660	
8-9	2165	4006		1087	2337		524	874	
9-10	1834	2547		1384	2730		948	1428	
10-11	2007	2378		1474	2505		1343	1905	
11-12	2182	2560		1779	2039		1795	2260	
P. M. 12-1	2220	2373		2786	2076		2113	3124	
1-2	2451	2466		2839	2158		2303	2813	
2-3	2599	2886		2393	2252		2502	2736	
3-4	3225	3342		2490	2363		2593	3072	
4-5	4093	3125		2598	2337		2395	2636	
5-6	3983	2777		2385	2257		2629	2419	
6-7	2635	2372		2145	2644		2655	2375	
7-8	1868	1855		1802	2465		1947	2482	
8-9	1453	1317		1677	1939		1791	1650	
9-10	1638	1363		1496	1614		2039	1537	
10-11	1401	1038		1733	1302		1468	1274	
11-12	1185	816		1744	1101		1145	858	
Automatic Recorder Total 24 Hours	42706	46756		36213	38910		33818	36819	
~~Axle Correction~~ Total ~~Factor~~ 2-Way	89,462			75,123			70636	☒	
Adjusted All Vehicle Total 24 Hr.									

REMARKS

.m. 11 (PM)
ek Wed.
unted 14 hs
Cloud

North to West

chollsFe
Robb

9374 L

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:

July 13, 1981

TO: Dale E. Wilken
Division Administrator
Federal Highway Administration

**Original Signed By
D. E. Swan**

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Project Data Submission
Item No. 80356
Project No. F-27-2 (10)
Sylvan Intchge. - Vista Ridge Tunnel Sec.
Multnomah County

Attached data consists of PR-1 forms with project maps for the subject project.

This project is expected to be funded from the 20% of the FY'81 limitation withheld from distribution until after August 1, 1981.

DRH/lms
Attachments

cc: R.N. Bothman (Metro)
E.L. Hardt (Region 1)
Jon Rose (Metro)
Judy Smith (Metro)
General Files

Form 734-3122

9374

L.

VICTOR ATIYEH
GOVERNOR

Oregon State Highway Division

TRANSPORTATION BUILDING, SALEM, OREGON 97310

June 30, 1981

Mr. Dale E. Wilken
Division Administrator
Federal Highway Administration
The Equitable Center, Suite 100
530 Center Street, N.E.
Salem, OR 97301

Attention Glenn K. Hossner

Dear Sir:

Sylvan Interchange-Vista Ridge Tunnel Section
Sunset Highway
Multnomah County

As you are well aware, traffic volumes on this portion of the Sunset Highway are very high with congestive interchange ramp movements under the best of conditions. There is also a lane-drop westbound within the project, and vertical and horizontal sight restrictions.

To complete the prescribed work on the above-named project, it will be necessary to close the inside lane of both eastbound and westbound travel during working hours. As a portion of the temporary protective devices for the project, it is our intention to employ two variable message signs of the Winko-Matic or Easi-Sign genure with a three-line legend display possible (trailer mounted).

Upon completion of the project, it is our desire that these signs become the property of the State of Oregon so they will be available for other projects in the metropolitan Portland area where complicated traffic handling procedures arise.

We therefore respectfully request your full participation in the purchase of the two variable message signs, with the mutual understanding that they will be made available for future projects.

Very truly yours,

ORIGINAL SIGNED
DUANE O. CHRISTENSEN
Duane O. Christensen
Acting Road Design Engineer

RECEIVED
STATE HWY ENGR

JUL 1'81

REFER TO

FOR

[illegible]	[illegible]	R/D	D/R	Sign	Act	File

bc H. S. Coulter
E. S. Hunter
D. H. Moehring
C. T. Keasey
E. L. Hardt
W. G. Beard
James Cochell

WGB:ja

9374

No. 47 ✓
Sunset Hwy.

STATE OF OREGON
ROAD DESIGN SECTION

INTEROFFICE MEMO

TO: MEMO TO THE FILES

DATE: June 19, 1981

Allan L. Hansen

FROM: Allan L. Hansen
Design Engineer Supervisor

SUBJECT: Sylvan Interchange-Vista Ridge Tunnel
Multnomah County

Preliminary plans for the project were reviewed the morning of June 15, 1981 in a meeting at the Region Office in Milwaukie. The following items were discussed:

1. Traffic control during construction headed the list of items covered. Construction speed to be posted at 35 MPH. A Variable Message Speed Sign to be mounted on the Sylvan structure. Neon control signs to be mounted at Cemetary structure and at the Vista Ridge Tunnel. News media coverage on construction of this project. Funds in the contract for overtime pay for Portland police officers. It was agreed that the Portland Police Department would be the best method of controlling traffic. Traffic Section to be contacted regarding lane closures.

2. Concrete median barrier to be placed adjacent to existing metal barrier before the latter is removed. This is to prevent an opening of any great distance between eastbound and westbound traffic.

3. Approximately 30,000 lineal feet of metal median barrier and guardrail to be salvaged and placed in the Sylvan Maintenance Station.

4. There is an existing sign bridge at the end of the project with one support in the median. This will require a section of poured-in-place concrete median barrier.

5. Existing vertical clearance at the Highlands Interchange structure is 15'-1" eastbound and 15'-3" westbound. A clearance of 15'-0" is to be maintained. The best solution discussed was grinding off the existing surfacing to accommodate the 3-inch and 5-inch overlays. This has since been approved by John Scofield.

6. A crack has developed in the asphalt concrete surfacing adjacent to the Viaduct structure. Surface water enters the crack, runs down and is causing erosion problems around the supports below It was decided to drive sheet piling adjacent to the structure before the overlay to prevent this from happening in the future.

7. Storm sewer pipe installations will be backfilled with aggregate material and capped with 7 inches of early-set concrete. Precast manholes and inlets were also requested to speed up installation time.

8. Region does not want 3-inch asphalt concrete base course placed in one lift. Typical section will be changed to show base course placed in two 1-1/2-inch lifts. Class "C" asphalt concrete will be used in the leveling course.

9. Maintenance requested a manhole and pipe be added to an existing system right of Station 126+80. The right angle connection restricts the flow and creates a problem. This is being added to the plans.

10. Bill Geibel stated that the P.C. Concrete pavement on the east-bound approach to the tunnel needs a skid resistant overlay of some type. The P.C. Concrete has been grooved but traffic and tire studs are smoothing out the surface. I talked with John Scofield and he said that he would discuss the problem with Bill Geibel.

The following people were in attendance:

Ed Hardt, Region 1
Marion Craft, Region 1
Jim Cochell, Region 1
George Gadeholt, Region 1
Bill Geibel, District 2A
R. Jaden, District 2A
Tom Lowe, FHWA
Bill Farr, FHWA
Sgt. Sam Rosson, Portland Police Dept.
Justin Vincent, Final Design
Chuck Tedrow, Final Design
Bill Bergstedt, Specifications
Al Hansen, Final Design

ALH:ja

cc Duane Christensen
Lyle Watson
Ed Hardt
Jim Cochell
Bill Geibel
Tom Lowe, FHWA
Justin Vincent
Chuck Tedrow
Bill Bergstedt

9374

47

N

STATE OF OREGON

INTEROFFICE MEMO

TO: MEMO TO THE FILES

DATE: January 7, 1981

Duane O. Christensen

FROM: Duane O. Christensen
Final Design Engineer

SUBJECT: Sylvan Interchange-Vista Ridge Tunnel
Sunset Highway
Multnomah County

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Anderson
Christensen
Olson
2 Sullivan JWS
Terpin
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Wakerlig

Art ✓
Bill-file copy
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ROAD DESIGN SECTION

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Action

The 2.1 mile project, as originally submitted to us, was for a 2-inch asphaltic concrete overlay. The surfacing engineer's design calls for an overlay of 3-inches of asphaltic concrete on the eastbound lanes and 5-inches of asphaltic concrete on the westbound lanes. In addition, it is proposed to place a 2-inch asphaltic concrete overlay on the following ramps:

Sylvan Interchange eastbound entrance ramp

Sylvan Interchange westbound exit ramp

Highland Interchange ramps

Entrance & exit to S.W. Jefferson Street

A review of the project indicates that it will also be necessary to do some safety work consisting of upgrading the median barrier and guardrail.

The project will also have to be extended to include 0.4 mile cut from the easterly end of the Cedar Hills Interchange-Sylvan Interchange project due to lack of funds at that time.

The current estimate for this project as described above is $2,610,000. The programmed amount is $1,100,000. This leaves a shortfall of $1,510,000.

Please advise us if funds are available for this project or if it will be necessary to cut back on the project.

This memo has been prepared to advise everyone of the project status, the increased cost, and the change in project limits. Unless otherwise advised, we will proceed with plan preparation based on the above.

NEM:ab
cc: E. S. Hunter
D. H. Moehring
R. N. Bothman
N. E. Mann
E. L. Hardt

Contains Recycled Materials
81-125-1387

9374 47 N

STATE OF OREGON

INTEROFFICE MEMO

DATE: December 16, 1980

DES 23
Brs.
8648 & 9

TO: Mr. D. O. Christensen
Final Design Engineer

FROM: J. E. Backstrand
Supervising Structural
Design Engineer

SUBJECT:
Sunset Highway Partial Viaducts
Bridges 8648 and 8649
Sylvan Interchange-Vista Ridge Tunnel Section
Sunset Highway
Multnomah County

The viaduct structures in the subject project should be stripped of existing AC wearing surface and overlayed with membrane waterproofing and new AC wearing surface for a total thickness of 2 to 2 1/2 inches.

Joints should be sawed in the new overlay at each existing joint and filled with poured joint sealer.

JEB:dh

cc E. L. Hardt
George Hopkins
Jack Sullivan

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Cole
Eriksen
Hager
Staudenmeyer ✓
Mann AEM
Watson
Leu
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BY FINAL DESIGN ENGINEER

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ROAD DESIGN SECTION

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Materials
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STATE OF OREGON
Highway - Traffic 378-6537

INTEROFFICE MEMO

TO: Norman E. Mann
Design Engineer Supervisor

DATE: December 3, 1980

FROM: L. E. George
Traffic Engineer

SUBJECT: Accident History on Overlay
Sylvan Interchange - Vista Ridge Tunnel
Sunset Highway No. 47
Multnomah County
M.P. 70.95 to M.P. 73.40

As requested in your November 18, 1980, letter, we have reviewed the accident history on the subject section.

Our investigation revealed no apparent accident problem areas. The 1979 accident rate for the section was 0.72 which compares closely to the statewide rate on Suburban Freeways of 0.74.

L. E. George
Traffic Engineer

JB:jrb

REFERRED TO
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STATE OF OREGON
HIGHWAY DIVISION - ODOT

INTEROFFICE MEMO

TO: D. H. Moehring
Assistant State Highway Engineer

DATE: August 25, 1980

FROM: Lyle H. Watson for
Duane O. Christensen
Final Design Engineer

NOTED
E. S. HUNTER

SUBJECT: Cedar Hills Blvd. Intchg-Sylvan Intchg. Section
Sunset Highway
Washington & Multnomah Counties

The subject 3.0 mile FAI-X funded project is set up in the six-year program for $2,285,000. The current estimate, August 1980, for this section is $2,794,000. In addition to this there is a 0.4 mile gap between the overlay on this project and the overlay placed under a previous project, "Wilson River Highway Junction-Vista Ridge Tunnel Section." The overlay on that project ended at MP 67.91. We propose to move the beginning of the subject project back westerly 0.4 mile to MP 67.91 to eliminate this gap. The cost to eliminate the gap is $370,000. The cost for the project would then become $2,794,000 plus $370,000, or $3,164,000.

If it is necessary to reduce the length of the project we would recommend cutting one mile off of the easterly end of the project, which would reduce the cost approximately $910,000. This would bring the cost of the project down to $2,254,000, which is close to the programmed amount. The removed portion should then be added to the Sylvan Intchge-Vista Ridge Tunnel Section.

Please review the above and available funding and advise us of your decision. The project is currently scheduled for an October 23 letting.

DOC:NEM:ge

cc: E. S. Hunter
R. N. Bothman
E. L. Hardt
N. E. Mann

RECEIVED
TECHNICAL SERVICES
AUG 25 '80
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Contains

9374

DATE: February 7, 1979

TO: OREGON TRANSPORTATION COMMISSION

FROM: R. S. Coulter
State Highway Engineer

SUBJECT: Finance Approval

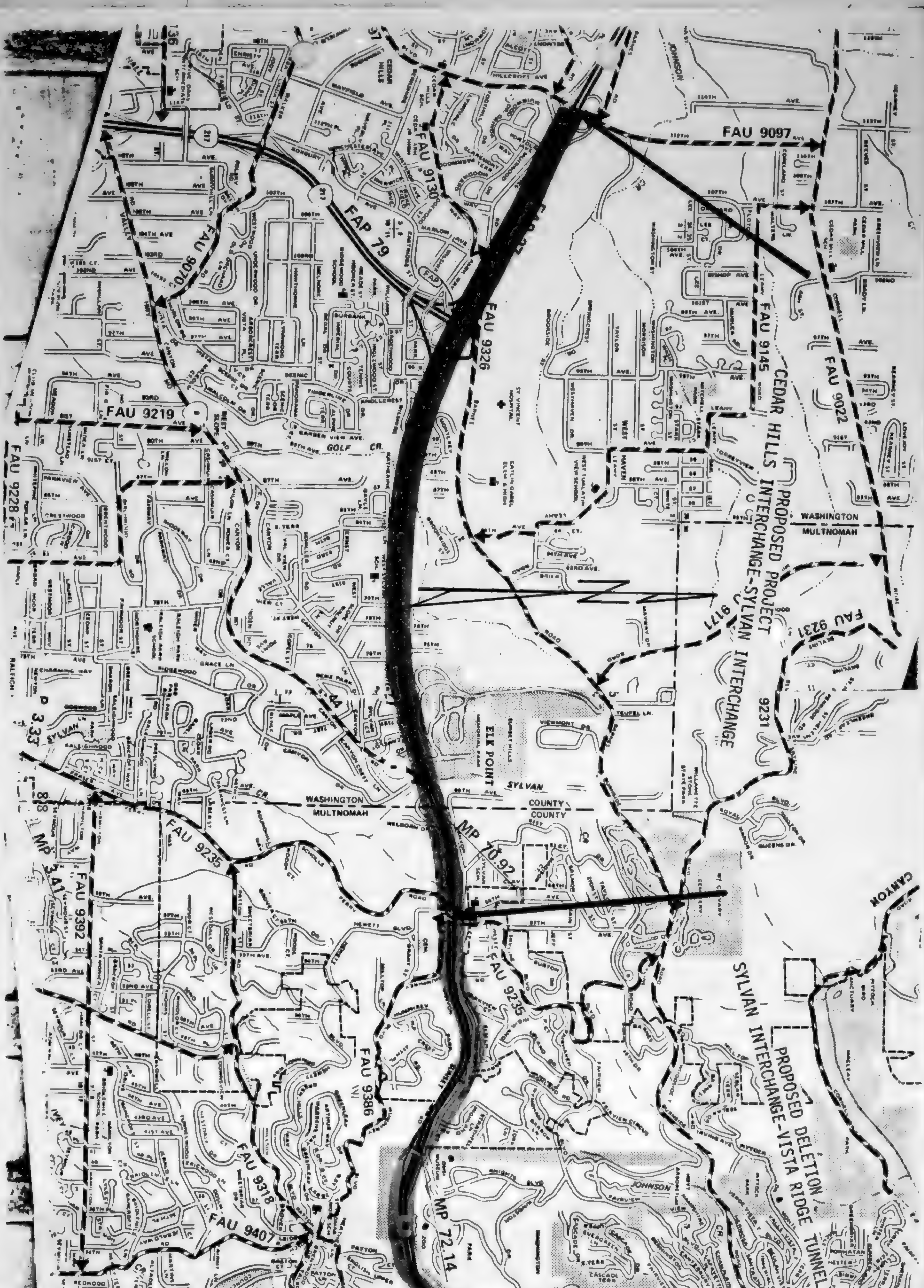
On the Consent Calendar for the March meeting will be a request for the addition of one project and deletion of another project using Interstate Transfer Funds. The Cedar Hills Interchange-Sylvan Interchange Section on the Sunset Highway is to be added and the Sylvan Interchange-Vista Ridge Tunnel is to be deleted from the Six-Year Program.

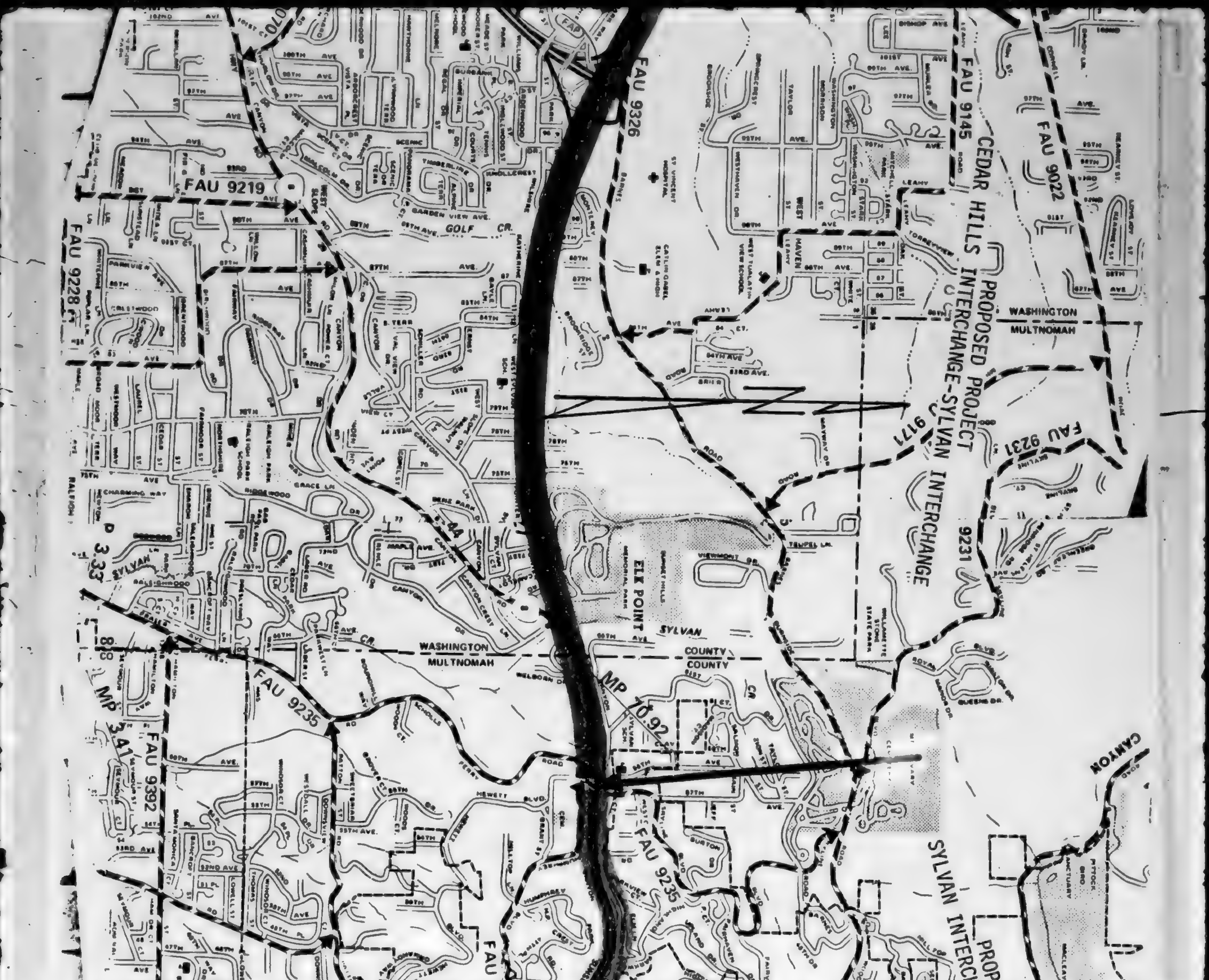
The Six-Year Program included two overlay projects on the Sunset Highway. They are separated by the Cedar Hills Interchange-Sylvan Interchange Section. The proposed additional section is in critical need of repair. It should have been included in the Six-Year Program instead of the Sylvan Interchange-Vista Ridge Tunnel Section. Construction of the Cedar Hills Interchange-Sylvan Interchange Section will provide for the orderly restoration of these sections. The new project should be constructed during 1980. The estimated cost is $1,465,000. Federal-aid Interstate Transfer Funds in the amount of $1,245,000 are available. State funds in the amount of $220,000 will be used to match these Federal funds. A map showing the location of the projects is attached.

I recommend your approval and request authorization to sign the necessary agreements for and on your behalf.

Attachment

DES:pf
bcc: F. B. Klaboe
E. S. Hunter
D. H. Moehring
F. E. Terpin
E. L. Hardt
C. W. Head
R. N. Bothman
J. H. Versteeg
V. E. Skoog
George Bell


FAU 9097
FAU 9130
FAP 79
217
FAU 9070
FAU 9326
FAU 9145
FAU 9022
CEDAR HILLS INTERCHANGE-SYLVAN INTERCHANGE
PROPOSED PROJECT
FAU 9219
FAU 9228
GOLF CR.
WASHINGTON
MULTNOMAH
9171
FAU 9231
9231
ELK POINT
SYLVAN
P 3.33
WASHINGTON COUNTY
MULTNOMAH COUNTY
MP 70.92
FAU 9235
MP 3.41
FAU 9392
CANYON
FAU 9235
FAU 9386
FAU 9318
FAU 9407
JOHNSON
MP 72.14
PROPOSED DELETION
SYLVAN INTERCHANGE-VISTA RIDGE TUNNEL


FAU 9326
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FAU 9228
CEDAR HILLS INTERCHANGE-SYLVAN INTERCHANGE
PROPOSED PROJECT
WASHINGTON
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FAU 9231
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ELK POINT
SYLVAN
WASHINGTON COUNTY
MULTNOMAH COUNTY
MP 70.92
P 3.33
MP 3.41
FAU 9235
FAU 9392
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PROPOSED DELETION
SYLVAN INTERCHANGE-VISTA RIDGE TUNNEL
MP 72.14
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9374 8-11-78 L.

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

FEDERAL AID PROJECT NO. F-27-2(3)
STATE PROJECT NO. See below
COUNTY NAME Multnomah
PROGRAM STAGE (Check) ☐ 1. ☐ 2.

FROM:
G. L. Green, Division Administrator
Salem, Oregon

PROGRAM NO.
ITEM NO. 80356

TO:

Mr. F. B. Klaboe
Chief of Operations, ODOT
State of Oregon
Salem, Oregon

DATE PS & E APPROVED
DATE AUTHORIZATION EFFECTIVE 8-11-78
FEDERAL ROUTE NUMBER Primary 27
STATE ROUTE NUMBER Primary 47

GENERAL LOCATION:

Sylvan Interchange - Vista Ridge Tunnel Section

GENERAL DESCRIPTION OF WORK:

Preliminary Engineering Overlay

YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

PRELIMINARY ENGINEERING TO DETERMINE
☐ LOCATION ONLY
PRLIMINARY ENGINEERING FOR SURVEY AND PLAN
☒ PREPARATION Including utility preparatory work
TEC NTE $18,000 F.F. $15,438
☐ OTHER (Specify)

☐ ACQUISITION OF RIGHT-OF-WAY
CONTRUCTION - ADVERTISE FOR RECEIPT
☐ OF BIDS
☐ CONSTRUCTION - PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS

REMARKS

As requested in Mr. Swan's letter of July 31, 1978, I concur that the subject project is a non-major action as set forth in FHPM 7-7-2 paragraph 10e.

DATE 8-11-78
SIGNATURE OF APPROVING OFFICIAL G.K. Hossner
TITLE for Div. Administrator

FORM PR-1240 (REV. 8-70) EXISTING STOCKS OF FORM PR-1240 (REV. 6-68) WILL BE USED

☆ U.S. GOVERNMENT PRINTING OFFICE: 1976—626-787

1981 SW 89th Ave.-Pac. Hwy. 9375
(Tualatin) Sec., SW Nyberg Rd. (Gr.,
pav., sign., sig. & landsc.) #4

ORIGINAL RECORDS

DO NOT REMOVE

FROM TRANSPORTATION BUILDING

The Oregon Department of Transportation

731-0274 (2-86)

9375

CITY OF TUALATIN
18880 SW MARTINAZZI AVE. PO BOX 369
TUALATIN, OREGON 97062-0369
(503) 692-2000

January 12, 1988

Mr. Robert N. Bothman
Director
Department of Transportation
Transportation Building
Salem, Oregon 97310

Dear Mr. Bothman:

Tualatin-Sherwood Road Bypass
Highway Division Invoice #146050
Project Numbers M-9282(2), 1X-9282(3)(4)

I have your letter of January 6, 1988 regarding the charges on invoice #146050, and I am requesting your further assistance.

On page 6 of the Construction Finance Agreement No. 7195, signed by the State Highway Engineer on June 13, 1980, the estimated cost of the project is stated as $1,840,000. Per the invoice detail, the total cost was $2,562,026.23; higher than the estimate by $686,026.23 (37%).

In order for me to justify this additional cost, would you please identify the areas of unanticipated, and/or greater than estimated, expenditures. We would appreciate this information.

Sincerely,

Marilyn Matthias

Marilyn M. Matthias
Finance Director

1-20-88
Per Doug Goldbach - Cam should r/d response.

MMM/jn

ENCLOSURE

RECEIVED
JAN 15 1988
HIGHWAY ACCOUNTING

D ____
BC ____
AC ____
BO ____
DE ____
LR ____ OM ____ PY ____
OC ____ Doug Goldbach
LC ____ r/D by 1-26.
AP ____
CA 1/14 Done
DP ____ Cy - Schwartz
ST ____

RECEIVED
STATE HWY ENGR
JAN 14 '88
REFER TO
FOR

Info	Inves	R/D	D/R	Sign	Act	File

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DOT DIRECTOR
REFER TO [illegible]
JAN 13 1988
FOR

Info	Inves	R/D	Reply Direct	Sign	Act	File
			X			

RESOLUTION NO. 729-80

A RESOLUTION AUTHORIZING EXECUTION OF A THREE-PARTY "CONSTRUCTION FINANCE AGREEMENT"/BETWEEN THE STATE OF OREGON, WASHINGTON COUNTY AND THE CITY OF TUALATIN TO CONSTRUCT ROADWAY IMPROVEMENTS BETWEEN INTERSTATE 5 AND S. W. 89TH AVENUE.

BE IT RESOLVED by the City Council of the City of Tualatin, Oregon, a municipal corporation, that:

Section 1. The Mayor and City Recorder be and they hereby are authorized to execute that certain three-party agreement between the State of Oregon, Washington County and the City of Tualatin, titled "Construction - Finance Agreement/Interstate Transfer Project" to construct roadway improvements between Interstate 5 and S.W. 89th Avenue, a copy of which is marked Exhibit "A", attached hereto and by this reference incorporated herein.

INTRODUCED AND ADOPTED this 12th day of May, 1980.

CITY OF TUALATIN, OREGON

BY ______________________
Mayor

ATTEST:

BY Yvonne L Addington
Recorder

6. The parties hereto also mutually agree that if any parcel of real property purchased with federal aid participation is no longer needed for right-of-way, or other public purposes, the sale, transfer of exchange of such property shall be subject to applicable Federal and State statutes, rules and regulations which are in effect at the time of disposition. Reimbursement to State of the required proportionate share of the fair market value may be required.

7. It is acknowledged by the parties that the estimated cost of the project as of the date of this agreement is $1,840,000 and that the anticipated completion date is June 30, 1982. In the event a contract for the construction of the project is not awarded on or before June 1, 1981, then the City may terminate this agreement subject to the conditions contained in Section 11 of City's Obligations above. The City shall give no less than 30 days written notice of termination to the other parties.

IN WITNESS WHEREOF, the parties hereto have set their hands and affixed their seals as of this date and year hereinafter written. City has acted in this matter pursuant to Resolution No. 729-80, adopted by its City Council on the 12th day of May, 1980.

This project was approved by the State Highway Engineer on December 26, 1979, under delegated authority from the Oregon Transportation Commission.

The Oregon Transportation Commission, by a duly-adopted delegation order, authorized the State Highway Engineer to sign this agreement for and on behalf of the Commission. Said authority is set forth in the Minutes of the Oregon Transportation Commission.

APPROVAL RECOMMENDED

Region Engineer

APPROVED AS TO FORM:

County Counsel

City Attorney

CITY OF TUALATIN, by and through
Its designated City Officials

By
Mayor

By Yvonne L Addington
City Recorder

STATE OF OREGON, by and through
its Department of Transportation,
Highway Division

State Highway Engineer

Date 6/13/80

WASHINGTON COUNTY, by and through
its Board of County Commissioners

Chairman

Approved Washington County
Board of Commissioners

Minute Order No. 80-304

Date 5-27-80

By Jo Ann Johansen
Clerk of the Board

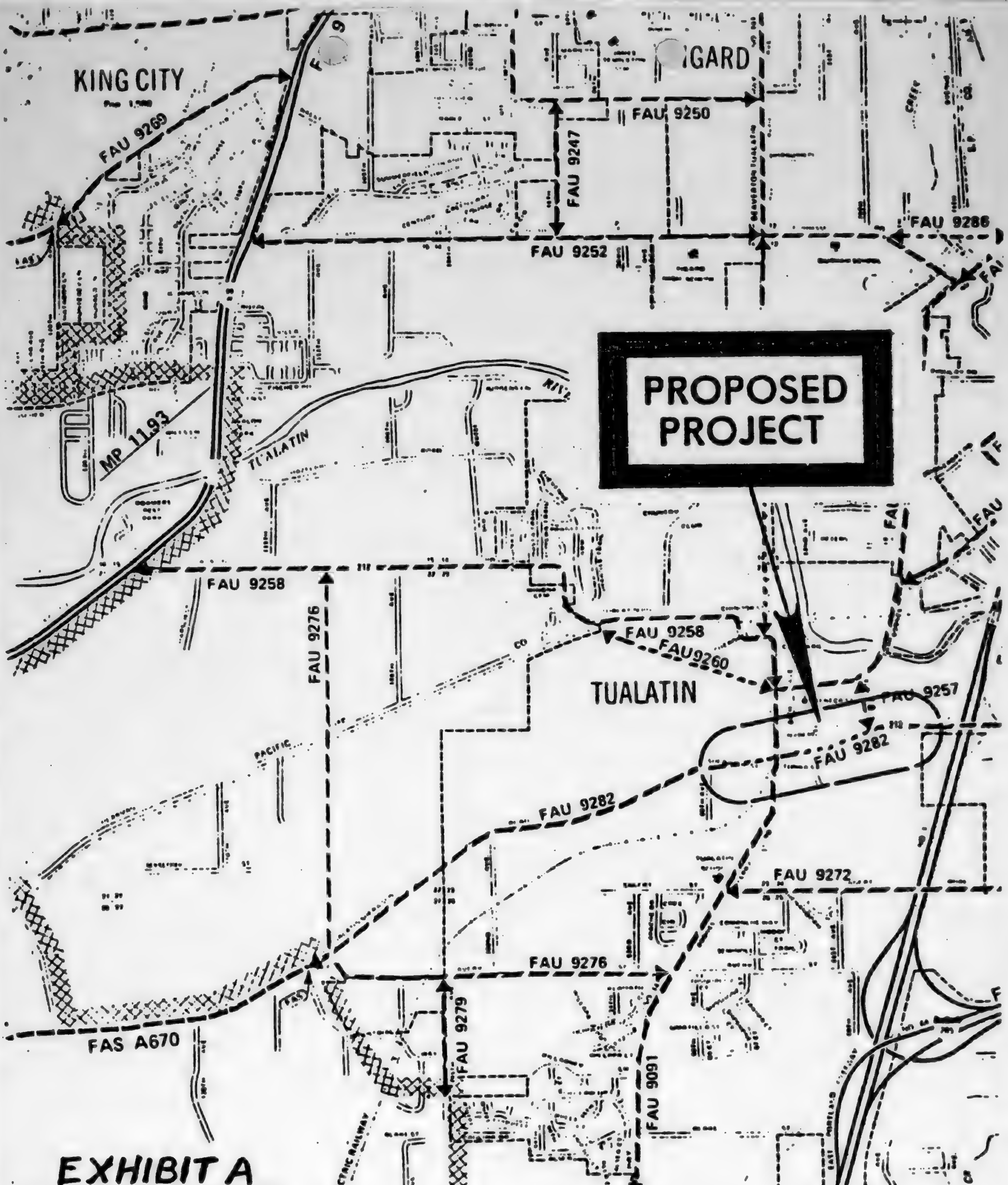
KING CITY
IGARD
FAU 9269
FAU 9250
FAU 9247
FAU 9252
FAU 9286
PROPOSED PROJECT
MP 11.93
TUALATIN
FAU 9258
FAU 9276
FAU 9258
FAU 9260
TUALATIN
FAU 9257
FAU 9282
PACIFIC
FAU 9282
FAU 9272
FAU 9276
FAU 9279
FAS A670
FAU 9091
OREGON ELECTRIC RAILWAY

EXHIBIT A

#1375

January 6, 1988 ACC/COM

Marilyn Matthias
Finance Director
City of Tualatin
18880 SW Martinazzi Avenue
Post Office Box 369
Tualatin, OR 97062-0369

Tualatin-Sherwood Road Bypass
Highway Division Invoice #146050
Project Numbers M-9282(2), IX-9282(3)(4)

I apologize for the delay in responding. I felt it necessary to research not only your particular situation, but the process as a whole.

I can understand your reaction to such a late billing. However, the practice has been to bill out all costs up to the amount of any advance deposit, then to provide a final billing when everything is complete and when the Federal Highway Administration has confirmed their portion of the costs.

This process works fine if the original estimates are accurate and there are no change orders during construction. If anything materially affects the costs, the area of responsibility seems to go awry. The headquarters' staff, through the field engineer, kept the City advised of cost increases through notification of engineering changes. The field staff, through the headquarters' staff, thought notices were being sent through the billing process. I have directed both the Program and Accounting Sections to implement procedures that will prevent this situation from reoccurring in the future.

I regret this has created an "unanticipated" expense for the City of Tualatin; however, the balance of $55,167.62 was an authorized expenditure.

s/Gary Potter

Robert N. Bothman
Director

bc Gary Potter
Larry Rulien
Cam Gilmour
Doug Goldbach

DG:dt sl fn

CITY OF TUALATIN
18880 SW MARTINAZZI AVE. PO BOX 369
TUALATIN, OREGON 97062-0369
(503) 692-2000

RECEIVED
STATE HWY ENGR
ROBERT N. BOTHMAN
NOV 19 '87
REFER TO
Doug Goldbach
FOR
X by 12-1-87.

RECEIVED
DOT DIRECTOR
REFER TO
PULLEN
NOV 16 1987
FOR

Info	Inves	R/D	Reply Direct	Sign	Act	File
		X				

November 10, 1987

Mr. Robert Bothman, Director
Oregon State Department of Transportation
135 Transportation Building
Salem, Oregon 97310-0780

RE: Highway Division invoice #146050 in the amount of $55,167.62
Project Numbers M-9282(2), IX-9282(3)(4)

Dear Mr. Bothman:

We are returning the enclosed invoice and attached documentation to you for your perusal. We received this billing on October 13, 1987 for work that was completed in the spring of 1983.

The City was to share in the cost of this project known to the City as the Tualatin Sherwood Road bypass. To facilitate the Highway Division receiving funds from the City for the City's share of the cost of this project, funds were set aside in one of our investment pool accounts and the Highway Division was given the authority to withdraw reimbursing funds from this account within specified limits.

In March, 1983, the last Highway Division withdrawal was made from our pool account. We received no notification from the Highway Division as to a pending liability of the City for additional funds. Nor did we hear of any pending liability in fiscal years 1983-84, 1984-85, 1985-86 or 1986-87. The enclosed invoice for a "balance due" on this project was received in October of the 1987-88 fiscal year.

Understandably, no appropriation has been made for this project in our budgets for the last five fiscal years; nor has any acknowledgment been made of such a potential liability in our five year financial plan, which is an integral part of our City's financial planning.

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NOV 20 1987
HIGHWAY
ACCOUNTING
C ___ BC ___ AC ___ BO ___ DE ___ LR ___ OM ___ PY ___ OC ___ LC ___ AP ___ CA ___ DP ___ ST ___

Even though it would be unanticipated (and unwelcome) at this time, the receipt of a "balance due" invoice for $1,000 to $2,000 could be presented to the Council for their approval. However, $55,000 is quite another matter, and would need to be considered as an unanticipated appropriation for the following fiscal year's budget.

I would appreciate receiving your comments on this matter.

Sincerely,

Marilyn Matthias

Marilyn Matthias
Finance Director

MM:gk
a:mmrb1110.ltr
Attachments

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310
CONTRACT ACCOUNTING
TOLL FREE: 1-800-452-7813 Ext. 86232

In Reply Refer to File No.: CON

October 6, 1987

City of Tualatin
PO Box 369
Tualatin, Oregon 97062

Re: Project Name SW 89th Avenue- I-5 Freeway, SW Nyberg Road

Fed. Aid No. 1X 9282 (3)(4) M 9282 (2)

Pool Acct. No. 4487

The above project has been completed and no further costs are anticipated. We have drawn up to the authorized amount for the project. Therefore, you may withdraw the interest balance remaining in your account with the Oregon State Treasurer, Local Government Investment Pool.

JHenry
Jan Henry
Contract Accounting Supervisor

AH:rs

cc: Oregon State Treasurer
Local Govt. Investment Pool

Form 734-3122

OREGON STATE HIGHWAY DIVISION

ITEMIZED STATEMENT OF FINAL COSTS DATE: August 14, 1987

CITY Tualatin AGREEMENT NO: 5766 & 7195 PROJECT NO: IX-9282(3)(4) M-9282(2)

CONTRACT NO: 9375 SECTION: SW 89th Ave. - I-5 Freeway, SW Nyberg Rd.

PRELIMINARY ENGINEERING (M-9282(2) PREFIX NO. 234-1959):

Project Manager ($1,403.41 Non-Partic.)	$ 67,345.83
Citizen Involvement ($372.29 Non-Partic.)	5,550.46
Consultant Fee	68,750.00
Final Design	32,383.40
Preliminary Design	534.30
R/W Descriptions	7,779.53
Region Geology	1,786.69
Traffic Section ($677.20 Non-Partic.)	32,786.98
Landscape Section	3,786.62
R/W Liaison	1,397.62
Region Utility Liaison	3,977.99
Audit Expense	455.65
Photogrammetry	12.00
Location	2,167.17
Engineering Graphics	37.28
Program Section	858.93
Specifications	5,269.99
Administrative Services	89.75
Environmental Section	23,455.64
Planning Section	3.25
Archaeological Salvage	199.14
Utility Relocation	450.38
Training	881.65
Public Hearing ($5.33 Non-Partic.)	4,575.74
TOTAL P.E. COST	$264,535.99
Less Federal Funds (FAU)	(224,862.72)
Less State Share: $\frac{(\$224,862.72)}{85.8\%} \times 7.1\% =$	(18,607.52)
CITY SHARE PE COST	$ 21,065.75

RIGHT-OF-WAY (IX-9282(3) PREFIX NO. 234-2529):

Net Cost of Land	$362,675.00
Value of Buildings & Equipment	1,675.00
Appraisals, Witness Fees, Etc. ($2,000.00 Non-Partic.)	11,295.07
Title Costs & Recording Fees	2,409.94
Taxes ($3.85 Non-Partic.)	841.27
Negotiation Expense	6,721.20

Relocation Computation	42.04
Legal	180.21
Appraisal Review	487.60
R/W Liaison & Relocation Plan	76.49
Program Section	14.94
R/W Office Expense	2,555.00
Training	433.12
TOTAL RIGHT-OF-WAY COSTS	$389,406.88
Less Federal Funds (FAI-X)	(329,292.58)
Less State Share: $\frac{(\$329,292.58)}{85\%} \times 9\%$	(34,866.27)
CITY SHARE R/W COSTS	$ 25,248.03

CONSTRUCTION (IX-9282(4) PREFIX NO. 234-1063 & C09375):

Payment to Contractor ($7,519.94 Non-Partic.)	$1,470,473.36
Payment to Contract (Fire Pre-emption System)	16,918.00
SFO #1 Permanent Striping	6,763.66
SFO #3 Install Automatic Crossing Devices	128,300.43
SFO #4 Signal Controller Test & Turn-On ($1,874.00 Non-Partic.)	15,325.00
SFO #5 Adjust Buried Telephone Conduit	3,885.00
SFO #6 Credit for Adjusting City San. Sew. Manholes	(1,016.00)
SFO #7 Credit for Work for McDonald's Inc.	(9,305.65)
SFO #8 Provide Electrical Service to Irrigation Controller	1,176.34
SFO #9 Install 20-Amp Breaker at Irrigation Controller	379.51
SFO #10 Relocate Left Turn Signal Head & Illuminated Sign	389.91
SFO #11 Credit for Work for Fred Meyer Shopping Center (Non-Partic.)	(2,338.61)
Construction Engineering ($1,575.29 Non-Partic.)	210,381.48
Audit Services	767.20
Landscape Design	55.59
Program Section	98.41
Materials Testing	15,414.37
Technical Services	4,531.21
Construction Branch	3,022.12
Region Office Charges	5,771.27
Training ($40.90 Non-Partic.)	1,090.76
TOTAL CONSTRUCTION COST	$1,872,083.36
Less Federal Funds	(1,583,871.09)
Less State Share: $\frac{(\$1,261,844-329,292.58)}{85\%} \times 9\%$ + ($124,000 x 15%) =	(117,340.73)
Less State Share of Fire Pre-emption System: $16,918 x 7.5% =	(1,268.85)

Less Tualatin Fire District Share of Fire Pre-emption System: $16,918 x 7.5% =	(1,268.85)
CITY SHARE CONSTRUCTION COST	$ 168,333.84

SUMMARY

City Share PE Cost	$ 21,065.75
City Share R/W Cost	25,248.03
City Share Const. Cost.	168,333.84
TOTAL CITY SHARE	$ 214,647.62
Less PE Deposit 10-4-76 & 2-3-78	(12,370.00)
Less R/W Deposit 8-13-80	(14,100.00)
Less Const. Deposits 9-23-81 & 10-26-81	(133,010.00)
AMOUNT DUE FROM CITY	$ 55,167.62

GEZ:me
cc: Jan Henry
Wayne Schulte
LPG Files

Oregon Department of Transportation
HIGHWAY DIVISION

HIGHWAY DIVISION INVOICE

		AG 02	CURRENT DOCUMENT NUMBER 146050
YOUR ORDER NUMBER	BILLING REQ. NUMBER CA 5910	DATE 10-6-87	VENDOR NUMBER 0001023318-00

REC'D
CITY OF TUALATIN
OCT 13 '87

City of Tualatin
P.O. Box 369
Tualatin, Oregon 97062

Mayor	____	Council	____
Admin	____	Admin Asst.	____
Police	____	[✓ Finance]	____
Eng	____	Planning	____
Bldg	____	Library	____
Recreation	____	Operations	____

SEND REMITTANCE TO:
OREGON STATE HIGHWAY DIVISION
434 TRANSPORTATION BUILDING
SALEM OR 97310-0780

T.C.	E.A. SUB JOB	SPECD	ORG. UNIT	OBJ DTL	ACT	REVENUE SOURCE	AGY. SRC.	AMOUNT
617	C09375-011	L03	8002			844010	02	$55,167.62

PROG	APP SYM	FUND CODE	FUND DETAIL	FUND SOURCE

FOLD

DESCRIPTION:

Final Settlement 1X 9282 (3) (4)
M 9282 (2)

SW. 89th Ave. - I-5 Freeway, SW. Nyberg Road

See attached itemized statement

Amount Due: $55,167.62

TOTAL PRICE

GL 1140

SPECIAL INSTRUCTIONS (FOR ACCOUNTING USE ONLY)

TOTAL AMOUNT DUE $55,167.62

Gary Zehner - 378-6011
IF YOU HAVE QUESTIONS ABOUT THIS INVOICE PLEASE CONTACT: Anne Hernandez PH. 378-5034
(INVOICE PREPARER)

734-1150 (11-86)

Oregon Department of Transportation
HIGHWAY DIVISION

HIGHWAY DIVISION INVOICE

AGE	CURRENT DOCUMENT NUMBER
02	146050

YOUR ORDER NUMBER	BILLING REQ. NUMBER	DATE	VENDOR NUMBER
	CA 5910	10-6-87	0001023318-00

City of Tualatin
P.O. Box 369
Tualatin, Oregon 97062

SEND REMITTANCE TO:
OREGON STATE HIGHWAY DIVISION
434 TRANSPORTATION BUILDING
SALEM OR 97310-0780

T.C.	E.A. SUB JOB	SPECD	ORG. UNIT	OBJ DTL	ACT.	REVENUE SOURCE	AGY. SRC.	AMOUNT
617	C09375-011	L03	8002			844010	02	$55,167.62

PROG	APP SYM	FUND CODE	FUND DETAIL	FUND SOURCE

FOLD

DESCRIPTION:

Final Settlement 1X 9282 (3) (4)
M 9282 (2)

SW. 89th Ave. - I-5 Freeway, SW. Nyberg Road

See attached itemized statement

	TOTAL PRICE
Amount Due:	$55,167.62
TOTAL AMOUNT DUE	$55,167.62

GL 1140

SPECIAL INSTRUCTIONS (FOR ACCOUNTING USE ONLY)

Gary Zehner - 378-6011
IF YOU HAVE QUESTIONS ABOUT THIS INVOICE PLEASE CONTACT: Anne Hernandez (INVOICE PREPARER) PH. 378-5034

734-1150 (11-86)

S.W. 89th Ave. Pacific Hwy @ Swinyberg 234-1063

Fred Meyer Portion - 9N (Costs of Special Bid items - see Agreement) Agreement # 7195 + 7307

City - [illegible] (7[illegible] 100% N - see Agree for Participation

	Pool Account 4487_02	1	2 B01766-01 B01769-01	3	4 Deposits	5 Transfers	6 Balance
9/11/81	Initial Deposit - City				10629000	[illegible]	
	✓ Deposit - Fred Meyer				7660000	[illegible]	18289000
10/25/81	10% Draw - City					/ 1062900	
	10% Draw - F.M.					/ 766000	16460100
10/27/81	Additional Deposit - City				2672000	[illegible]	19132100
1/25/82	Costs thru 1/21/82						
	City - N - 525.19	322987			209,610.00	/ 322987	18809113
	" 6% P 2704.68						
3/2/82	Return Portion of Fred Meyer Draw				⟨~~744000~~⟩	/ ⟨744000⟩	19553113
	Total F.M. Deposit will be $2200 - 10% only $220						
3/2/82	Costs thru 2/25/82						
	City N - 603.81	480295				/ 157308	19395805
	" 6% P 4199.14						
	Reduce Pool Balance - Return of Fred Meyer Amount				⟨744000⟩	[redacted]	11955805
4/14/82	Costs thru 4/8/82		less F.M. total		13521000 ⟨12200.00⟩		
	City N 665.66	604398			1,330.10	/ 124103	11831702
	6% P 5378.32						
5/25/82	Costs thru 5/20/82						
	City N 675.69	884625				/ 280227	11551475
	6% P 8170.56						
7/15/82	Costs thru 6/29/82						
	City N 682.48	1376104				/ 491479	11059996
	6% P 13078.56						
8/82	Costs thru 8/19/82						
	City N 699.98	2604761				/ 1228657	9831339
	6% P 25347.63						
10/82	Costs thru 10/7/82						
	City N 20.04	4783009				/ 2178248	7653091
	6% P 47810.05						
11/82	Costs thru 11/10/82						
	City N 20.04	7313979				/ 2530970	5122121
	6% P 73119.75						
1/83	Costs thru 1/6/83						
	City N 217.94	9527661				/ 2213682	2908439
	6% P 95058.67						
2/83	Costs thru 2/10/83						
	N 217.94	10031454				/ 503793	2404646
	6% P 100,096.60						
3/83	Cost thru 3/10/83 N 401.94	13026574				/ 2404646	— 0
	6% P [illegible]				(over)		

275

234-1063
C9375

(ORIGINAL)

FORM APPROVED BY
COMPTROLLER GENERAL,
U.S. MAY 12, 1966

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

7-1-86

VOUCHER FOR WORK PERFORMED UNDER PROVISIONS OF THE FEDERAL AID AND FEDERAL HIGHWAY ACTS, AS AMENDED

STATE VOUCHER NO.

FHWA VOUCHER NO.

FHWA SCHEDULE NO.

APPROPRIATION

THE UNITED STATES, DR., TO *(Insert official or depositary named in project agreement)*
TREASURER OF THE STATE OREGON

ADDRESS
CAPITOL BUILDING
SALEM, OREGON 97310

PAID BY

(For use of Paying Office)

STATE
OREGON

VOUCHER TYPE *(Check Appropriate Block)*
☐ CURRENT BILLING
☐ OTHER PROGRESS
☒ FINAL VOUCHER (*)

VOUCHER PERIOD
FROM 9-2-81
TO 1-9-85

FEDERAL AID PROJECT NO.
IX-9282(4)

(*) *Use Form FHWA-1447 for Final Voucher for a project constructed under certification acceptance or secondary road procedures (23 U.S.C. 117).*

	TOTAL ACTUAL COST	TOTAL PARTICIPATING COST	PRO-RATA OF PARTICIPATING COST CLAIMED FROM U.S.	TOTAL AMOUNT CLAIMED FROM U.S.	LESS PREVIOUS PAYMENTS	NET AMOUNT CLAIMED
772	$ 69,133.75	$ 69,133.75	85%	$ 58,763.69	$ 58,763.69	-0-
178	$ 26,681.83	$ 26,681.83	85%	$ 22,679.56	$ 22,679.56	-0-
772	$1,776,227.88	$1,767,562.76	85%	$1,502,427.84	$1,502,427.84	-0-
	$1,872,043.46	$1,863,377.74	85%	$1,583,871.09	$1,583,871.09	-0-

I certify that the costs shown in this voucher have been incurred in accordance with terms of project agreements; applicable State and Federal laws or regulations; and that no claim has previously been submitted for costs claimed.

STATE HIGHWAY AGENCY
OREGON

DATE
7-1-86

SIGNATURE OF AUTHORIZED OFFICIAL
CONTROLLER

I certify that supporting records for costs claimed, and the referenced project (if applicable), have been subjected to required reviews, approvals and inspections by the Federal Highway Administration and that the amount approved is justly due.

AMOUNT SUBMITTED
$0.00

ADJUSTMENTS

AMOUNT APPROVED

SIGNATURE OF FHWA REPRESENTATIVE
(SIGN ORIGINAL ONLY)

DATE APPROVED

FORM PR-20
(Rev. 5-78)

PREVIOUS EDITIONS ARE OBSOLETE

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (Payee must not use this column)
	S.W. 89th AVE. - PACIFIC HIGHWAY (TUALATIN) SECTION					
	FAU 9282(S.W. NYBERG RD.)					
	WASHINGTON COUNTY					
	Construction					
	Type Code 6205					
	Roadway (Sta. 53 + 50 to Sta. 97.40)					
	Final Contract Payment summary	Lump Sum			$1,210,247.65	
SFO #1	Permanent Striping (State)	All Required			6,763.66	
SFO #3	To relocate crossing install automatic devices (Burlington Northern)	All Required			$ 125,260.22	
SFO #5	Adjustment of buried telephone conduit (General Telephone Company)	All Required			$ 3,885.00	
SFO #6	To authorize the crediting of payment to the project account for adjusting and or reconstruction sanitary sewer manholes owned by the City of Tualatin	All Required			$ -1,016.00	
SFO #7	Document a credit to the project for work performed for McDonalds, Inc.	All Required			$ -9,305.65	
SFO #8	Provide electrical service to irrigation controller (Portland General Electric)	All Required			$ 1,176.34	
SFO #9	Install 20-Amp weather proof circuit breaker at irrigation controller	All Required			$ 379.51	
SFO #10	Relocate left turn signal head and left turn illuminated sign (State)	All Required			$ 389.91	
	TOTAL PARTICIPATING TYPE CODE 6205				$1,337,780.64	
	Type Code Y031					
	Traffic Signal (Nyberg Road at Martinazzi Road at S.W. Boone) Ferry Road and at I-5 E & W Ramps					
	Final Contract Payment Summary	Lump Sum			$ 269,623.77	
SFO #4	Signal controller testing and signal turn (State)	All Required			$ 13,451.00	
	TOTAL PARTICIPATING TYPE CODE Y031				$ 283,074.77	
	TOTAL PARTICIPATING CONSTRUCTION COST				$1,620,855.41	
	Construction Engineering					
	State	All Required			$ 238,714.92	
	Work by Burlington Northern, Inc.	All Required			$ 3,040.21	
	TOTAL PARTICIPATING CONSTRUCTION ENGINEERING				$ 241,755.13	
	Misc Project Cost					
	Audit Expense	All Required			$ 767.20	
	TOTAL PARTICIPATING PROJECT COST				$1,863,377.74	
	AMOUNT CARRIED FORWARD.....					

FORM PR-20B (REV. 5-66)
FORM APPROVED BY
COMPTROLLER GENERAL,
U.S. MAY 12, 1966
IN LIEU OF SF-1166

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

(PPM 30-6)

FEDERAL AID PROJECT

STATE: OREGON

COUNTY: WASHINGTON COUNTY

NUMBER: IX-9282(4)

SECTION: S.W. 89 Ave. - Pacific Hwy.

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (Payee must not use this column)
	Non Participating Project Cost					
	Final contract Payment Summary	All Required			$ 7,519.94	
SFO #4	Signal Controller testing and signal turn on (State)	All Required			$ 1,874.00	
SFO #11	Credit for work performed for Fred Meyer Shopping Center	All required			$ -2,338.61	
	Construction Engineering	All Required			$ 1,610.39	
	TOTAL NON PARTICIPATING PROJECT COST				$ 8,665.72	
	TOTAL PROJECT COST				$1,872,043.46	

Prepared based on Participating cost as shown on the Federal Billing as of June 26, 1986.

PREVIOUS EDITIONS ARE OBSOLETE

USCOMM-DC 27329-P66

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (Payee must not use this column)
	AMOUNT CARRIED FORWARD.......					

FORM PR-20B (REV. 5-66)

GPO 907-444

USCOMM-DC 27329-P65

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PAGE     1
                    JOB COST SUMMARY RUN ON  08-04-87
                 EA/SUBJOB/ACTIVITY/OBJ-DETAIL CREW-NUMBER
                        PAYROLL CHARGES ARE LOADED
                      CHARGES ARE CURRENT TO 07/24/87
                                    CREW        CURRENT      BALANCE TO
EA        ACTIVITY  OBJ-DETAIL     NUMBER       MONTH          DATE
--        --------  ----------     ------       -------     ----------
                                   8002                    1,872,558.58 ***
C09375                             8002                           21.40
C09375               194           8002                           11.60
C09375               199           0521                      -20,100.00
C09375               300           0521                       20,100.00
C09375               304           0521                         -199.14
C09375               312           0521                         -450.38
C09375               336           0521
C09375               598           0631
C09375               598                                              1,871,942.06 SUBTOTAL
ACTIVITY
                                                                 84.45       84.45 SUBTOTAL
C09375    050        001           0500
ACTIVITY    050

C09375    900        598           0521
C09375    900        598           0631                                           SUBTOTAL
ACTIVITY    900
                                                                 63.70
C09375    901        504           7300                          42.40
C09375    901        504           7612                                     106.10 SUBTOTAL
ACTIVITY    901

C09375    915        030           7114                          55.59       55.59 SUBTOTAL
ACTIVITY    915
                                                                 27.79
C09375    920        001           0631                                      27.79 SUBTOTAL
ACTIVITY    920
                                                                 17.19
C09375    940        130           8200                                      17.19 SUBTOTAL
ACTIVITY    940
                                                                      1,872,233.18
EA          C09375 TOTAL

*** INDICATES PRIOR TO JULY 1, 1985 EXPENDITURES
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PAGE     1

                         JOB COST SUMMARY RUN ON  08-04-87
                    EA/SUBJOB/ACTIVITY/OBJ-DETAIL CREW-NUMBER
                              PAYROLL CHARGES ARE LOADED
                           CHARGES ARE CURRENT TO 07/24/87

                                           CREW   MSA          CURRENT        BALANCE TO
EA      'SUBJOB ACTIVITY OBJ-DETAIL NUMBER FIELD          MONTH             DATE
--       ------ -------- ---------- ------ -----         -------        ----------
C09375   000    050      001        0500                                      84.45
OBJ-DETAIL 001                                                                84.45

ACTIVITY   050                                                                84.45 SUBTOTAL

C09375   000    901      504        7300                                      63.70
C09375   000    901      504        7612                                      42.40
OBJ-DETAIL 504                                                               106.10

ACTIVITY   901                                                               106.10 SUBTOTAL

C09375   000    915      030        7114                                      55.59
OBJ-DETAIL 030                                                                55.59

ACTIVITY   915                                                                55.59 SUBTOTAL

C09375   000    920      001        0631                                      27.79
OBJ-DETAIL 001                                                                27.79

ACTIVITY   920                                                                27.79 SUBTOTAL

C09375   000    940      130        8200                                      17.19
OBJ-DETAIL 130                                                                17.19

ACTIVITY   940                                                                17.19 SUBTOTAL

SUB-JOB    000 SUBTOTAL                                                      291.12

C09375   010                        8002                                     496.24 ***
OBJ-DETAIL                                                                   496.24

C09375   010             199        8002                                       5.80
OBJ-DETAIL 199                                                                 5.80

ACTIVITY                                                                     502.04 SUBTOTAL

SUB-JOB    010 SUBTOTAL                                                      502.04

C09375   011                        8002                               1,767,929.94 ***
OBJ-DETAIL                                                             1,767,929.94

C09375   011             194        8002                                      21.40
OBJ-DETAIL 194                                                                21.40

*** INDICATES PRIOR TO JULY 1, 1985 EXPENDITURES
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                        JOB COST SUMMARY RUN ON  08-04-87
                      EA/SUBJOB/ACTIVITY/OBJ-DETAIL CREW-NUMBER
                             PAYROLL CHARGES ARE LOADED
                           CHARGES ARE CURRENT TO 07/24/87

                                        CREW   MSA          CURRENT       BALANCE TO
EA       SUBJOB ACTIVITY OBJ-DETAIL NUMBER FIELD          MONTH           DATE
--       ------ -------- ---------- ------ -----         -------       ----------
C09375   011               199        8002                                     5.80
OBJ-DETAIL 199                                                                 5.80

C09375   011               300        0521                               -20,100.00
OBJ-DETAIL 300                                                           -20,100.00

C09375   011               304        0521                                20,100.00
OBJ-DETAIL 304                                                            20,100.00

C09375   011               312        0521                                  -189.18
OBJ-DETAIL 312                                                              -189.18

C09375   011               336        0521   SF03                           -450.38
OBJ-DETAIL 336                                                              -450.38

C09375   011               598        0521                                      .01
C09375   011               598        0631                                -5,448.73
OBJ-DETAIL 598                                                            -5,448.72

ACTIVITY                                                              1,761,868.86 SUBTOTAL

C09375   011    900        598        0521                                 5,448.73
C09375   011    900        598        0631                                     -.01
OBJ-DETAIL 598                                                             5,448.72

ACTIVITY   900                                                             5,448.72 SUBTOTAL

SUB-JOB    011 SUBTOTAL                                               1,767,317.58

C09375   031                          8002                                26,681.83 ***
OBJ-DETAIL                                                                26,681.83

C09375   031               598        0521                                     -.01
C09375   031               598        0631                                 5,448.73
OBJ-DETAIL 598                                                             5,448.72

ACTIVITY                                                                  32,130.55 SUBTOTAL

C09375   031    900        598        0521                                -5,448.73
C09375   031    900        598        0631                                      .01
OBJ-DETAIL 598                                                            -5,448.72

ACTIVITY   900                                                            -5,448.72 SUBTOTAL


*** INDICATES PRIOR TO JULY 1, 1985 EXPENDITURES
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                      JOB COST SUMMARY RUN ON  08-04-87
                   EA/SUBJOB/ACTIVITY/OBJ-DETAIL CREW-NUMBER
                          PAYROLL CHARGES ARE LOADED
                       CHARGES ARE CURRENT TO 07/24/87
                                             CREW   MSA          CURRENT        BALANCE TO
EA        SUBJOB ACTIVITY OBJ-DETAIL NUMBER FIELD          MONTH             DATE
--        ------ -------- ---------- ------ -----          -------        ----------
                                                                           26,681.83
SUB-JOB    031 SUBTOTAL
                                                                               19.30 ***
C09375   080                         8002                                      19.30
OBJ-DETAIL
                                                                               19.30 SUBTOTAL
ACTIVITY
                                                                               19.30
SUB-JOB    080 SUBTOTAL
                                                                           69,131.27 ***
C09375   081                         8002                                  69,131.27
OBJ-DETAIL
                                                                               -9.96
C09375   081                312      0521                                      -9.96
OBJ-DETAIL 312
                                                                           69,121.31 SUBTOTAL
ACTIVITY
                                                                           69,121.31
SUB-JOB    081 SUBTOTAL
                                                                            8,300.00 ***
C09375   090                         8002                                   8,300.00
OBJ-DETAIL
                                                                            8,300.00 SUBTOTAL
ACTIVITY
                                                                            8,300.00
SUB-JOB    090 SUBTOTAL
                                                                        1,872,233.18
EA         C09375 TOTAL

*** INDICATES PRIOR TO JULY 1, 1985 EXPENDITURES
```

...TION	PREFIX	FUNCTION	SUB F.	GR	CURRENT MONTH	FISCAL YEAR TO DATE	GRAND TOTAL TO DATE	ACTIVE BEG	ACTIVE END
	234 1062	201	00	P 8			1,881.00	[illegible]	[illegible]
	234 1062	206	00	N 1			23.73	[illegible]	[illegible]
	234 1062	206	00	N 8			24	[illegible]	[illegible]
	234 1062	210	02	P 1			500.00	[illegible]	[illegible]
	234 1062	296	00	N 8		2,529.30CR	74,436.09CR	[illegible]	[illegible]
	234 1062	297	00	N 9		2,529.30	10,043.77	[illegible]	[illegible]
	234 1062	298	00	N 9			64,79[illegible]	[illegible]	[illegible]
	234 1062	900	00	P 1			[illegible],162.40	[illegible]	[illegible]
	234 1062	900	00	P 8			74.54	[illegible]	[illegible]
	234 1062	900	00	N 1			2,579.05	[illegible]	[illegible]
	234 1062	900	00	N 8			26.05	[illegible]	[illegible]
	234 1062	920	00	P 1			72.94	[illegible]	[illegible]
	234 1062	920	00	P 8			[illegible]	[illegible]	[illegible]
	234 1062	940	00	P 1			443.74	[illegible]	[illegible]
	234 1062	940	00	P 8			4.51	[illegible]	[illegible]
	234 1062	941	00	P 1			207.96	[illegible]	[illegible]
	234 1062	941	00	P 8			2.04	[illegible]	[illegible]
	234 1062	942	00	P 1			24.39	[illegible]	[illegible]
	234 1062	942	00	P 8			25	[illegible]	[illegible]
	234 1062	944	00	P 1			666.98	[illegible]	[illegible]
	234 1062	944	00	P 8			6.[illegible]	[illegible]	[illegible]
	234 1062	945	00	P 1			220.50	[illegible]	[illegible]
	234 1062	945	00	P 8			[illegible]	[illegible]	[illegible]
	234 1062	946	00	P 1			240.43	[illegible]	[illegible]
	234 1062	946	00	P 8			4.[illegible]	[illegible]	[illegible]
	234 1062	948	00	P 1			238.[illegible]		
		TOT		P1			69,572.97		
		TOT		P8			1,974.05		
		TOT		N1			2,862.[illegible]		
		TOT		N8			26.29		
		** JOB TOTALS **			**	**	74,436.09 **		
SW 89TH-PAC HWY(TUALATIN) CONT NO 9375 = FA PROJ NOS X10 9282004 95 X10 9282004						X10 9282004	X10 9282004 95 STATE		
	234 1063	201	00	P 1	Pay Cont.	33,346.76	1,44[illegible],801.18 ✓	[illegible]	[illegible]
	234 1063	201	00	P 8	" "	1,158.38	57,170.24 ✓	[illegible]	[illegible]
	234 1063	201	00	N 9	" "		[illegible],519.94 ✓	[illegible]	[illegible]
	234 1063	203	00	P 1	Cr. Liq. Dam.		20,100.00CR ✓	[illegible]	[illegible]
	234 1063	205	03	P 1	6,437.54		379.51 ✓	[illegible]	[illegible]
	234 1063	220	09	P 1	SFO#9		[illegible] ✓	[illegible]	[illegible]
	234 1063	270	01	P 1	SFO#1		6,[illegible]62.66 ✓	[illegible]	[illegible]
	234 1063	270	04	P 1	" #4		12,451.00 ✓	[illegible]	[illegible]
	234 1063	270	04	N 2	" "		1,[illegible]74.00	[illegible]	[illegible]
	234 1063	270	10	P 1	" #10		[illegible] ✓	[illegible]	[illegible]
	234 1063	235	03	P 1	" #3	12,110.31	123,750.31 ✓	[illegible]	[illegible]
	234 1063	285	05	P 1	" #5		[illegible],835.00 ✓	[illegible]	[illegible]
	234 1063	285	08	P 1	" #8		1,1[illegible] ✓	[illegible]	[illegible]
	234 1063	291	06	P 1	" #6		1,016.[illegible]CR ✓	[illegible]	[illegible]
	234 1063	291	07	P 1	" #7		[illegible]CR ✓	[illegible]	[illegible]

ACCOUNT SUMMARY - EXPENDITURES & LEDGERS JUNE 1985 PAGE 236

DESCRIPTION	PREFIX	FUNCTION	SUB F.	GR	CURRENT MONTH	FISCAL YEAR TO DATE	GRAND TOTAL TO DATE	ACTIVE BEG	ACTIVE END
234	1063	291	11	N 9	" "	2,336.61CR	2,336.61CR	24	24
234	1063	295	00	N 9	Tr. City	138.61CR	133,010.00		
234	1063	296	00	N 9	" St. .01CR	33,320.55CR	1,712,201.25CR		
234	1063	298	00	N 9	" Fed. .01	36,159.16	1,57[illegible],922.40		
234	1063	299	00	N 9	" RR/ETC	2,200.00CR	1,268.[illegible]		
234	1063	900	00	P 1	Const. Engr. 1.41CR	26,286.33CR	170,822.88		
234	1063	900	00	P 3	" "	26,681.87	26,681.8[illegible]		
234	1063	900	00	P 8	" " .07CR	12.98	10,452.60		
234	1063	900	00	N 1	" "		135.91		
234	1063	900	00	N 8	" "		9.76		
234	1063	900	00	N 9	" "		1,244.67		
234	1063	915	00	P 1	Audit 197.09	600.21	632.75		
234	1063	920	00	P 1	Prog. Sec. .06CR	14.91	67.11		
234	1063	920	00	P 8	" " .01CR	.78	2.51		
234	1063	928	00	N 1	Adm on Ret .22	49.02CR	[illegible]		
234	1063	928	00	N 8	" " " .01	2.58CR	.01		
234	1063	939	00	P 1	Arch. Salv.		~~134.13~~		
234	1063	939	00	P 8	" "		~~9.96~~		
234	1063	940	00	P 1	Salem Lab. .17CR	38.10	13,719.53		
234	1063	940	00	P 8	" " .01CR	2.00	564.04		
234	1063	941	00	P 1	Port "		3,338.91		
234	1063	941	00	P 8	" "		104.64		
234	1063	942	00	P 1	Eugene "		19.05		
234	1063	942	00	P 8	" "		1.01		
234	1063	944	00	P 1	Tech. Serv 391.96	571.55	4,304.88		
234	1063	944	00	P 3	" " 20.64	30.09	326.53		
234	1063	945	00	P 1	Const. Br. 2.47CR	546.18	2,871.01		
234	1063	945	00	P 8	" " .17CR	28.75	151.11		
234	1063	946	00	P 1	Region Off.		5,4[illegible]		
234	1063	946	00	P 8	" "		288.54		
234	1063	948	00	P 1	Gen Const Engr. 6.35	512.66	702.39		
234	1063	948	00	P 8	" " " .45	.88	6.60		
234	1063	948	00	N 1	" " "	128.92	[illegible].92		
234	1063	950	00	P 1	Training		69[illegible]		
234	1063	950	00	P 8	"		[illegible].48		
234	1063	950	00	N 1	"		38.85		
234	1063	950	00	N 8	"		.05		
234	1063	960	00	N 1	Personal Leave		142.34		
234	1063	960	00	N 8	" "		.48		
		TOT	P1		7,029.10	21,454.91	1,767,923.[illegible]		
		TOT	P3			26,681.03	26,681.8[illegible]		
		TOT	P8		20.87	1,239.06	69,131.2[illegible]		
		TOT	N1		.22	79.90	496.24		
		TOT	N8		.01	[illegible].58CR	19.[illegible]		
		TOT	N9			2,338.61CR	3,200.00		
		** JOB TOTALS **			7,050.20 **	47,115.21 **	1,772,558.52 **		

SPOE RRXING&SW TIDEMAN SEC CONT NO FA PROJ NOS RRS 3189001 100 STATE

234 1070 205 01 P 1

PROGRAM SECTION
MANAGER ___ RESOURCE UNIT ___
FA UNIT ___ PROGRAM UNIT ___
JUL 24 1987
REFER TO ___
R/D ___ ACT ___ REPLY ___
DISC ___ INFO ___ FILE ___

17093

CONTRACT PAYMENT VOUCHER - COVER SHEET

OREGON STATE HIGHWAY DIVISION

PAYEE CASCADE CONSTRUCTION CO INC PO BOX 4267 PORTLAND OR 97208	VOUCHER DATE 11-26-84	TOTAL AMOUNT $ 25,960.00

CONTRACT NO. 9375	ESTIMATE NO. 23 POST FINAL	APPROVED: IX - 9282 (4) Designated Authority
PERIOD COVERED: TO 1-22-83		

FINAL OR POST FINAL VOUCHERS ONLY

CONTRACTORS CERTIFICATE

I, ______________________ (Name) CERTIFY THAT I AM ______________________ (Capacity)

FOR ______________________ (Firm or Corp.) THAT I HAVE KNOWLEDGE OF THE WITHIN DESCRIBED AND ATTACHED CLAIM; THAT THE FOREGOING ACCOUNT IS CORRECT AND JUST; THAT THE WORK WAS ACTUALLY PERFORMED AND MATERIAL FURNISHED AS THEREIN CHARGED; AND THAT THERE IS DUE ME FROM THE STATE OF OREGON THE AMOUNT INDICATED HEREON; FURTHER, THAT WHERE FORCE ACCOUNT WORK IS CHARGED, ANY CONTRIBUTIONS TO THE EMPLOYE'S BENEFIT FUNDS REQUIRED BY AGREEMENTS BETWEEN THE EMPLOYER'S ASSOCIATIONS AND THE EMPLOYE'S UNIONS HAVE BEEN PAID; FURTHER THAT NO PORTION OF THIS BILL HAS BEEN PREVIOUSLY PAID.

____
Contractor's Signature

Executing the final voucher does not waive your right to submit additional claim(s) as defined in Sec.109.15, Standard Specifications for Highway Construction.	If the Contractor has elected to have retainage deposited in an interest-bearing account, per ORS279.420, accumulated interest will be paid in conjunction with the final warrant when issued. Administrative costs will also be deducted at this time for retainage deposits, or securities deposited in lieu of retainage.

Payment of accounts incurred by the State Highway Division authorized by ORS 366.435.

Form 734-1020X (Rev. 8-81)

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CONTRACT #   9375                                      EST 023

 234 1063   201(41)  1   P      25,960.00
            GROUP TOTAL CONTRACT ITEMS  P              25,960.00

         GRAND TOTAL CONTRACT ITEMS                    25,960.00

 234 1063   204(41)
```

31

A.
B. # 11

• CONTRACT PAYMENT VOUCHER

OREGON STATE HIGHWAY DIVISION

FORM 734-1020 (REV. 7-78)

COUNTY WASHINGTON	CONTRACT NO. 9375	ESTIMATE NO. 23	PREFIX NO'S.	
HIGHWAY FAU 9282 (SW NYBERG RD)	FEDERAL AID PROJECT NO. IX 9282004			
SECTION SW [illegible]9TH AVE-PACIFIC HWY(TUALATIN)				

NO.	ITEMS	UNITS	UNIT PRICE	QUANTITY TO DATE	AMOUNT TO DATE	PREVIOUS AMOUNT
001	NI Mobilization				169.57	
001	1P MOBILIZATION	LUMP SUM	42699.0000	100.000	~~42699.00~~	42699.00
002	1P TEMPORARY PROTECTION AND DIR OF TRAFFIC	LUMP SUM	8832.0000	100.000	~~8832.00~~	8832.00
003	1P TEMPORARY SIGNS	SQ FT	9.0000	391.000	3519.00	3519.00
004	1P TEMPORARY BARRICADES	EACH	105.0000	39.000	4095.00	4095.00
006	1P TEMPORARY PLASTIC SAFETY MARKERS	EACH	54.0000	42.000	2268.00	2268.00
008	1P FLAGMEN	HOUR	24.0000	1,160.000	27840.00	27840.00
009	1P CLEARING AND GRUBBING	LUMP SUM	6868.0000	100.000	6868.00	6868.00
010	1P REMOVAL OF STRUCTURES ANDOBSTRUCTIONS	LUMP SUM	6262.0000	100.000	6262.00	6262.00
011	1P DITCH EXCAVATION	CU YD	6.2000	1,101.110	6826.88	6826.88
012	1P EMBANKMENT IN PLACE	CU YD	3.9500	10,050.900	39701.06	39701.06
013	1P TOPSOIL EMBANKMENT IN PLACE	CU YD	9.6000	1,039.510	9979.30	9979.30
014	1P TRENCH EXCAVATION	CU YD	13.4000	1,943.450	26042.23	26042.23
015	1P FINISHING ROADBED AND SLOPES	LUMP SUM	5050.0000	100.000	5050.00	5050.00
016	1P WATERING	M-GAL	30.0000	270.000	8100.00	8100.00
017	1P COARSE AGGREGATE BASE	TON	8.3200	1,963.620	16337.32	16337.32
018	1P 3/4"-0 AGGREGATE BASE	TON	12.3000	279.310	3435.51	3435.51
019	1P LIME TREATED SUBGRADE	SQ YD	1.3300	24,461.500	32533.80	32533.80
020	1P LIME FOR TREATED SUBGRADE	TON	96.0000	300.790	28875.84	28875.84
021	1P TREATED BASE MIXTURE	TON	10.3000	14,624.750	150634.93	150634.93
022	1P CEMENT IN TREATED BASE MIXTURE	TON	75.0000	646.190	48464.25	48464.25
023	1P CLASS B ASPHALT CONCRETE MIXTURE	TON	16.2100	10,633.064	172361.97	172361.97
024	1P ASPHALT CEMENT IN MIXTURE	TON	165.0000	520.349	85857.59	85857.59
025	1P CONCRETE IN BOX CULVERT	CU YD	238.0000	49.770	11845.26	11845.26
026	1P REINFORCEMENT IN BOX CULVERT	LB	.8100	7,197.[illegible]20	5829.9[illegible]	5829.9[illegible]
027	1P 8-INCH CULVERT PIPE	LIN FT	6.5000	685.000	4452.50	4452.50
028	1P 12-INCH CULVERT PIPE	LIN FT	10.5000	238.000	2499.00	2499.00
029	1P 15-INCH CULVERT PIPE	LIN FT	12.2800	75.000	921.00	921.00
031	1P 12-INCH SEWER PIPE	LIN FT	14.0000	2,923.000	40922.00	40922.00
032	1P 15-INCH SEWER PIPE	LIN FT	16.9000	663.000	11207.70	11207.70
033	1P 18-INCH SEWER PIPE	LIN FT	22.0000	439.000	9658.00	9658.00
034	1P 24-INCH SEWER PIPE	LIN FT	36.0000	146.000	5256.00	5256.00
002	IN Temporary Protection and Dir of Traffic	Lump Sum		[illegible]	35.07	

DATE 11 20 84 PG. 01 9375	TOTAL CONTRACT ITEMS	A. 815319.54
PREVIOUS VOUCHER NO.	% RETAINED ON CONTRACT ITEMS	B. 13650.95
CHECKED BY:	FORCE ACCOUNT	N. 204.64
ENGINEER OR AUDITOR	TOTAL PAYMENTS	

ENT VOUCHER WAY DIVISION	COUNTY WASHINGTON	CONTRACT NO. 9375	ESTIMATE NO. 23	PREFIX NO'S.
	HIGHWAY FAU 9292 (SW NYBERG RD)	FEDERAL AID PROJECT NO. IX 9282004		31,218.46 A. B.# 11,310.97
	SECTION SW 49TH AVE-PACIFIC HWY(TUALATIN)			

ITEMS	UNITS	UNIT PRICE	QUANTITY TO DATE	AMOUNT TO DATE	PREVIOUS AMOUNT	PRESENT AMOUNT
ION	LUMP SUM	42699.0000	100.000	169.57 ~~42699.00~~	42699.00	A 6456.95
PROTECTION AND DIR OF TRAFFIC	LUMP SUM	8832.0000	100.000	~~8832.00~~	8832.00	B. 2,339.98
SIGNS	SQ FT	9.0000	391.000	3519.00	3519.00	
BARRICADES	EACH	105.0000	39.000	4095.00	4095.00	
PLASTIC SAFETY MARKERS	EACH	54.0000	42.000	2268.00	2268.00	
	HOUR	24.0000	1,160.000	27840.00	27840.00	
ND GRUBBING	LUMP SUM	6868.0000	100.000	6868.00	6868.00	
STRUCTURES ANDOBSTRUCTIONS	LUMP SUM	6262.0000	100.000	6262.00	6262.00	
VATION	CU YD	6.2000	1,101.110	6826.88	6826.88	
IN PLACE	CU YD	3.9500	10,050.900	39701.06	39701.06	
BANKMENT IN PLACE	CU YD	9.6000	1,039.510	9979.30	9979.30	
CAVATION	CU YD	13.4000	1,943.450	26042.23	26042.23	
ROADBED AND SLOPES	LUMP SUM	5050.0000	100.000	5050.00	5050.00	
	M-GAL	30.0000	270.000	8100.00	8100.00	
REGATE BASE	TON	8.3200	1,963.620	16337.32	16337.32	
REGATE BASE	TON	12.3000	279.310	3435.51	3435.51	
ED SUBGRADE	SQ YD	1.3300	24,461.500	32533.80	32533.80	
REATED SUBGRADE	TON	96.0000	300.790	28875.84	28875.84	
E MIXTURE	TON	10.3000	14,624.750	150634.93	150634.93	
TREATED BASE MIXTURE	TON	75.0000	646.190	48464.25	48464.25	
PHALT CONCRETE MIXTURE	TON	16.2100	10,633.064	172361.97	172361.97	
MENT IN MIXTURE	TON	165.0000	520.349	85857.59	85857.59	
N BOX CULVERT	CU YD	238.0000	49.770	11845.26	11845.26	
ENT IN BOX CULVERT	LB	.8100	7,197.520	5829.99	5829.99	
VERT PIPE	LIN FT	6.5000	685.000	4452.50	4452.50	
LVERT PIPE	LIN FT	10.5000	238.000	2499.00	2499.00	
LVERT PIPE	LIN FT	12.2800	75.000	921.00	921.00	
WER PIPE	LIN FT	14.0000	2,923.000	40922.00	40922.00	
WER PIPE	LIN FT	18.9000	593.000	11207.70	11207.70	
WER PIPE	LIN FT	22.0000	439.000	9658.00	9658.00	
WER PIPE	LIN FT	36.0000	146.000	5256.00	5256.00	
tection and Dir of Traffic	Lump Sum		[illegible]	35.07		
PG. 01 9375	TOTAL CONTRACT ITEMS			A. 815,319.54		
	% RETAINED ON CONTRACT ITEMS			B. 13,650.95		
	FORCE ACCOUNT			N. 204.64		
	TOTAL PAYMENTS					

CONTRACT PAYMENT VOUCHER

OREGON STATE HIGHWAY DIVISION

FORM 734-1020 (REV. 7-78)

COUNTY	CONTRACT NO. 4175	ESTIMATE NO. 23	PREFIX NO'S.
HIGHWAY	FEDERAL AID PROJECT NO.		
SECTION			

NO.	ITEMS	UNITS	UNIT PRICE	QUANTITY TO DATE	AMOUNT TO DATE	PREVIOUS AMO
035	1P 30-INCH ARCH TYPE PIPE	LIN FT	31.6000	190.000	6004.00	6004
036	1P EXTRA FOR PIPE UNDER PAVEMENT	LIN FT	14.2000	422.000	5992.40	5992
037	1P 2-INCH ELECTRICAL CONDUIT	LIN FT	5.1000	150.000	765.00	765
038	1P 4-INCH ELECTRICAL CONDUIT	LIN FT	17.7000	320.000	5664.00	5664
039	1P CONCRETE MANHOLES	EACH	1210.0000	6.000	7260.00	7260
040	1P CONCRETE INLETS TYPE CG-1	EACH	364.0000	14.000	5096.00	5096
041	1P CONCRETE INLETS TYPE CG-2	EACH	392.0000	38.000	14896.00	14896
042	1P CONCRETE INLETS TYPE G-2M	EACH	505.0000	2.000	1010.00	1010
043	1P 6-INCH DRAIN PIPE	LIN FT	7.0000	544.000	3808.00	3808
044	1P FILTER FABRIC	SQ YD	2.0000	555.400	1110.80	1110
045	1P GRAVEL IN DRAINS	CU YD	23.0000	79.799	1835.17	1835
046	1P GUARD RAIL TYPE 1	LIN FT	13.0000	113.000	1469.00	1469
047	1P GUARD RAIL TYPE 2A	LIN FT	15.0000	125.000	1875.00	1875
048	1P GUARD RAIL ANCHORS TYPE 1	EACH	329.0000	1.000	329.00	329
049	1P RAIL END PIECES TYPE B	EACH	41.0000	4.000	164.00	164
050	1P RAIL END PIECES TYPE C	EACH	91.0000	1.000	91.00	91
051	1P CL-6 CHAIN LINK FENCE	LIN FT	15.0000	70.000	1050.00	1050
052	8P CONCRETE WALKS	SQ YD	10.7300	5,246.900	56299.24	56299
053	1P CONCRETE DRIVEWAYS	SQ YD	18.0000	159.600	2872.80	2872
054	1P CONCRETE CURBS	LIN FT	4.9200	13,731.500	67558.98	67558
055	1P CONCRETE ISLANDS	CU YD	146.0000	32.480	4742.08	4742
056	1P EXTRA FOR ASPHALT APPROACHES	EACH	166.0000	15.000	2490.00	2490
057	8P EXTRA FOR ASPHALT WALKS	SQ YD	5.0000	174.200	871.00	871
058	1P PAVED CULVERT END SLOPES	SQ FT	8.0000	24.000	192.00	192
059	1P DRAINAGE CURBS	LIN FT	4.0000	300.800	1203.20	1203
060	1P DELINEATORS TYPE 2	EACH	20.2000	20.000	404.00	404
061	1P DELINEATORS TYPE 4	EACH	15.0000	4.000	60.00	60
062	1P ADJUSTING MANHOLES	EACH	83.0000	4.000	332.00	332
063	1P RECONSTRUCTING CONCRETE MANHOLES	EACH	425.0000	3.000	1275.00	1275
066	1P REMOVAL OF EXISTING SIGN INSTALLATIONS	LUMP SUM	606.0000	100.000	606.00	606
067	1P WOOD SIGN POSTS	LUMP SUM	3636.0000	100.000	3636.00	3636

DATE 11 20 84 PG. 02 9375	TOTAL CONTRACT ITEMS	A. 200,961.67	
PREVIOUS VOUCHER NO.	% RETAINED ON CONTRACT ITEMS		
CHECKED BY:	FORCE ACCOUNT		
ENGINEER OR AUDITOR	TOTAL PAYMENTS		

T VOUCHER Y DIVISION	COUNTY	CONTRACT NO. 9375	ESTIMATE NO. 73	PREFIX NO'S.
	HIGHWAY	FEDERAL AID PROJECT NO.		
	SECTION			

ITEMS	UNITS	UNIT PRICE	QUANTITY TO DATE	AMOUNT TO DATE	PREVIOUS AMOUNT	PRESENT AMOUNT
TYPE PIPE	LIN FT	41.6000	140.000	6004.00	6004.00	
PE UNDER PAVEMENT	LIN FT	14.2000	422.000	5992.40	5992.40	
ICAL CONDUIT	LIN FT	5.1000	150.000	765.00	765.00	
ICAL CONDUIT	LIN FT	17.7000	320.000	5664.00	5664.00	
HOLES	EACH	1210.0000	6.000	7260.00	7260.00	
ETS TYPE CG-1	EACH	364.0000	14.000	5096.00	5096.00	
ETS TYPE CG-2	EACH	392.0000	38.000	14896.00	14896.00	
ETS TYPE G-2MA	EACH	505.0000	2.000	1010.00	1010.00	
PIPE	LIN FT	7.0000	544.000	3808.00	3808.00	
C	SQ YD	2.0000	555.400	1110.80	1110.80	
AINS	CU YD	23.0000	79.799	1835.17	1835.17	
YPE 1	LIN FT	13.0000	113.000	1469.00	1469.00	
YPE 2A	LIN FT	15.0000	125.000	1875.00	1875.00	
ANCHORS TYPE 1	EACH	329.0000	1.000	329.00	329.00	
CES TYPE B	EACH	41.0000	4.000	164.00	164.00	
CES TYPE C	EACH	91.0000	1.000	91.00	91.00	
LINK FENCE	LIN FT	15.0000	70.000	1050.00	1050.00	
LKS	SQ YD	10.7300	5,246.900	56299.24	56299.24	
VEWAYS	SQ YD	18.0000	159.600	2872.80	2872.80	
[illegible]	LIN FT	4.9200	13,731.500	67558.98	67558.98	
ANDS	CU YD	146.0000	32.480	4742.08	4742.08	
SPHALT APPROACHES	EACH	166.0000	15.000	2490.00	2490.00	
SPHALT WALKS	SQ YD	5.0000	174.200	871.00	871.00	
RT END SLOPES	SQ FT	8.0000	24.000	192.00	192.00	
RBS	LIN FT	4.0000	300.800	1203.20	1203.20	
TYPE 2	EACH	20.2000	20.000	404.00	404.00	
TYPE 4	EACH	15.0000	4.000	60.00	60.00	
ANHOLES	EACH	83.0000	4.000	332.00	332.00	
ING CONCRETE MANHOLES	EACH	425.0000	3.000	1275.00	1275.00	
EXISTING SIGN INSTALLATIONS	LUMP SUM	606.0000	100.000	606.00	606.00	
OSTS	LUMP SUM	3636.0000	100.000	3636.00	3636.00	
G. 02 9375	TOTAL CONTRACT ITEMS			A. 200,961.67		
	% RETAINED ON CONTRACT ITEMS					
	FORCE ACCOUNT					
	TOTAL PAYMENTS					

A

CONTRACT PAYMENT VOUCHER

OREGON STATE HIGHWAY DIVISION

COUNTY	CONTRACT NO. 9375	ESTIMATE NO. 23	PREFIX NO'S.
HIGHWAY	FEDERAL AID PROJECT NO.		
SECTION			

FORM 734-1020 (REV. 7-76)

NO.	ITEMS		UNITS	UNIT PRICE	QUANTITY TO DATE	AMOUNT TO DATE	PREVIOUS AMO
068	1P HORIZ AND VERT SIGN	MOUNT ARMS	LUMP SUM	3131.0000	100.000	3131.00	313
069	1P TYPE C AND D SIGNS IN	PLACE	SQ FT	13.0000	193.900	2520.70	257
070	1P TYPE EE SIGNS IN PLACE		SQ FT	13.0000	49.500	643.50	64
071	1P TYPE M SIGNS IN PLACE		SQ FT	8.0000	20.000	160.00	1
072	1P TYPE U AND V SIGNS IN	PLACE	SQ FT	24.2400	359.300	8709.43	87
073	1P MOVE AND REINSTALL EXIST	SIGNS AND SUPP	LUMP SUM	1616.0000	100.000	1616.00	161
074	IN ~~1P~~ TRAFF SIG INST NYBERG RD/F MEYER-K-MART		LUMP SUM	5151.0000	100.000	5151.00	515
075	1P TRAFFIC SIGNAL INSTALL	OTHER	LUMP SUM	208727.0000	100.000	208727.00 B.	2087
076	1P FIRE PRE-EMPTION SYSTEM	COMPLETE	LUMP SUM	14918.0000	100.000	14918.00 B.	1491
077	1P TRAFFIC CONTROL PROGRAMS	COMPLETE	LUMP SUM	15150.0000	100.000	12,985.70 ~~15150.00~~ B	1515
078	1P ROADSIDE SEEDING AND	MULCHING	ACRE	707.0000	1.400	989.80	98
079	1P FURNISHING AND PLANTING	TREES	EACH	33.6000	85.000	2856.00	28
079A	1P ESTABL WORK	TREES	EACH	4.8000	85.000	408.00	4
079B	1P ESTABL WORK	TREES	EACH	4.8000	85.000	408.00	4
079C	1P ESTABL WORK	TREES	EACH	4.8000	85.000	408.00	4
080	1P FURNISHING AND PLANTING	SHRUBS	EACH	4.2700	1.187.000	5068.49	50
080A	1P ESTABL WORK	SHRUBS	EACH	.6100	1.187.000	724.07	7
080B	1P ESTABL WORK	SHRUBS	EACH	.6100	1.187.000	724.07	7
080C	1P ESTABL WORK	SHRUBS	EACH	.6100	1.187.000	724.07	7
081	1P FURNISHING AND PLANTING	VINES	EACH	.2900	12.930.000	3749.70	374
081A	1P ESTABL WORK	VINES	EACH	.0400	12.930.000	517.20	5
081B	1P ESTABL WORK	VINES	EACH	.0400	12.930.000	517.20	5
081C	1P ESTABL WORK	VINES	EACH	.0400	12.930.000	517.20	5
082	1P BARK MULCH		UNIT	144.0000	129.200	18604.80	186
083	1P SOIL CONDITIONER		CU YD	14.1400	604.200	8543.39	85
084	1P IRRIGATION SYSTEM		LUMP SUM	45450.0000	100.000	45450.00	454
077	1P Traffic Control programs complete		lump Sum			# 2,164.30	
	PRICE AGREEMENT ITEMS						
30038	1P RECYCLED ASPHALT IN	RAP MIX	TON	165.0000	63.163	10421.40	10
3005A	1P 30" ASPH COATED CMP	CULVERT PIPE	LIN FT	35.0000	23.000	805.00	8

DATE 11 20 84 PG. 03 9375	TOTAL CONTRACT ITEMS	A. 118,21752
PREVIOUS VOUCHER NO.	% RETAINED ON CONTRACT ITEMS	B 238,630.70
CHECKED BY:	FORCE ACCOUNT	N. 7315.30
ENGINEER OR AUDITOR	TOTAL PAYMENTS	

VOUCHER

DIVISION

COUNTY	CONTRACT NO. 9375	ESTIMATE NO. 23	PREFIX NO'S.
HIGHWAY	FEDERAL AID PROJECT NO.		
SECTION			

ITEMS		UNITS	UNIT PRICE	QUANTITY TO DATE	AMOUNT TO DATE		PREVIOUS AMOUNT	PRESENT AMOUNT
T SIGN	MOUNT ARMS	LUMP SUM	3131.0000	100.000	3131.00		3131.00	
SIGNS IN	PLACE	SQ FT	13.0000	193.400	2520.70		2520.70	
S IN PLACE		SQ FT	13.0000	49.500	643.50		643.50	
IN PLACE		SQ FT	8.0000	20.000	160.00		160.00	
SIGNS IN	PLACE	SQ FT	24.2400	359.300	8709.43		8709.41	
NSTALL EXIST	SIGNS AND SUPP	LUMP SUM	1616.0000	100.000	1616.00		1616.00	
ST NYBERG RD/F	MEYER-K-MART	LUMP SUM	5151.0000	100.000	5151.00		5151.00	
L INSTALL	OTHER	LUMP SUM	208727.0000	100.000	208727.00	B	208727.00	
TION SYSTEM	COMPLETE	LUMP SUM	14918.0000	100.000	14918.00	B.	14918.00	
ROL PROGRAMS	COMPLETE	LUMP SUM	15150.0000	100.000	12,985.70 ~~15150.00~~	B	15150.00	
DING AND	MULCHING	ACRE	707.0000	1.400	989.80		989.80	
NJ PLANTING	TREES	EACH	33.6000	85.000	2856.00		2856.00	
	TREES	EACH	4.8000	85.000	408.00		408.00	
	TREES	EACH	4.8000	85.000	408.00		408.00	
	TREES	EACH	4.8000	85.000	408.00		408.00	
ND PLANTING	SHRUBS	EACH	4.2700	1,187.000	5068.49		5068.49	
	SHRUBS	EACH	.6100	1,187.000	724.07		724.07	
	SHRUBS	EACH	.6100	1,187.000	724.07		724.07	
	SHRUBS	EACH	.6100	1,187.000	724.07		724.07	
ND PLANTING	VINES	EACH	.2900	12,930.000	3749.70		3749.70	
	VINES	EACH	.0400	12,930.000	517.20		517.20	
	VINES	EACH	.0400	12,930.000	517.20		517.20	
	VINES	EACH	.0400	12,930.000	517.20		517.20	
		UNIT	144.0000	129.200	18604.80		18604.80	
IONER		CU YD	14.1400	604.200	8543.39		8543.39	
SYSTEM		LUMP SUM	45450.0000	100.000	45450.00 # 2,164.30		45450.00	
rograms complete		Lump Sum						
EMENT ITEMS								
PHALT IN	HAP MIX	TON	165.0000	63.163	10421.90		10421.90	
ATED CMP	CULVERT PIPE	LIN FT	35.0000	23.000	805.00		805.00	

. 03 9375	TOTAL CONTRACT ITEMS	A. 118,21752		
	% RETAINED ON CONTRACT ITEMS	B 238630.70		
	FORCE ACCOUNT	N. 7315.30		
	TOTAL PAYMENTS			

• CONTRACT PAYMENT VOUCHER

OREGON STATE HIGHWAY DIVISION

FORM 734-1020 (REV. 7-78)

COUNTY	
HIGHWAY	
SECTION	
CONTRACT NO.	[illegible]
ESTIMATE NO.	3
FEDERAL AID PROJECT NO.	
PREFIX NO'S.	

NO.	ITEMS	UNITS	UNIT PRICE	QUANTITY TO DATE	AMOUNT TO DATE	PREVIOUS AMOUNT
3006A	1P 3'x3' SINGLE LOOP	EACH	94.0000	3.000	282.00 B	282.0
3006B	1P TWIN 3'X3' LOOPS (15' ON CENTER)	EACH	215.0000	3.000	645.00	645.0
3006C	1P LOOP FEEDER RUN WITH 1 CABLE	LIN FT	5.2500	132.700	696.68	696.6
3006D	1P LOOP FEEDER RUN WITH 2 CABLES	LIN FT	5.7500	152.500	876.88	876.6
3006E	1P LOOP FEEDER RUN WITH 3 CABLES	LIN FT	6.3000	9.100	57.33	57.3
3006F	1P LOOP FEEDER RUN WITH 4 CABLES	LIN FT	6.9000	32.700	225.63	225.6
3006G	1P LOOP FEEDR RUN TO CABINET W/TERMINATIONS	LIN FT	3.0000	115.200	345.60	345.6
3007	1P INSTALL TYPE "F", "G" ANODIUM SIGNS	SQ FT	13.0000	24.000	312.00	312.0
3008	1P PRICE REDUCTION FOR NON-SPEC TREES	EACH	4.3800-	56.000	245.28-	245.2
3009A	1P REV TRAFF SIGNALS	LUMP SUM	14213.0000	100.000	14213.00 B	14213.0
3010A	1P ADDITIONAL WOOD SIGN POSTS	BOARD FT	4.8480	152.000	736.90	736.9
3011A	1P PRICE RED FOR NON-SPEC AC COMPACTION	LUMP SUM	145.7500-	100.000	145.75-	145.7
3012A	1P PRICE RED NON-SPEC GALV NIPPLES	EACH	1.5000-	1,500.000	2250.00-	2250.0
3013A	1P DEL PORTION IRRG SYSTEM	LUMP SUM	1100.0000-	100.000	1100.00-	1100.0
3014A	1P FOUNDATION REMOVAL	LUMP SUM	5403.5000	100.000	5403.50	5403.5
3015A	1P CLAIM SETTLEMENT	LUMP SUM	25960.0000	100.000	25960.00	
	ADJUSTMENT ITEMS					
5001A	1P LIQUIDATED DAMAGES	DAY	300.0000-	67.000	20100.00-	20100.0
5001B	1P TIME EXT APPROVED 4-6-83	DAY	300.0000	67.000	20100.00	25100.0
	FORCE ACCOUNT ITEMS					
901	1P TEMP STRIPING & REMOVAL				1149.07	1149.0
902	1P SUB-EXCAVATE SOFT SPOTS AND BACKFILL				24869.04	24869.0
903	1P RELOC ILLUM & LIGHTING CONTROL PANEL				12559.24	12559.2
904	1P ADDITIONAL WIRING				3879.02	3879.0
905	1P PURCH & INSTALL MONUMENT BOXES				1797.56	1797.5
906	1P ASPHALT REMOVAL FOR MEDIAN ISLAND				2823.62	2823.6

DATE 11 20 84 PG. 04 9375	TOTAL CONTRACT ITEMS	A 75,748.92
PREVIOUS VOUCHER NO.	% RETAINED ON CONTRACT ITEMS	B 17,342.12
CHECKED BY:	FORCE ACCOUNT	
ENGINEER OR AUDITOR	TOTAL PAYMENTS	

MENT VOUCHER

GHWAY DIVISION

COUNTY		CONTRACT NO. 9375	ESTIMATE NO. 3	PREFIX NO'S.
HIGHWAY		FEDERAL AID PROJECT NO.		
SECTION				

ITEMS		UNITS	UNIT PRICE	QUANTITY TO DATE	AMOUNT TO DATE	PREVIOUS AMOUNT	PRESENT AMOUNT
NGLE LOOP		EACH	94.0000	3.000	282.00 B	282.00	
3' LOOPS (15' ON CENTER)		EACH	215.0000	3.000	645.00	645.00	
ER RUN WITH	1 CABLE	LIN FT	5.2500	132.700	696.68	696.68	
ER RUN WITH	2 CABLES	LIN FT	5.7500	152.500	876.88	876.68	
ER RUN WITH	3 CABLES	LIN FT	6.3000	9.100	57.33	57.33	
ER RUN WITH	4 CABLES	LIN FT	6.9000	32.700	225.63	225.63	
R RUN TO CABINET W/TERMINATIONS		LIN FT	3.0000	115.200	345.60	345.60	
TYPE MFM, MGM AND MIM SIGNS		SQ FT	13.0000	24.000	312.00	312.00	
UCTION FOR	NON-SPEC TREES	EACH	4.3800-	56.000	245.28-	245.28-	
SIGNALS		LUMP SUM	14213.0000	100.000	14213.00 B	14213.00	
AL WOOD SIGN	POSTS	BOARD FT	4.8480	152.000	736.90	736.90	
D FOR NON-SPEC	AC COMPACTION	LUMP SUM	145.7500-	100.000	145.75-	145.75-	
NON-SPEC GALV	NIPPLES	EACH	1.5000-	1,500.000	2250.00-	2250.00-	
ON IRRG	SYSTEM	LUMP SUM	1100.0000-	100.000	1100.00-	1100.00-	
ON REMOVAL		LUMP SUM	5403.5000	100.000	5403.50	5403.50	
TLEMENT		LUMP SUM	25960.0000	100.000	25960.00		25960.00
MENT ITEMS							
ED DAMAGES		DAY	300.0000-	67.000	20100.00-	20100.00-	
APPROVED	4-6-83	DAY	300.0000	67.000	20100.00	25100.00	
CCOUNT ITEMS							
IPING & REMOVAL					1149.07	1149.07	
VATE SOFT SPOTS	AND BACKFILL				24869.04	24869.04	
UM & LIGHTING	CONTROL PANEL				12559.24	12559.24	
AL WIRING					3879.02	3879.02	
INSTALL MONUMENT	BOXES				1797.56	1797.56	
REMOVAL FOR	MEDIAN ISLAND				2823.62	2823.62	

PG. 04 9375	TOTAL CONTRACT ITEMS	A 75,748.92		
	% RETAINED ON CONTRACT ITEMS	B 17,342.12		
	FORCE ACCOUNT			
	TOTAL PAYMENTS			

CONTRACT PAYMENT VOUCHER

OREGON STATE HIGHWAY DIVISION

FORM 734-1020 (REV. 7-76)

COUNTY

HIGHWAY

SECTION

CONTRACT NO. 9374

ESTIMATE NO. 23

FEDERAL AID PROJECT NO.

PREFIX NO'S.

NO.	ITEMS	UNITS	UNIT PRICE	QUANTITY TO DATE	AMOUNT TO DATE	PREVIOUS AMOUN
	Type Code	"P" Construction Cost	"N" Construction Cost		Total Cost	
	6205 Roadway	$ 1,219,247.65				
			$ 7,519.94			
	4031 Signals	269,623.77				
	Total Cost	1,479,871.42	$ 7,519.94		1,487,391.36	

GROSS RETAINAGE	
TREASURER DEPOSIT	
* NET RETAINAGE	

DATE 11 20 84 PG. 05 9374	TOTAL CONTRACT ITEMS	1440313.81	1414353.
PREVIOUS VOUCHER NO. 04094	_ % RETAINED ON CONTRACT ITEMS		
CHECKED BY: RMW/CG	FORCE ACCOUNT	47077.55	47077.
ENGINEER OR AUDITOR W. BAXTER	TOTAL PAYMENTS	1,487,391.36	1,461,431.

NT VOUCHER

WAY DIVISION

COUNTY		CONTRACT NO. 9374	ESTIMATE NO. 23
HIGHWAY		FEDERAL AID PROJECT NO.	
SECTION			

PREFIX NO'S.

ITEMS	UNITS	UNIT PRICE	QUANTITY TO DATE	AMOUNT TO DATE	PREVIOUS AMOUNT	PRESENT AMOUNT
"P" Construction Cost		"V" Construction Cost		Total Cost		
Roadway $ 1,219,247.65		$ 7,519.94				
Signals 269,623.77						
1,479,871.42		$ 7,519.94		1,487,391.36		
		GROSS RETAINAGE				
		TREASURER DEPOSIT				
		* NET RETAINAGE				
PG. 05 9374		TOTAL CONTRACT ITEMS		1440313.81	1414353.81	25960.00
		_ % RETAINED ON CONTRACT ITEMS				
		FORCE ACCOUNT		47077.55	47077.55	
		TOTAL PAYMENTS		1,487,391.36	1,461,431.36	25,960.00

12/09/86

JOB COST SUMMARY
EA 15 SUBJOB/ACTIVITY/OBJ-DETAIL CREW-NUMB
PAYROLL CHARGES ARE LOADED

EA	SUBJOB	ACTIVITY	OBJ-DETAIL	CREW NUMBER	MSA FIELD
C09375	000	050	001	0500	
C09375	000	050	001	0500	
C09375	000	050	001		
C09375	000	050	Audit P		
C09375	000	901	504	7300	
C09375	000	901	504	7300	
C09375	000	901	504		
C09375	000	901	Const. Engr. P		
C09375	000	915	030	7114	
C09375	000	915	030	7114	
C09375	000	915	030		
C09375	000	915	Landscape Design P		
C09375	000	920	001	0631	
C09375	000	920	001	0631	
C09375	000	920	001		
C09375	000	920	Prog. Sec P		
C09375	000	940	130	8200	
C09375	000	940	130	8200	
C09375	000	940	130		
C09375	000	940	Materials Testing P		
C09375	000				
C09375	010 N-P		199	8002	
C09375	010		199	8002	
C09375	010		199		
C09375	010				
C09375	010		DATA PROCESSING N-P		
C09375	011 P		194	8002	
C09375	011		194	8002	

JOB COST SUMMARY
B/ACTIVITY/OBJ-DETAIL CREW-NUMBER
AYROLL CHARGES ARE LOADED

	CREW NUMBER	MSA FIELD	CURRENT MONTH	CURRENT BALANCE
	0500		.00	84.45
	0500		.00	84.45
			.00	84.45
			.00	84.45 ✓
	7300		.00	63.70
	7300		.00	63.70
			.00	63.70
			.00	63.70 ✓
	7114		.00	55.59
	7114		.00	55.59
			.00	55.59
gn P			.00	55.59 ✓
	0631		.00	27.79
	0631		.00	27.79
			.00	27.79
P			.00	27.79 ✓
	8200		.00	17.19
	8200		.00	17.19
			.00	17.19
ug P			.00	17.19 ✓
			.00	248.72
	8002		.00	5.80
	8002		.00	5.80
			.00	5.80
			.00	5.80
ING N-P			.00	5.80 ✓
	8002		.00	21.40
	8002		.00	21.40

12/09/86

JOB COST SUMMARY
EA/SUBJOB/ACTIVITY/OBJ-DETAIL CREW-NUMBE
PAYROLL CHARGES ARE LOADED

EA	SUBJOB	ACTIVITY	OBJ-DETAIL	CREW NUMBER	MSA FIELD
C09375	011		194 DA PROC. P		
C09375	011		199	8002	
C09375	011		199	8002	
C09375	011		199 DATA PROC P		
C09375	011		300	0521	
C09375	011		300	0521	
C09375	011		300 Pay Cont. P		
C09375	011		304	0521	
C09375	011		304	0521	
C09375	011		304 CRED. LIQ. Dam		
C09375	011		312	0521	
C09375	011		312	0521	
C09375	011		312 ARCH. SALWAGE		
C09375	011		336	0521	SF03
C09375	011		336	0521	
C09375	011		336 RR/UTL RELOC		
C09375	011		598	0521	
C09375	011		598	0521	
C09375	011		598		
C09375	011				
C09375	011	900	598	0631	
C09375	011	900	598	0631	
C09375	011	900	598		
C09375	011	900			
C09375	011				
C09375	031		598	0521	
C09375	031		598	0521	
C09375	031		598		
C09375	031				

JOB COST SUMMARY
TIVITY/OBJ-DETAIL CREW-NUMBER
LL CHARGES ARE LOADED

REW MBER	MSA FIELD	CURRENT MONTH	CURRENT BALANCE
P		.00	21.40 ✓
002		.00	5.80
002		.00	5.80
oc P		.00	5.80 ✓
521		.00	20,100.00- ✓
521		.00	20,100.00-
P		.00	20,100.00-
521		.00	20,100.00 ✓
521		.00	20,100.00
. Dam		.00	20,100.00
521		.00	189.18-
521		.00	189.18- ✓
WAGE		.00	189.18-
521	SF03	.00	450.38-
521		.00	450.38- ✓
RELOC		.00	450.38-
521		.00	.01
521		.00	.01
		.00	.01
		.00	612.35-
631		.00	.01-
631		.00	.01-
		.00	.01-
		.00	.01-
		.00	612.36-
521		.00	.01-
521		.00	.01-
		.00	.01-
		.00	.01-

```
                                                                      PAGE        2
 JOB COST SUMMARY
CTIVITY/OBJ-DETAIL CREW-NUMBER
ULL CHARGES ARE LOADED

REW        MSA               CURRENT                        CURRENT
MBER       FIELD             MONTH                          BALANCE

                                            .00                21.40
P
002                                         .00                 5.80
002                                         .00                 5.80
                                            .00                 5.80
oc P
0521                                        .00            20,100.00-
0521                                        .00            20,100.00-
                                            .00            20,100.00-
 P
0521                                        .00            20,100.00
0521                                        .00            20,100.00
                                            .00            20,100.00
Q. Dam
0521                                        .00               189.18-
0521                                        .00               189.18-
                                            .00               189.18-
AWAGE
0521       SF03                             .00               450.38-
0521                                        .00               450.38-
                                            .00               450.38-
 RELOC
0521                                        .00                  .01
0521                                        .00                  .01
                                            .00                  .01
                                            .00               612.35-
0631                                        .00                  .01-
0631                                        .00                  .01-
                                            .00                  .01-
                                            .00                  .01-
                                            .00               612.36-
0521                                        .00                  .01-
0521                                        .00                  .01-
                                            .00                  .01-
                                            .00                  .01-
```

12/09/86

JOB COST SUMMARY
EA/SUBJOB/ACTIVITY/OBJ-DETAIL CREW-NU
PAYROLL CHARGES ARE LOADED

EA	SUBJOB	ACTIVITY	OBJ-DETAIL	CREW NUMBER	MSA FIELD
C09375	031	900	598	0631	
C09375	031	900	598	0631	
C09375	031	900	598		
C09375	031	900			
C09375	031				
C09375	081		312	0521	
C09375	081		312	0521	
C09375	081		312		
C09375	081				
C09375	081				
C09375					

ARCH SALV. P

JOB COST SUMMARY
ACTIVITY/OBJ-DETAIL CREW-NUMBER
ROLL CHARGES ARE LOADED

CREW NUMBER	MSA FIELD	CURRENT MONTH	CURRENT BALANCE
0631		.00	~~.01~~
0631		.00	~~.01~~
		.00	~~.01~~
		.00	~~.01~~
		.00	.00
0521		.00	9.96-
0521		.00	9.96-
		.00	9.96- ✓
		.00	9.96-
SALV. P		.00	9.96-
		.00	367.80-

PE 89th – I-5
ALATIN #164

9375

6-23-86

(ORIGINAL)

C234-1959

FORM APPROVED BY
COMPTROLLER GENERAL,
U.S. MAY 12, 1966

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

VOUCHER FOR WORK PERFORMED UNDER PROVISIONS OF THE FEDERAL AID AND FEDERAL HIGHWAY ACTS, AS AMENDED

STATE VOUCHER NO.

FHWA VOUCHER NO.

FHWA SCHEDULE NO.

APPROPRIATION

THE UNITED STATES, DR., TO *(Insert official or depositary named in project agreement)*
TREASURER OF THE STATE OF OREGON

ADDRESS
CAPITOL BUILDING
SALEM, OREGON 97310

PAID BY

(For use of Paying Office)

STATE
OREGON

VOUCHER TYPE *(Check Appropriate Block)*
☐ CURRENT BILLING
☐ OTHER PROGRESS
☒ FINAL VOUCHER (*)

VOUCHER PERIOD
FROM 1-10-78
TO 9-1-81

FEDERAL AID PROJECT NO.
M-9282(2)

(*) Use Form FHWA-1447 for Final Voucher for a project constructed under certification acceptance or secondary road procedures (23 U.S.C. 117).

App W36

TOTAL ACTUAL COST	TOTAL PARTICIPATING COST	PRO-RATA OF PARTICIPATING COST CLAIMED FROM U.S.	TOTAL AMOUNT CLAIMED FROM U.S.	LESS PREVIOUS PAYMENTS	NET AMOUNT CLAIMED
$264,535.99	$262,077.76	858%	$224,862.72	$224,862.72	-0-

I certify that the costs shown in this voucher have been incurred in accordance with terms of project agreements; applicable State and Federal laws or regulations; and that no claim has previously been submitted for costs claimed.

STATE HIGHWAY AGENCY
OREGON

DATE
6-23-86

SIGNATURE OF AUTHORIZED OFFICIAL
CONTROLLER

I certify that supporting records for costs claimed, and the referenced project (if applicable), have been subjected to required reviews, approvals and inspections by the Federal Highway Administration and that the amount approved is justly due.

AMOUNT SUBMITTED $0.00

ADJUSTMENTS

AMOUNT APPROVED

SIGNATURE OF FHWA REPRESENTATIVE
(SIGN ORIGINAL ONLY)

DATE APPROVED

FORM PR-20
(Rev. 5-78)

PREVIOUS EDITIONS ARE OBSOLETE

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (Payee must not use this column)
	S.W. 89th AVE. I-5 FREEWAY (TUALATIN) SECTION COUNTY ROAD IN WASHINGTON					
	Preliminary Engineering **Type Code PE**					
	State	All Required			$191,648.01	
	Work by Burlington Northern Inc.	All Required			450.38	
	Work by Earth Metrics, Inc.	All Required			68,750.00	
	TOTAL PARTICIPATING PRELIMINARY ENGINEERING				**$260,848.39**	
	Misc. Project Cost					
	Audit Expense	All Required			$ 455.65	
	Type Code Y070					
	Archeological Salvage	All Required			$ 773.72	
	TOTAL PARTICIPATING PROJECT COST				**$262,077.76**	
	Non Participating Project Cost					
	State	All Required			$ 2,458.23	
	TOTAL PROJECT COST				**$264,535.99**	
	Prepared based on the Participating Cost as shown on the Federal Billing as of June 26, 1986.					
	AMOUNT CARRIED FORWARD					

```
ACCOUNT SUMMARY - EXPENDITURES & LEDGERS
                                                                                     FISCAL          GRAND TOTAL
                                                                                  YEAR TO DATE         TO DATE
     DESCRIPTION              PREFIX  FUNCTION SUB F.  GR  CURRENT MONTH                                641.99
                          234   1956     920      00 P 1                                              2,761.72
                          234   1956     921      00 P 1                                                 75.23
                          234   1956     922      00 P 1                                             15,791.02
                          234   1956     923      00 P 1                                                351.96
                          234   1956     923      00 N 1                                              1,078.68
                          234   1956     950      00 P 1                                              1,185.46
                          234   1956     980      00 P 1                                             89,721.19
                                         TOT         P1                                               1,130.66
                                         TOT         N1                                              90,851.85  **
                                    ** JOB TOTALS **              **                   **
                                                                                                            STATE
                                       * FA PROJ NOS M   9282002 100                                  6,050.00
SW 89TH-PACIFIC HWY 1-5     CONT NO
                          234   1959     295      00 N 9  Tr. City          51,520.43CR           230,355.43CR
                          234   1959     296      00 N 9  "  SF             51,520.43             224,305.43
                          234   1959     298      00 N 9  "  Fed.              245.82              65,942.42
                          234   1959     901      00 P 1  Proj. Mgr.                                1,403.41
                          234   1959     901      00 N 1  "    "                                    5,178.17
                          234   1959     902      00 P 1  Citizens Involve.    128.92CR               372.29
                          234   1959     902      00 N 1  "        "            59.40CR
                          234   1959     903      00 P 1                       263.36CR            68,750.00
                          234   1959     904      00 P 1  Consultant Fee                           32,383.40
                          234   1959     905      00 P 1  Fin. Des.                                   534.30
                          234   1959     907      00 P 1  Pre. Des.                                 7,229.53
                          234   1959     909      00 P 1  R/w Desc.                                 1,786.69
                          234   1959     910      00 P 1  Reg. Geol.                               32,109.78
                          234   1959     911      00 P 1  Tr. Sec.                                    677.20
                          234   1959     911      00 N 1  "    "                18.15CR             3,786.62
                          234   1959     912      00 P 1  Landscape Sec.        52.84CR             1,397.62
                          234   1959     913      00 P 1  R/w Liais.           344.95CR             3,977.99
                          234   1959     914      00 P 1  Reg. Ut. Liais.                             455.65
                          234   1959     915      00 P 1  Audit                                        12.00
                          234   1959     916      00 P 1  Photog.                                   2,167.17
                          234   1959     918      00 P 1  Location                                     37.28
                          234   1959     919      00 P 1  Engn Gr.                                    858.93
                          234   1959     920      00 P 1  Prog. Sec.                                5,269.99
                          234   1959     921      00 P 1  Specs.                                       89.75
                          234   1959     922      00 P 1  Adm. Serv.                               23,455.64
                          234   1959     923      00 P 1  Env. Sec.                                     3.25
                          234   1959     924      00 P 1  Planning                5.00CR
                          234   1959     932      00 P 1                                              881.65
                          234   1959     950      00 P 1  Training                1.29CR
                          234   1959     960      00 P 1                        135.69CR
                          234   1959     960      00 N 1                                            4,570.41
                          234   1959     980      00 P 1  Pub. Hear.                                    5.33
                          234   1959     980      00 N 1  "    "               499.17CR           261,428.24
                                         TOT         P1                        264.61CR             2,458.23
                                         TOT         N1                        763.78CR**         263,886.47  **
                                    ** JOB TOTALS **              **
```

REPORT NO: FMBL003-1
SEQ: FEDERAL APPROPRIATION, FEDERAL
PROJECT, AGREEMENT, EA-SUBJOB

OREGON DEPARTMENT OF TRANSPORTATION
FINANCIAL MANAGEMENT SYSTEM
OREGON STATE HIGHWAY DIVISION
FHWA BILLING VOUCHER

FEDERAL APPROPRIATION: W36

AGREEMENT EA/SUBJOB	TOTAL COSTS TO DATE	AMOUNT PREV CLAIMED	--PARTICIPATION-- AMOUNT	PERCENT	AGREEMENT AMOUNT	FEDERAL SHARE	-ADJUSTMENT- AMOUNT	CODE	VOUCHER AMOUNT
FEDERAL PROJECT: M -9207-001									
F01805									
AGREEMENT TOTALS	90,851.85	76,980.78	89,721.19	85.80	76,980.78	76,980.78	.00		.00
FED PROJ TOTALS	90,851.85	76,980.78	89,721.19		76,980.78	76,980.78	.00		.00
FEDERAL PROJECT: M -9228-003									
F00715									
C0261919-010	4.80	.00	.00						
C0261919-011	760.84	670.68	760.84						
AGREEMENT TOTALS	765.64	670.68	760.84	88.15	670.68	670.68	.00		.00
F02227									
C3261014-011	8,239.41	7,263.04	8,239.41						
AGREEMENT TOTALS	8,239.41	7,263.04	8,239.41	88.15	7,263.04	7,263.04	.00		.00
FED PROJ TOTALS	9,005.05	7,933.72	9,000.25		7,933.72	7,933.72	.00		.00
FEDERAL PROJECT: M -9282-002									
F01806									
C2341959-010	2,458.23	.00	.00						
C2341959-011	262,077.76	224,862.72	262,077.76						
AGREEMENT TOTALS	264,535.99	224,862.72	262,077.76	85.80	224,862.72	224,862.72	.00		.00
FED PROJ TOTALS	264,535.99	224,862.72	262,077.76		224,862.72	224,862.72	.00		.00
FEDERAL PROJECT: M -9326-003									
F02476									
C3341964-000	150.01	.08	150.01						
C3341964-010	7,641.32	.00	.00						
C3341964-011	226,354.91	194,341.14	226,354.91						
AGREEMENT TOTALS	234,146.24	194,341.22	226,504.92	85.80	205,773.00	194,341.22	.00		.00
FED PROJ TOTALS	234,146.24	194,341.22	226,504.92		205,773.00	194,341.22	.00		.00
FEDERAL PROJECT: M -9345-002									
F02304									

11/15/86

JOB COST SUMMARY
EA/SUBJOB/ACTIVITY/OBJ-DETAIL CREW-NUMB
PAYROLL CHARGES ARE LOADED

EA	SUBJOB	ACTIVITY	OBJ-DETAIL	CREW NUMBER	MSA FIELD	CU M
C2341959	011		312	0521		
C2341959	011		312	0521		
C2341959	011		312	Archaeological Salvage		
C2341959	011		336	0521		
C2341959	011		336	0521		
C2341959	011		336	~~EE~~ Utility Relocations		
C2341959	011					
C2341959	011					
C2341959						

JOB COST SUMMARY
B/ACTIVITY/OBJ-DETAIL CREW-NUMBER
AYROLL CHARGES ARE LOADED

CREW NUMBER	MSA FIELD	CURRENT MONTH	CURRENT BALANCE
0521		.00	199.14
0521		.00	199.14
elogical Salvage		.00	199.14 ✓
0521		.00	450.38
0521		.00	450.38
tility Relocations		.00	450.38 ✓
		.00	649.52
		.00	649.52
		.00	649.52

9375

STATE COPY N

TO BE COMPLETED BY FHWA	U.S. Department of Transportation Federal Highway Administration	Form Approved; O M B No. 04-R2089
MONTHLY TRANSACTION NUMBER 8-83	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	State Oregon
PROJECT REPORT NUMBER		County Washington
MODIFICATION NUMBER 5	8-26-85	Project Number IX-9282(4)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on June 20, 19 85, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$1,856,756	$1,865,100
	1,555,499 (772)	1,555,499 (772)
Federal funds	$ 22,744 (178)	$ 29,835 (178)
Other revisions		

This modification is made for the following reasons: to include increase in construction engineering costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 26TH day of AUG, 19 85.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Manager, Program Section
(Title)

~~By~~ For: E.S. Hunter, P.E.

Acting State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 7-83)

Previous editions are obsolete

Gen Files

Oregon State Highway Division
Salem, Oregon August 20, 1985

Federal-Aid Project No. IX-9282(4)

S.W. 89th Ave.-Pacific Hwy. (Tualatin) Section
FAU 9282 (S.W. Nyberg Rd.)
Washington County

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6205
Roadway (Sta. 53+50 to Sta. 97+40)

Subtotal on estimate of March 14, 1984		$ 1,347,987.46
Additional Item: Sub-excavate soft spots and backfill (FA #2)		24,869.04
	Subtotal	$ 1,372,856.50
	Engineering	205,928.50
	Total	$ 1,578,784.00

Type Code Y031
Traffic Signal (Nyberg Road @ Martinazzi Rd. @ S.W. Boone Ferry Rd. and @ I-5 E. & W. Ramps)

Total as on estimate of October 12, 1981	$ 286,315.00
Length of Roadway	0.831 mi.
Cost of Roadway Per Mile	$ 1,899,860.41

SUMMARY OF FUNDS (85.0%)

Description	Appn Code	Total Cost	Federal Funds	State Funds	Other Funds
Roadway	(772)	$1,543,685.00	$1,312,132.00	$ 138,931.00	$ 92,622.00
Roadway	(178)	35,100.00	29,835.00	3,159.00	2,106.00
Signals	(772)	286,315.00	243,367.00	---	42,948.00
Total		$1,865,100.00	$1,585,334.00	$ 142,090.00	$ 137,676.00

Group 1 95%; Group 8 5%
Contract No. 9375
Prefix: 234-1959
Prefix: C09375
RLC:bkb

TO BE COMPLETED BY FHWA **MONTHLY TRANSACTION NUMBER** 6-197 & 198	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	**State** Oregon
PROJECT REPORT NUMBER		**County** Washington
MODIFICATION NUMBER 3		**Project Number** IX-9282(4)

MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15 , 19 81 , is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,830,000.00	$ 1,856,756.00
Federal funds	$ 1,555,499.00	1,555,499.00 (~~580~~)772 $ 22,744.00 (178)
Other revisions		

This modification is made for the following reasons: to include increases in construction and construction engineering costs, and to utilize Appn Code 178.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 20th day of June , 19 85 .

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Manager, Program Section
(Title)

XXBy For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)
For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Oregon State Highway Division
Salem, Oregon June 18, 1985

Federal-Aid Project No. IX-9282(4)

S.W. 89th Ave.-Pacific Hwy. (Tualatin) Section
FAU 9282 (S.W. Nyberg Rd.)
Washington County

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6205
Roadway (Sta. 53+50 to Sta. 97+40)

Subtotal on estimate of March 14, 1984		$ 1,347,987.46
Additional item: Sub-excavate soft spots and backfill (FA #2)		24,869.04
	Subtotal	$ 1,372,856.50
	Engineering	197,584.50
	Total	$ 1,570,441.00

Type Code Y031
Traffic Signal (Nyberg Road @ Martinazzi Rd. @ S.W. Boone Ferry Rd. and @ I-5 E. & W. Ramps)

Total as on estimate of October 12, 1981	$ 286,315.00
Length of Roadway	0.831 mi.
Cost of Roadway Per Mile	$ 1,889,820.70

SUMMARY OF FUNDS (85.0%)

Description	Appn Code	Total Cost	Federal Funds	State Funds	Other Funds
Roadway	772 ~~(580)~~	$1,543,685.00	$1,312,132.00	$ 138,931.00	$ 92,622.00
Roadway	(178)	26,756.00	22,744.00	2,408.00	1,604.00
Signals	772 ~~(580)~~	286,315.00	243,367.00	----	42,948.00
Total		$1,856,756.00	$1,578,243.00	$ 141,339.00	$137,174.00

Group 1 95%; Group 8 5%
Contract No. 9375
Prefix: 234-1959
Prefix: 234-1063

9375 .

STATE COPY

TO BE COMPLETED BY FHWA	U.S. Department of Transportation **Federal Highway Administration**	Form Approved; O M B No. 04-R2089
MONTHLY TRANSACTION NUMBER 1-65	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	State Oregon
PROJECT REPORT NUMBER	1-8-85	County Washington
MODIFICATION NUMBER 3		Project Number IX-9282(4)

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15, 19 81, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,830,000	$ 1,856,756
Federal funds	$ 1,555,499	$ 1,578,243
Other revisions		

This modification is made for the following reasons: to include increases in construction and construction engineering costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 8 th day of January, 19 85.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By Gary C. Potter

Manager, Program Section
(Title)

XXX For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By
(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)
For: Dale E. Wilken

Form PR-2A
(Rev. 7-83)

Previous editions are obsolete

Oregon State Highway Division
Salem, Oregon December 6, 1984

Federal-Aid Project No. IX-9282(4)

S.W. 89th Ave.-Pacific Hwy. (Tualatin) Section
FAU 9282 (S.W. Nyberg Rd.)
Washington County

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6205
Roadway (Sta. 53+50 to Sta. 97+40)

Subtotal on estimate of March 14, 1984	$ 1,347,987.46
Additional Item: Sub-excavate soft spots and backfill (FA #2)	24,869.04
Subtotal	$ 1,372,856.50
Engineering	197,584.50
Total	$ 1,570,441.00

Type Code Y031
Traffic Signal (Nyberg Road @ Martinazzi Rd. @ S.W. Boone Ferry Rd. and @ I-5 E. & W. Ramps)

Total as on estimate of October 12, 1981	$ 286,315.00
Length of Roadway	0.831 mi.
Cost of Roadway Per Mile	$ 1,889,820.70

SUMMARY OF FUNDS (85.0%)

Description	Total Cost	Federal Funds	State Funds	Other Funds
Roadway	$ 1,570,441.00	$ 1,334,876.00	$ 141,339.00	$ 94,226.00
Signals	286,315.00	243,367.00	----	42,948.00
Total	$ 1,856,756.00	$ 1,578,243.00	$ 141,339.00	$137,174.00

Group 1 95% Group 8 5%
Contract No. 9375
Prefix: 234-1959
Prefix: 234-1063

WH:bkb

9375

STATE COPY

TO BE COMPLETED BY FHWA	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State Oregon
MONTHLY TRANSACTION NUMBER 3 - 159		County Washington
PROJECT REPORT NUMBER	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT**	Project Number IX-9282(4)
MODIFICATION NUMBER 2	3-19-84	

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15, 19 81, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,794,130	$ 1,830,000
Federal funds	$ 1,525,009	$ 1,555,499
Other revisions		

This modification is made for the following reasons: to include increase in construction costs, and construction engineering costs.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 19th day of March, 19 84.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Manager, Program Section
(Title)

~~By~~ XXX For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen File

Oregon State Highway Division
Salem, Oregon March 14, 1984

Federal Aid Project No. IX-9282(4)

S.W. 89th Ave.-Pacific Hwy. (Tualatin) Section
FAU 9282 (S.W. Nyberg Rd.)
Washington County

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6205
Roadway (Sta. 53+50 to Sta. 97+40)

Subtotal of previous estimate of October 12, 1981			$ 1,264,340.02
Previous Estimate			
Treated Base Mixture	13,000 Ton	10.30	$ 133,900.00
Class "B" Asph. Conc. Mix	8,000 Ton	16.21	129,680.00
Asphalt Cement in Mix	450 Ton	165.00	74,250.00
			$ 337,830.00
Revised Estimate			
Treated Base Mixture	14,624 Ton	10.30	$ 150,627.20
Class "B" Asph. Conc. Mix	10,744 Ton	16.21	174,160.24
Asphalt Cement in Mix	506 Ton	165.00	83,490.00
Recycled Asph. in RAP Mix (P.A. #3)	80 Ton	165.00	13,200.00
Relocate Illum. & Lighting Control Panel (EWO #3)	All Required		12,559.24
		Increase	$ 83,647.44
		Subtotal	$ 1,347,987.46
		Engineering	195,697.54
		Total	$ 1,543,685.00

Type Code Y031
Traffic Signal (Nyberg Road @ Martinazzi Rd. @ S.W. Boone Ferry Rd. and @ I-5 E. & W. Ramps)

Total the same as previous estimate October 12, 1981	$ 286,315.00
Length of Roadway	0.831 mi.
Cost of Roadway Per Mile	$ 1,857,623.34

SUMMARY OF FUNDS (85.0%)

Description	Total Cost	Federal Funds	State Funds	Other Funds
Roadway	$ 1,543,685.00	$ 1,312,132.00	$ 138,931.00	$ 92,622.00
Signals	286,315.00	243,367.00	-----	42,948.00
Total	$ 1,830,000.00	$ 1,555,499.00	$ 138,931.00	$ 135,570.00

Group 1 95% Group 8 5%
Contract No. 9375
Prefix: 234-1959
Prefix: 234-1063

RHZ:bkb

9375

L.

TO BE COMPLETED BY FHWA	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	State Oregon
MONTHLY TRANSACTION NUMBER 3-192		County Washington
PROJECT REPORT NUMBER	**MODIFICATION OF FEDERAL-AID PROJECT AGREEMENT** 3/22/82	Project Number IX-9282(4)
MODIFICATION NUMBER 1		

The Project Agreement for the above-referenced project entered into between the undersigned parties and executed by the Division Administrator on October 15, 19 81, is hereby modified as follows:

	Former amount	Revised amount
Estimated total cost of project	$ 1,890,788.00	$ 1,794,130.00
Federal funds	$ 1,607,169.00	$ 1,525,009.00
Other revisions		

This modification is made for the following reasons: to reflect an estimated decrease in costs and release funds for use on IX-9282(3) and other projects.

All other terms and conditions of the Project Agreement will remain in full force and effect. This modification is effective as of the 22nd day of March, 19 82.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)

By

Program Management Engineer
(Title)

~~By~~ For: H.S. Coulter, P.E.

State Highway Engineer
(Title)

By

(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By
(Division Administrator)

For: Dale E. Wilken

Form PR-2A
(Rev. 10-75)

Previous editions are obsolete

Gen. file

Oregon State Highway Division
Salem, Oregon March 17, 1982

Federal-Aid Project
No. IX-9282(4)

S.W. 89th Ave.-Pacific Hwy. (Tualatin) Section
FAU 9282 (S.W. Nyberg Rd.)
Washington County

REVISED PROJECT AGREEMENT ESTIMATE

Type Code 6205
Roadway (Sta. 53+50 to Sta. 97+40)

Total same as previous estimate of October 12, 1981 $1,422,382.00

Type Code Y031
Traffic Signal (Nyberg Road @ Martinazzi Rd. at S.W. Boones Ferry Rd., and I-5 E. & W. Ramps)

Total same as previous estimate of October 12, 1981 $ 286,315.00

Length of Roadway ------------------- 0.831 mile
Cost of Roadway Per Mile ------------$1,711,651.02

SUMMARY OF FUNDS (85%)

Description	Total Cost	Federal Funds	State Funds	Other Funds
Roadway	$1,422,382.00	$1,209,024.00	$ 123,240.00	$ 90,118.00
Signals	286,315.00	243,367.00	----	42,948.00
SUBTOTAL	$1,708,697.00	$1,452,391.00	$ 123,240.00	$133,066.00
Reserve	85,433.00	72,618.00	----	12,815.00
TOTAL	$1,794,130.00	$1,525,009.00	$ 123,240.00	$145,881.00

Group 1 95% Group 8-5%
Prefix: 234-1063
Contract: 9375

1375.

STATE COPY

TO BE COMPLETED BY FHWA 10-72	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL-AID PROJECT AGREEMENT 10/15/81	STATE Oregon COUNTY Washington PROJECT NO. IX-9282(4)

The State, through its Highway Agency, having complied, or hereby agreeing to comply, with the applicable terms and conditions set forth in (1) Title 23, U.S. Code, Highways, (2) the Regulations issued pursuant thereto and, (3) the policies and procedures promulgated by the Federal Highway Administrator relative to the above designated project, and the Federal Highway Administration having authorized certain work to proceed as evidenced by the date entered opposite the specific item of work, Federal funds are obligated for the project not to exceed the amount shown herein, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends only to project costs incurred by the State after the Federal Highway Administration authorization to proceed with the project involving such costs.

PROJECT TERMINI

S.W. 89th Ave.-Pacific Hwy. (Tualatin)

PROJECT CLASSIFICATION OR PHASE OF WORK	EFFECTIVE DATE OF AUTHORIZATION	APPROXIMATE LENGTH *(Miles)*
HIGHWAY PLANNING AND RESEARCH (HP & R)		
PRELIMINARY ENGINEERING		
RIGHTS-OF-WAY		
CONSTRUCTION	9-2-81	0.831

OTHER *(Specify)*

FUNDS PRO RATA 85%

ESTIMATED TOTAL COST OF PROJECT $ 1,890,788.00	FEDERAL FUNDS $ 1,607,169.00

The State further stipulates that as a condition to payment of the Federal funds obligated, it accepts and will comply with the applicable provisions set forth on the reverse hereof.

OREGON STATE HIGHWAY DIVISION
(Official name of Highway Agency)
By
Asst. State Hwy. Engineer
(Title)
XXX For: H.S. Coulter
State Highway Engineer
(Title)
By ____________
(Title)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
By
(Division Administrator)
For: Dale E. Wilken
Date executed by Division Administrator OCT 15 1981

FORM PR-2 (REV. 10-75) PREVIOUS EDITIONS ARE OBSOLETE

AGREEMENT PROVISIONS

1. RESPONSIBILITY FOR WORK

a. Except for projects constructed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in compliance with the approved plans and specifications or project proposal which, by reference, are made a part hereof.

b. With regard to projects performed under Certification Acceptance procedures, the State highway agency will perform the work, or cause it to be performed, in accordance with the terms of its approved Certification, or exceptions thereto as may have been approved by the Federal Highway Administration.

2. HIGHWAY PLANNING AND RESEARCH (HP&R) PROJECT. The State highway agency will (a) conduct or cause to be conducted, under its direct control, engineering and economic investigations of projects for future construction, together with highway research necessary in connection therewith, pursuant to the work program approved by the Federal Highway Administration and (b) prepare reports suitable for publication of the result of such investigations and research, but no report will be published without the prior approval of the Federal Highway Administration.

3. PROJECT FOR ADVANCE ACQUISITION OF RIGHTS-OF-WAY. In the event that actual construction of a road on this right-of-way is not undertaken by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

4. PRELIMINARY ENGINEERING PROJECT FOR PREPARATION OF RIGHT-OF-WAY PLANS OR FOR PREPARATION OF CONSTRUCTION PLANS, SPECIFICATIONS AND ESTIMATES. In the event that right-of-way acquisition for, or actual construction of the road for which this preliminary engineering is undertaken is not started by the close of the fifth fiscal year following the fiscal year in which this agreement is executed, the State highway agency will repay to the Federal Highway Administration the sum or sums of Federal funds paid to the highway agency under the terms of this agreement.

5. INTERSTATE SYSTEM PROJECT. (a) The State highway agency will not add or permit to be added, without the prior approval of the Federal Highway Administration any points of access to, or exit from, the project in addition to those approved in the plans and specifications for the project. (b) The State highway agency will not permit automotive service stations, or other commercial establishments for serving motor vehicle users, to be constructed or located on the right-of-way of the interstate system. (c) The State highway agency will not after June 30, 1968, permit the construction of any portion of the Interstate Route on which this project is located, including spurs and loops, as a toll road without the written concurrence of the Secretary of Transportation or his officially designated representative. The term 'toll road' does not include toll bridges or toll tunnels.

6. PROJECT FOR CONSTRUCTION IN ADVANCE OF APPORTIONMENT. (a) This project authorized pursuant to 23 U.S.C. 115 as amended, will be subject to all procedures and requirements, and conform to the standards applicable to projects on the system on which located, financed with the aid of Federal funds. (b) No obligation of previously apportioned Federal funds is created by this agreement, its purpose and intent being to provide that, upon application by the State highway agency, and approval thereof by the Federal Highway Administration, any Federal-aid funds of the class designated by the project number prefix, apportioned to the State under 23 U.S.C. 104 subsequent to the date of this agreement, may be used to reimburse the State for the Federal share of the cost of work done on the project.

7. STAGE CONSTRUCTION. The State highway agency agrees that all stages of construction necessary to provide the initially planned complete facility, within the limits of this project, will conform to at least the minimum values set by approved AASHTO design standards applicable to this class of highways, even though such additional work is financed without Federal-aid participation..

8. BOND ISSUE PROJECT. Construction, inspection and maintenance of the project will be accomplished in the same manner as for regular Federal-aid projects. No present or immediate obligation is created by this Agreement against Federal funds, its purpose and intent being to provide aid to the State, as authorized by 23 U.S.C. 122, for retiring maturities of the principal indebtednesss of the bonds referred to below. When the State requests Federal reimbursement to aid in the retirement of such bonds, the request will be supported by the appropriate certification required by 23 CFR Part 140, Subpart F, and Volume 1, Chapter 4, Section 8 of the Federal-Aid Highway Program Manual or the alternative State procedure set forth in the State's Certificate, and payment of the authorized Federal share will be made from appropriate funds available. If in any year there is no unobligated balance of any apportioned Federal funds available from which payments hereunder may be made, there will be no obligation on the part of the Federal Government on account of bond maturities for that year. Funds available to the highway agency for this project are the proceeds of bonds issued by the governmental unit indicated on the attached tabulation, pursuant to the authority and in the amounts by date of issue and beginning date of maturities set forth therein.

9. SPECIAL HIGHWAY PLANNING AND RESEARCH PROJECT. The State Highway agency hereby authorizes the Federal Highway Administration to charge the State's pro rata share of costs incurred against funds apportioned to the State under 23 U.S.C. 307 (c), as amended. In the event a project is financed with both Federal-aid funds and State matching funds, the State agrees to advance to The Federal Highway Administration the State matching funds for its share of the estimated cost. For a National Pooled Fund study, the State hereby assigns its responsibility for the work to the Federal Highway Administration. For an Intra-Regional Cooperative Study, the State hereby assigns its responsibility for the work to the lead State for the study.

10. PARKING REGULATION AND TRAFFIC CONTROL. The State highway agency will not permit any changes to be made in the provisions for parking regulations and traffic control as contained in the agreement between the State and the local unit of Government referred to in the paragraph on "Additional Provisions," without the prior approval of the Federal Highway Administration, unless the State determines, and the Division Administrator concurs, that the local unit of Government has a functioning traffic engineering unit with the demonstrated ability to apply and maintain sound traffic operations and control.

6-File

Oregon State Highway Division
Salem, Oregon October 12, 1981

Federal Aid Project
No. IX-9282(4)

S.W. 89th Ave.-Pacific Hwy. (Tualatin) Section
FAU 9282 (S.W. Nyberg Rd.)
Washington County

PROJECT AGREEMENT ESTIMATE

Type Code 6205
Roadway (Sta. 53+50 to Sta. 97+40)

Mobilization	68.2 %	All Required	$ 29,120.72
Temporary Protection and Direction of Traffic	68.2 %	All Required	6,023.43
Temporary Signs	300 Sq. Ft.	9.00	2,700.00
Temporary Barricades	39 Each	105.00	4,095.00
Temporary Continuous Rail Traffic Barriers, Reflectorized	1,125 Lin. Ft.	4.60	5,175.00
Temporary Plastic Safety Markers	42 Each	54.00	2,268.00
Temporary Reflective Pavement Markers	100 Each	6.00	600.00
Flagmen	1,500 Hour	24.00	36,000.00
Clearing and Grubbing		All Required	6,868.00
Removal of Structures and Obstructions		All Required	6,262.00
Ditch Excavation	1,415 Cu. Yd.	6.20	8,773.00
Embankment in Place	16,420 Cu. Yd.	3.95	64,859.00
Extra for Selected Topsoil Material	920 Cu. Yd.	9.60	8,832.00
Trench Excavation	1,840 Cu. Yd.	13.40	24,656.00
Finishing Roadbed and Slopes		All Required	5,050.00
Watering	250 M-Gal.	30.00	7,500.00
Aggregate Base	2,000 Ton	8.32	16,640.00
Aggregate Leveling Course	100 Ton	12.30	1,230.00
Lime Treated Subgrade	32,500 Sq. Yd.	1.33	43,225.00
Lime for Treated Subgrade	365 Ton	96.00	35.040.00
Treated Base Mixture	13,000 Ton	10.30	133,900.00
Cement in Treated Base Mixture	715 Ton	75.00	53,625.00
Class "B" Asphalt Concrete Mixture	8,000 Ton	16.21	129,680.00
Asphalt Cement in Mixture	450 Ton	165.00	74,250.00
Concrete in Box Culvert	60 Cu. Yd.	238.00	14,280.00
Reinforcement in Box Culvert	8,000 lbs.	0.81	6,480.00
8-inch Culvert Pipe	588 Lin. Ft.	6.50	3,822.00
12-inch Culvert Pipe	136 Lin. Ft.	10.50	1,428.00
15-inch Culvert Pipe	100 Lin. Ft.	12.28	1,228.00
18-inch Culvert Pipe	116 Lin. Ft.	19.50	2,262.00
12-inch Sewer Pipe	2,941 Lin. Ft.	14.00	41,174.00

15-inch Sewer Pipe	580	Lin. Ft.	18.90	10,962.00
18-inch Sewer Pipe	230	Lin. Ft.	22.00	5,060.00
24-inch Sewer Pipe	126	Lin. Ft.	36.00	4,536.00
30-inch Arch Type Pipe	190	Lin. Ft.	31.60	6,004.00
Extra for Pipe Under Pavement	425	Lin. Ft.	14.20	6,035.00
2-inch PVC Pipe	150	Lin. Ft.	5.10	765.00
4-inch PVC Pipe	320	Lin. Ft.	17.70	5,664.00
Concrete Manholes	5	Each	1,210.00	6,050.00
Concrete Inlets, Type G-1	14	Each	364.00	5,096.00
Concrete Inlets, Type G-2	37	Each	392.00	14,504.00
Concrete Inlets, Type G-2MA	2	Each	505.00	1,010.00
6-inch Drain Pipe	576	Lin. Ft.	7.00	4,032.00
Filter Fabric	570	Sq. Yd.	2.00	1,140.00
Gravel in Drains	60	Cu. Yd.	23.00	1,380.00
Guard Rail, Type 1	25	Lin. Ft.	13.00	325.00
Guard Rail, Type 2A	113	Lin. Ft.	15.00	1,695.00
Guard Rail Anchors, Type 1	1	Each	329.00	329.00
Rail End Pieces, Type B	2	Each	41.00	82.00
Rail End Pieces, Type C	1	Each	91.00	91.00
CL-6 Chain Link Fence	70	Lin. Ft.	15.00	1,050.00
Concrete Walks	5,400	Sq. Yd.	10.73	57,942.00
Concrete Driveways	60	Sq. Yd.	18.00	1,080.00
Concrete Curbs	13,050	Lin. Ft.	4.92	64,206.00
Concrete Islands	35	Cu. Yd.	146.00	5,110.00
Extra for Asphalt Approaches	8	Each	166.00	1,328.00
Asphalt Walks	240	Sq. Yd.	5.00	1,200.00
Paved Culvert End Slopes	70	Sq. Ft.	8.00	560.00
Drainage Curbs	135	Lin. Ft.	4.00	540.00
Delineators, Type 2	20	Each	20.20	404.00
Delineators, Type 4	4	Each	15.00	60.00
Adjusting Manholes	3	Each	83.00	249.00
Reconstructing Concrete Manholes	4	Each	425.00	1,700.00
Adjusting Inlets	1	Each	152.00	152.00
Removal of Existing Sign Installations			All Required	606.00
Wood Sign Posts			All Required	3,636.00
Horizontal and Vertical Sign Mounting Arms			All Required	3,131.00
Type "C" and "D" Signs in Place	138	Sq. Ft.	13.00	1,794.00
Type "EE" Signs in Place	50	Sq. Ft.	13.00	650.00
Type "M" Signs in Place	12	Sq. Ft.	8.00	96.00
Type "U" and "V" Signs in Place	250	Sq. Ft.	24.24	6,060.00
Move and Reinstall Existing Signs and Supports			All Required	1,616.00
Roadside Seeding and Mulching	3	Acre	707.00	2,121.00
Furnishing and Planting Trees	85	Each	48.00	4,080.00
Furnishing and Planting Shrubs	1,363	Each	6.10	8,314.30
Furnishing and Planting Vines	10,577	Each	0.41	4,336.57
Bark Mulch	68	Unit	144.00	9,792.00
Soil Conditioner	500	Cu. Yd.	14.14	7,070.00
Irrigation System			All Required	45,450.00
				$1,086,140.02

Anticipated Items

Railroad Protective Costs	All Required	$ 12,000.00
Work by Oregon Electric Railroad	All Required	145,800.00
Asphalt Cement Adjustment	All Required	15,000.00
On-the-job Trainees (1-1,000 hrs. @ $0.80)	All Required	800.00
Permanent Pavement Striping	All Required	4,600.00
		$ 178,200.00
	SUBTOTAL	$1,264,340.02
	Engineering	158,041.98
	TOTAL	$1,422,382.00

Type Code Y031
Traffic Signal (Nyberg Road at Martinazzi Rd. at S.W. Boone Ferry Rd. and at I-5 E.&W. Ramps)

Mobilization	26.6 %		$ 11,357.93
Temporary Protection and Direction of Traffic	26.6 %	All Required	2,349.31
Traffic Signal Installation, Other		All Required	208,727.00
Fire Pre-emption System, Complete		All Required	16,918.00
Traffic Control Programs, Complete		All Required	15,150.00
SUBTOTAL---			$ 254,502.24
Engineering ---			16,937.76
Signal Controller Testing (Engineering) ----------			12,775.00
"OPTICOM" Testing (Engineering) -------------------			2,100.00
			$ 286,315.00

Length of Roadway -------------- 0.831 mi.
Cost of Roadway Per Mile -------$1,711,651.02

SUMMARY OF FUNDS (85%)

Description	Total Cost	Federal Funds	State Funds	Other Funds
Roadway	$1,422,382	$1,209,024	$123,240	$ 90,118
Signals	286,315	243,367	-----	42,948
SUBTOTAL	$1,708,697	$1,452,391	$123,240	$133,066
Reserve	182,091	154,778	-----	27,313
TOTAL	$1,890,788	$1,607,169	$123,240	$160,379

Group 1-95%; Group 8-5%
Contract No. 9375
Prefix: 234-1959 (PE)
234-1063 (Constr.)

S.W. 89th Ave.-PACIFIC HWY. (TUALATIN) SECTION
FAU 9282 (S.W. NYBERG RD.)
WASHINGTON COUNTY

STATE RESPONSIBILITY (NON PARTICIPATING ITEMS)

Mobilization	5.2 %	All Required	$ 2,220.35
Temporary Protection and Direction of Traffic	5.2 %	All Required	459.26
Traffic Signal Installation, Nyberg Rd. at Fred Meyer and K-Mart Access		All Required	5,151.00
Furnishing and Installing Mailbox Posts	2 Each	66.00	132.00

9375 jc

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. IX-9282(4)

2. STATE PROJECT NO. See Below

2A. COUNTY NAME Washington

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division
6-21-85

4. PROGRAM NO.

5. ITEM NO. 80112

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE June 20, 1985

8. FEDERAL ROUTE NUMBER FAU 9282

9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION
S. W. 89th Ave. - Pacific Highway (Tualatin) Section

11. GENERAL DESCRIPTION OF WORK
Program Change

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* Program Change

13. REMARKS

As requested in Mr. Potter's letter of 6-18-895 the Program Change is approved as follows:

1) Add Appropriation Code 178

2) Credit Appropriation Code 580
TEC $26,756 - Federal Funds $22,744

3) Debit Appropriation Code 178
TEC $26,756 - Federal Funds #22, 744

Orig to Trout
6-24-85
Ew

RECEIVED
STATE HWY ENGR
JUN 24 '85
REFER TO Potter
FOR

Info	Invest	R/D	D/R	Sign	Act	File

14. DATE 6/20/85

15. SIGNATURE OF APPROVING OFFICIAL G. K. Hossner

16. TITLE For Division Administrator

FORM PR-1240
(Rev. 12-79)
PREVIOUS EDITIONS MAY BE USED

9375

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VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:

PRO

Date: June 18, 1985

To: Dale E. Wilken
Division Administrator
Federal Highway Administration

From: Gary A. Potter, Manager
Program Section

Subject: Program Change
Item No. 80112
IX-9282(4)
S.W. 89th Ave.-Pacific Ave. (Tualatin)
Washington

I request your approval of a program change to joint finance the subject project utilizing Appn Code 178 funds available for use on December 14, 1984 and will require the following revisions:

1) Appn Code --- Add 178.
2) Credit: Appn Code 580 ---- $19,344.00
3) Debit: Appn Code 178 ------ $19,344.00

Revisions in financing are as indicated on the attached modified agreement.

RHZ:bkb
cc: R. Oakes
E.L. Hardt, Metro
W. Schulte, Metro
J. Peterson
General Files ✓

Form 734-3122

9375

P

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO

Date: April 26, 1985

To: Dale E. Wilken
Division Administrator
Federal Highway Administration

ORIGINAL SIGNED BY
GARY A. POTTER

From: Gary A. Potter, Manager
Program Section

Subject: Program Change
Item No. 80112
Project No. IX-9282(4)
S.W. 89th Ave.-Pacific Ave. (Tualatin) Section
Washington County

I request your approval of a program change to utilize Appn Code ~~177~~ 178 funds in place of Appn Code 580, previously approved by your memo of January 7, 1985.

DDB:bkb
cc: J. Peterson
G. Zehner
General Files

Approved by FHwA
178 funds effective
5-9-85.

9375

rll

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. IX-9282(4)

2. STATE PROJECT NO. See Below

2A. COUNTY NAME Washington

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division
1-7-85

4. PROGRAM NO.

5. ITEM NO. 80112

6. TO

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 1/3/85

8. FEDERAL ROUTE NUMBER FAU 9282

9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION:

SW 89th Avenue - Pacific Highway (Tualatin) Section

11. GENERAL DESCRIPTION OF WORK

Program Change

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* Program Change
See Below

13. REMARKS

As requested in Mr. Potter's letter of 12/19/84 I approve the revised Construction costs to a TEC of $1,856,756; Federal Funds $1,578,243.

(Increase TEC $26,756; Federal Funds $22,744 Appn. Code 580)

RECEIVED
STATE HWY ENGR
JAN 8 '65
REFER TO Potter
FOR

Info	Invest	R/D	D/R	Sign	Act	File

Orig. to 1/8

14. DATE 1/7/85

15. SIGNATURE OF APPROVING OFFICIAL G. K. Hossner

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9375

rll

cc: OSHD (Coulter)

~~STATE COPY~~

U.S. Department of Transportation
Federal Highway Administration

FINAL ACCEPTANCE REPORT

12-31-84

REGION NO. 10	REPORT NO. 3	COUNTY Washington	DIVISION Oregon
DATE OF REPORT 12/31/84	REPORT MADE BY T. P. Lowe, Area Engineer		PROJECT NO. IX-9282(4)
COMPLETION DATE (Actual) 1/22/83	ACCEPTANCE DATE BY CONRTACT AGENCY 10/31/84	TIME ELAPSED 100 %	CONTRACT TIME 400 Days

LOCATION

SEE BELOW

The FHWA-47, Statement of Materials and Labor Used by Contractors on Highway Construction Involving Federal Funds, has been submitted. (Projects over $500,000)

A copy of the State's materials certificate is attached to the Division office copy of this report.

There is compliance with section 1.23 of the Regulations pertaining to encroachments on the right-of-way.

REMARKS: *The project has been completed in reasonably close conformity with the approved plans and specifications including authorized changes and extra work.*

SW 89th AVENUE - PACIFIC HIGHWAY
NYBERG ROAD
Grading, Paving, Signals & Landscaping

This project provided for the complete realignment of Nyberg Road on virgin alignment within the project termini. Work included grading, paving, curbs, signals and landscaping.

A time extension of 67 days has been granted the contractor. No liquidated damages will be charged on this project.

The final estimated cost on this proejct was $1,800,240. This represents 0.2 percent overrun.

NOTED
W. E. SCHWARTZ

cy
1/14

RECEIVED
STATE HWY ENGR
JAN 10 '85
REFER TO
Fredrickson
FOR

Info	Inves	R/D	D/R	Sign	Act	File

ACCEPTANCE OF PROJECT IS RECOMMENDED		ACCEPTED BY FEDERAL HIGHWAY ADMINISTRATION	
SIGNATURE Original Signed by T. P. LOWE T. P. Lowe		SIGNATURE Original Signed By G. K. HOSSNER Field Operations Engineer G. K. Hossner	
TITLE Area Engineer	DATE 1/7/85	TITLE Field Operations Engineer	DATE 1/9/85

9375

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO

Date: December 19, 1984

To: Dale E. Wilken
Division Administrator
Federal Highway Administration

ORIGINAL SIGNED BY
GARY A. POTTER

From: Gary A. Potter, Manager
Program Section

Subject: Program Change
Project No. IX-9282(4)
S.W. 89th Ave.-Pacific Hwy. (Tualatin) Section
Washington County

I request your approval of a program change to adjust the estimated construction costs as indicated on the revised project agreement estimate and modification of project agreement submitted under separate action.

Approval of this request will involve an increase of $26,756 in total cost and federal obligation of $22,744 in Interstate Substitution Funds (Appn Code 580) with revised financing as follows:

	APPN CODE	TOTAL COST	FEDERAL FUNDS	%
Present		$ 1,856,756	$ 1,578,243	85%
Previous	772	1,830,000	1,555,499	
Difference	580	$ 26,756	$ 22,744	

CL:bkb
cc: J. Peterson
G. Zehner
General Files

Form 734-3122

9375

November 9, 1984

The Travelers Indemnity Company
Surety Department
707 SW Washington Street
Portland, OR 97205

CON 5
#9375

Gentlemen or Ladies:

Contract No. 9375 awarded to Cascade Construction Company, Inc. for work on the SW 89th Avenue-Pacific Highway (Tualatin) Section of FAU 9282 in Washington County was completed on January 23, 1984, and accepted by the State Highway Division on November 2, 1984.

The total contract amount is $1,461,431.36 including $47,077.55 for work performed under force account.

No claims for labor or material have been filed with us against the bond on this contract.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

kjm
cc: Cascade Construction Company, Inc.
PO Box 4267
Portland, OR 97208

Don Rager and Company
200 Market Building
Portland, OR 97201

bc: C. O. Fredrickson
Walt Hart
V. E. Skoog (Attn: Frank Griffin)
E. L. Hardt

9375 Files 1

REPORT OF ACTION UNDER DELEGATED AUTHORITY BY

ASSISTANT STATE HIGHWAY ENGINEER

11-2-84

On behalf of the Commission and under delegated authority, the following contracts were accepted as being completed according to specifications:

Contractor and Contract No.	Section and County	Acceptance Date
Morse Bros., Inc. Contract No. 9764	District 9 Rock Production Gilliam & Morrow Counties	10/2/84
Palmberg Paving Co., Inc. Contract No. 9672	Neawanna Cr.-Holliday Dr. (Seaside) Clatsop County	10/4/84
J. C. Compton Co. Contract No. 9782	Arlington-Fossil Gilliam & Wheeler Counties	10/11/84
Cherry City Electric, Inc. Contract No. 9609	Pac. Hwy. E @ Hilfiker Rd. (Salem) Marion County	10/11/84
Cascade Construction Co. Contract No. 9610	Sundial-Sandy River Multnomah County	10/11/84
Johnson Rock Products, Inc. Contract No. 9709	Winchester Bay Slide Douglas County	10/18/84
Auburn Construction Co. Contract No. 9613	Courtney Creek Bridge Linn County	10/18/84
Siuslaw Construction Co. Contract No. 9253	Fanno Creek Bridge Washington County	10/18/84
Wildish Corvallis Const. Co. Contract No. 9600	4th St.-10th St. (Medford) Jackson County	10/18/84
Bend Aggregate & Paving Co. Contract No. 9803	Pieper Canyon-Heppner Morrow County	10/26/84

Contractor and Contract No.	Section and County	Acceptance Date
Morse Bros., Inc. Contract No. 9036	Battle Cr.-N. Jefferson Intch. Marion County	10/29/84
Dirt & Aggregate Intch.,Inc. Contract No. 9639	Tillamook-Fogarty Cr. Lincoln & Tillamook Counties	11/2/84
Cascade Const. Co., Inc. Contract No. 9375	SW 89th Ave.-Pac. Hwy. (Tualatin) Washington County	11/2/84
Cascade Const. Co., Inc. Contract No. 9380	N. Basin Ave.-N. Going St. Multnomah County	11/2/84

EXPENDITURE RECAP

	ABOVE PROJECTS	FY TO DATE
Original Authorization	$19,756,427.39	$48,062,407.21
Anticipated Costs	$20,961,419.36	$52,349,194.57
% Overrun (Underrun)	+6.1%	+8.9%

November 2, 1984

W. E. Schwartz, P.E.
Asst. State Highway Engineer

9375

STATE COPY

rll

US Department of Transportation
Federal Highway Administration

INSPECTION REPORT

cc: OSHD (Coulter)

(Check appropriate box)

☐ INITIAL INSPECTION
☐ INTERMEDIATE INSPECTION
☐ PROJECT
☐ INSPECTION-IN-DEPTH
☒ FINAL INSPECTION

10-17-84

REGION NO. 10	REPORT NO. 2	COUNTY Washington	DIVISION Oregon
IN COMPANY WITH Marion Craft, OSHD			
DATE OF INSPECTION 10/17/84	INSPECTION MADE BY Original Signed by T. P. Lowe, Area Engineer		PROJECT NO. IX-9282(4)
QUALITY OF WORK Satisfactory	PROGRESS OF WORK *Satisfactory	TIME ELAPSED 100 %	WORK COMPLETED 100 %

SW 89th AVENUE - PACIFIC HIGHWAY
NYBERG ROAD
Grading, Paving, Signals, & Landscaping

This project provided for the complete realignment of Nyberg Road on virgin alignment within the project termini. Work included grading, paving, curbs, signals, and landscaping.

*A time extension of 67 days has been granted the contractor. No liquidated damages will be charged on this project.

The final estimated cost on this project was $1,800,240. This represents 0.2 percent overrun.

A price reduction of $175 was assessed for less than specified asphaltic concrete compaction. Also, a price reduction was assess for galvanized sprinkler nipples that did not have sufficient galvanization. This price reduction amounted to $2,250. The contractor had installed the nipples without providing certification. The State randomly sampled and tested the nipples and found they were deficient in galvanization. The contractor elected to take a price reduction of $2,250 in lieu of replacing all of the nipples on the project.

NOTED
W. E. SCHWARTZ og
11/1

RECEIVED
STATE HWY ENGR
OCT 31 '84
REFER TO Fredrickson
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Form FHWA-1446A (Supersedes FHWA-1446 dtd 12-73 & FHWA-1446A dtd 12-73 which are not to be used)
(Rev. 2-84)

The State has settled a contractor's claim concerning changes in excavation and embankment quantities on this project. The claim was settled by the State's Claim Review Board. The State is currently preparing a request with the appropriate supporting documentation for FHWA participation in this matter. I will address this matter following the State's presentation.

The project appears to have been constructed in conformance with the contract requirments and, therefore, acceptance is recommended.

9375

ALLEN & YAZBECK
ATTORNEYS AT LAW

F. GORDON ALLEN
JOSEPH A. YAZBECK, JR.
ROBERT L. O'HALLORAN
LYNNIA K. WOODS

735 S. W. FIRST AVENUE
STROWBRIDGE BUILDING
PORTLAND, OREGON 97204
(503) 224-2147

October 4, 1984

NOTED
H.S. COULTER

H. S. Coulter
State Highway Engineer
Department of Transportation
Highway Division
Transportation Building
Salem, Oregon 97310

Re: SW 89th Avenue - Pacific Highway; Contract No. 9375

Dear Mr. Coulter:

On behalf of Cascade Construction and Dirt & Aggregate Interchange, we accept the $25,960 set aside by the Claims Review Board for the settlement of this matter.

Very truly yours,

Joseph A. Yazbeck, Jr.

JAY/mle

cc: Cascade Construction Co.
Attn. George Morton
Dirt & Aggregate Interchange

10-5
cys
Schwartz
Bachman
Sollis
Fredrickson
Harwood
SKogg

RECEIVED
STAT HWY ENGR
OCT 5 '84
REFER TO
Schwartz
FOR

Info	Inves	R/D	D/R	Sign	Act	File
					✓	

ALLEN & YAZBECK
ATTORNEYS AT LAW

F. GORDON ALLEN
JOSEPH A. YAZBECK, JR.

ROBERT L. O'HALLORAN
LYNNIA K. WOODS
KAREN E. STRATTON

735 S. W. FIRST AVENUE
STROWBRIDGE BUILDING
PORTLAND, OREGON 97204
(503) 224-2147

October 1, 1984

H. S. Coulter
State Highway Engineer
Department of Transportation
Highway Division
Transportation Building
Salem, Oregon 97310

Re: SW 89th Avenue - Pacific Highway; Contract No. 9375

Dear Mr. Coulter:

On behalf of Cascade and Dirt & Aggregate, we accept the amount set aside by the Claims Review Board.

Very truly yours,

Joseph A. Yazbeck, Jr.

JAY/mle

cc: Dirt & Aggregate Interchange
Cascade Construction Co.

Approved by Cascade Construction Co., Inc.

George R. Morton
George R. Morton
Vice President, Engineering

9375

t

September 18, 1984

Joseph A. Yazbeck, Jr.
Allen & Yazbeck
Attorneys at Law
735 SW First Ave.
Strowbridge Bldg.
Portland, Oregon 97204

CON

Contract Claim
SW 89th Ave.-Pacific Highway
Contract No. 9375

This is in response to your September 5 letter concerning my decision in the above matter.

You, your client, and the prime contractor made a presentation to our Claim Review Board on July 26 concerning a claim for additional compensation relative to Bid Item No. 12, "Embankment in Place", on this contract. The Contract Claim Review Board made their recommendation to me after considering all of the information presented, which included all items contained in your September 5 letter.

The recommendation of the Contract Claim Review Board, with which I concurred, was a very generous equitable adjustment of this matter. The decision contained in my August 3 letter to Cascade Construction Company remains final and unaltered.

H. S. Coulter
State Highway Engineer

cc Cascade Construction Co.
  C. O. Fredrickson
  Al Harwood w/att.
  Walt Bartel w/att

OBJ:mk sl

ALLEN & YAZBECK
ATTORNEYS AT LAW

F. GORDON ALLEN
JOSEPH A. YAZBECK, JR.
ROBERT L. O'HALLORAN
LYNNIA K. WOODS
KAREN E. STRATTON

735 S. W. FIRST AVENUE
STROWBRIDGE BUILDING
PORTLAND, OREGON 97204
(503) 224-2147

September 5, 1984

Pat Schwartz
w/draft reply

cy 9-7
Sollis

cy 9/12 Jackmond R/D

due
9/19

RECEIVED
STATE HWY ENGR
SEP 7 '84
REFER TO
Ashes
FOR
Info Inves R/D D/R Sign Act File

H. S. Coulter, P.E.
State Highway Engineer
Through Jack G. Sollis
Assistant Attorney General
Department of Transportation
Highway Division
Transportation Bldg.
Salem, Oregon 97310

I believe Scott's letter said, approx., that our offer was final
WES

Re: Contract Claim, Southwest 89th Avenue - Pacific Highway,
Contract No. 9375

Gentlemen:

We have given substantial consideration to the offer of settlement that followed the hearing before the Claims Review Board. While we appreciate the effort that has been made to date, we do not believe that the offer adequately compensates Cascade and Dirt & Aggregate for the work performed by Dirt & Aggregate.

Our analysis of your offer leads us to believe that you have decided to pay the full amount of the embankment item plus some interest. This is insufficient because it does not take into account the overrun in represented quantities in excavation nor does it take into account the extra haul.

With respect to the overrun in excavation, the resident engineer has told us that the actual excavation quantities were 13,600 cubic yards and that the original excavation quantities were 12,729 cubic yards. The excavation quantities exceeded those planned by 871 cubic yards. A very reasonable rate for excavation, on site, is $2.00 per cubic yard or $5742.00. However, the material did not stay on the site. That leads us to the next item of claim, the excess haul.

Dirt & Aggregate hauled off all excavation material which was not placed into embankment. The actual excavation quantity was 13,600. The actual embankment quantity was 9,997. The difference is 3,603 cubic yards. Dirt & Aggregate originally contemplated importing 1,386 cubic yards. Assuming that the import haul and the export haul are equal, that still leaves an extra 2,217 cubic yards of extra material that was hauled off the site. A reasonable price for that haul was $4.25 per cubic yard or $9,422.25.

In addition to the excavation of cubic yards that were hauled off the site, 1,711 cubic yards also had to be hauled off the site from the force account soft spot excavation. Dirt & Aggregate was directed by Mr. Cochell to place the material in a sliver cut embankment, as was explained at the hearing. Mr. Cochell did this because he did not know at the time that there would be an excess of imported material on the site. In fact, as we understand it, the embankment quantity of 9,997 cubic yards includes the embankment in the sliver fill. The excavation quantity of 13,600 yards does not include the soft spot excavation. Accordingly, we believe that it is only fair to compensate Cascade and Dirt & Aggregate for the export of this 1,711 cubic yards of soft spot excavation. This also should be compensated at the rate of $4.25 per cubic yard or $7,271.75.

Dirt & Aggregate appreciates the fact that the State has increased the pay quantities to the full amount of the embankment. However, the cost in this item was not in the embankment but in the excavation. Moreover, Dirt & Aggregate in actuality performed more work by stockpiling the material than it would have had the material been placed in embankment. Placing the material in embankment would have required Dirt & Aggregate to simply spread it with scrapers and roll it. Dirt & Aggregate was required to stockpile the material. It accomplished this by dumping it with scrapers and pushing the material into a stockpile by use of a TD-8 Dozer. It was this pile that was later exported.

The items we have listed above total $18,436.00. We believe that Dirt & Aggregate should be compensated by this extra amount over and above your previous offer. We appreciate your attention to this matter and we will appreciate your continued consideration of this claim. We wish to make every effort to resolve this matter with the Department.

If you have any questions concerning the items which we have listed, please have Jack Sollis contact Joe Yazbeck.

Very truly yours,

Joseph A. Yazbeck Jr. by GJH

Joseph A. Yazbeck, Jr.

JAY/mjs

cc: Dirt & Aggregate Interchange, Inc.
 Attn. Henry Pelfrey
 Cascade Construction
 Attn. George Morton

9375

I

SC

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. M-9282(2)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Washington

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 80112

6. TO

8-29-84

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 8-24-84

8. FEDERAL ROUTE NUMBER FAU 9282

9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION:
S.W. 89th Ave. - I-5 Freeway (Tualatin) Section

11. GENERAL DESCRIPTION OF WORK
Program Change

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* Program Change
See below

13. REMARKS

As requested by Mr. Potter's letter of 7-5-84 and 8-16-84 the revised preliminary engineering costs to a TEC of $263,120 - F.F. $225,755 are approved.

(Increase TEC $61,720 - F.F. $52,970)

PROGRAM SECTION
MANAGER ___ RESOURCE UNIT ___
FA UNIT ___ PROGRAM UNIT ___
AUG30 1984
REFER TO ___
R/D ___ ACT ___ REPLY ___
DISC ___ INFO ___ [✓ FILE] ___

orig to 119

RECEIVED
STATE HWY ENGR
AUG 30 '84
REFER TO Potter.
FOR

Info	Inves	R/D	D/R	Sign	Act	File

14. DATE 8/29/84

15. SIGNATURE OF APPROVING OFFICIAL G. K. Hassner

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9375

August 3, 1984 CON

Cascade Construction Company
P.O. Box 4267
Portland, OR 97229

Contract Claim
S.W. 89th Avenue - Pacific Highway
Contract No. 9375

A review of the claim submitted by you on behalf of your subcontractor, Dirt & Aggregate Interchange, Inc., has been completed. I have reviewed the recommendations regarding this claim from the Claims Review Board and our legal counsel.

I concur with the decision of the Board that your subcontractor is due additional compensation for the work under Bid Item No. 12, "Embankment in Place". Therefore, I am offering the sum of $25,960 as full and complete compensation for settlement of the claim, including interest as required by statute.

My decision in this matter is the final informal review process available to you. If you do not agree with this determination, your recourse is through the courts.

H. S. Coulter, P.E.
State Highway Engineer

bc R. N. Bothman
W. E. Schwartz
E. S. Hunter
R. L. Schroeder
J. B. Boyd
J. L. Sollis
O. B. Jackmond
Allan Harwood
Walter Bartel
Steve Macnab

SHM:lks

STATE OF OREGON
HIGHWAY DIVISION

INTEROFFICE MEMO
FILE: CON

TO: H. S. Coulter
State Highway Engineer

FROM: Robert N. Bothman
Assistant State Highway Engineer

DATE: August 1, 1984

SUBJECT: Contract Claim
S.W. 89th Ave. - Pacific Hwy.
Contract No. 9375

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FOR

Info	Inves	R/D	D/R	Sign	Act	File

The Claims Review Board has reviewed the claim on the S.W. 89th Ave. - Pacific Hwy. project submitted by Cascade Construction Company on behalf of their subcontractor, Dirt & Aggregate Interchange, Inc. The claim requests additional compensation in the amount of $36,695.08 under Bid Item 12 - "Embankment in Place" because of a defect in the contract plans which resulted in a significant reduction in embankment quantities and an increase in the excavation quantities.

Following is a list of those attending the meeting:

Robert Bothman, Chairman	Claims Review Board
Robert Schroeder	Claims Review Board
Bruce Boyd	Claims Review Board
Steve Macnab, Secretary	Claims Review Board
Jack Sollis, Legal Counsel	Justice Department
George Morton	Cascade Construction Co.
Joe Yazbeck, Attorney	Allen & Yazbeck
Henry Pelfrey	Dirt & Aggregate Interchange, Inc.
Richard Pelfrey	Dirt & Aggregate Interchange, Inc.
Allan Harwood	OSHD, Metro Region
Jim Cochell	OSHD, Metro Region
Walter Bartell	OSHD, Metro Region

FINDINGS

The contract required general earthwork on the project to be measured and paid for on an embankment measure basis. Bid Item No. 12 - "Embankment in Place", which was provided for this purpose, indicates a contract bid quantity of 16,420 cubic yards. The contract plans show 12,800 cubic yards of roadway excavation on the project indicating that the contractor was to provide the additional material to complete the required work.

Final earthwork quantities show that the amount excavated within the project limits exceeded the amount of embankment placed. Approximately 10,000 cubic yard was measured under "Embankment in Place" and 13,600 cubic yard of excavation was measured, resulting in approximately 3,600 cubic yards to be disposed of by the contractor.

Following preparation of the preliminary plans, a grade change was made. The grade line for the bidding plans was lowered thus reducing the amount of embankment required, however, earthwork quantities on the bidding plans were not changed. The contractor bid the project based on quantities for the higher gradeline. The error in the quantities was not discovered by the State until after onsite work had been completed and final quantities calculated.

Earthwork by Dirt and Aggregate Interchange was substantially completed in calendar 1982, including the disposal of excess material. No notice of claim was made by them when they hauled the excess material from the project. We paid for 13,460 cubic yards of Embankment in Place at $3.95 per cubic yard (80 percent of quantities indicated on the plans). On May 19, 1983 our pay estimate No. 16 reduced the Embankment in Place quantity from 13,460 cubic yards to 9,669 cubic yards thus requiring a reduction in this payment.

At this time, Dirt & Aggregate Interchange, Inc. requested information from the State, through Cascade Construction, to determine the reason for the reduction in quantity. They thought the reduction was due to a survey error in measuring quantities. They also requested copies of our field notes. After several attempts to obtain this information, in February 1984 they were given a breakdown of the actual amounts of excavation on the project. On March 1, 1984 they submitted the claim.

The State has denied their claim for two reasons: (1) failure to give notice of claim as required under subsection 109.05 of the standard specifications, and (2) our inability to establish the amount claimed through a measure of the quantity of work performed.

CONCLUSIONS

The Board concludes that the bidding plans misrepresented to the bidders, the approximate quantities of earthwork on the project and established an improper method of payment for the work actually performed. In addition, the State failed to detect this error and notify the contractor in sufficient time to correct it by price agreement prior to commencement of the work.

Failure on the part of the contractor or his subcontractor to notify the State of a claim on this item, was due in part to the State's failure to detect the error during progress of the work. Therefore, the responsibility for his failure to give notice must be shared by State.

The subcontractor cannot be obsolved of all responsibility, since disposal of material was not within the character of the work which he bid. Prior to his removal of material from the project, he should have notified the State of his intent to do so and requested payment for that removal. His failure did prevent the State from making accurate measurement of the quantity of excess material on the project.

Lack of actual cost data and actual disposal quantities prevents the Board from establishing a settlement amount based on documented evidence. However, the Board concludes that Dirt and Aggregate bid the project in good faith expecting the final pay quantities to be reasonably close to the quantities indicated in the Bid Schedule. This unit price of $3.95 for "Embankment in Place" was a reasonable and fair bid for the quantities involved. However, had the quantities been more correctly shown on the bidding plans as 10,000 cubic yards, a higher unit cost would have resulted. The higher unit price would have included the disposal of excess material.

DECISION

It is the decision of the Claims Review Board that the contract unit price for "Embankment in Place" be increased from $3.95/cubic yard to $6.40/cubic yard. This amount was determined by taking Dirt and Aggregate Interchange's quote of $63,640.50 for 16,420 cubic yards and dividing it by the actual amount of embankment placed on the project (9,997 cubic yards). This will establish an equitable unit price for the work completed including the cost of handling and disposing of the excess material.

The amount due the contractor is based on this new unit price less any amount already paid to him. In addition, interest should be paid in accordance with ORS 279.575 beginning April 1, 1984.

$6.40 x 9,997 cubic yards =	$ 63,980.80
less $3.95 x 9,997 cubic yards =	39,488.15
Difference =	$ 24,492.65
4 mo. @ 1 1/2% per month =	$ 1,469.56
TOTAL CLAIM SETTLEMENT AMOUNT =	$ 25,962.21

Based on the Board's findings, conclusions, and decision on this claim, I have prepared a reply to Cascade Construction Company for your consideration.

Attachment

cc J. B. Boyd
R. L. Schroeder
J. L. Sollis
S. H. Macnab

SHM:lks

9373

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OREGON DIVISION
The Equitable Center, Suite 100
530 Center Street NE
Salem, OR 97301

July 31, 1984
IN REPLY REFER TO
HFO.6-OR

Mr. H. S. Coulter
State Highway Engineer
102 Transportation Building
Salem, Oregon 97310

Dear Mr. Coulter:

Oregon Project M-9282(2)
SW 89th Avenue - I-5 Section
SE Nyberg Road
Washington County

By letter of July 5, 1984 Mr. Potter has requested an increase in PE authorization for this project. According to our records the construction contract was awarded in September 1981, at which time the PE effort should have been complete.

We are concerned about the timing of charges against this project and the apparent time lag in accounting. A more detailed explanation of the circumstances would help us evaluate your request. We will detain action pending further information.

Sincerely your,

G.K. Hossna
for Dale E. Wilken
Division Administrator

cc:
OSHD (G Potter)
OSHD (F Terpin)

NOTED
ROBERT N. BOTHMAN

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VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:

April 20, 1984

1 Verstoeg
Anderson
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2 Macnab
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Cascade Construction Company
P. O. Box 4267
Portland, OR 97229

Re: SW 89th-Pacific Highway
Contract No. 9375

On April 17, 1984, we met with you and your subcontractor, Dirt and Aggregate Interchange, and reviewed your subcontractor's claim for additional compensation for earthwork performed on this project. This letter will memorialize the significant elements of our discussion and review.

The contract was bid and awarded with the provision that the general earthwork required on the project would be measured and paid for under the bid item "Embankment in Place". The contract bid item quantities indicated 16,420 cubic yards of "Embankment in Place". The contract plans indicated approximately 12,800 cubic yards of roadway excavation to be anticipated on the project. This would indicate that some additional material would have to be provided by the contractor in order to complete the estimated "Embankment in Place". The final earthwork quantities on this project show approximately 10,000 cubic yards of "Embankment in Place" and approximately 13,600 cubic yards of excavation on the project.

This contract was awarded on September 29, 1981 and all on site construction work was completed on January 22, 1983. Subsequently, your subcontractor submitted a claim for additional compensation due to the underrun in "Embankment in Place" quantities and the overrun in excavation quantities. The claimed amount of additional compensation is $36,695.08. Your subcontractor states that he derived this amount "by totalling our cost on this item, $75,684.10, and subtracting from that the amount already paid, $38,998.03".

The claimed "total cost" of $75,684.10 appears to have been derived through the application of arithmetic, utilizing certain excavation, embankment, hauling, and finishing costs purportedly estimated during the bidding process. It also includes a cost for disposing of some 4,700 cubic yards of excess material.

The State has no data to determine or verify any of the costs claimed and does not agree with the method used to determine the claimed amount. Notice of this claim, as required by Section 109.05 of the contract Standard Specifications, was not given until several months after the work

Form 734-3122

was completed. This lack of proper notice has denied the State the ability to keep records of work and costs and/or to mitigate any damages.

This claim is therefore denied due to the dollar amount claimed not being valid and due to the failure to provide notice of this claim in accordance with Section 109.05 of the contract Standard Specifications.

You disagreed with this finding and have requested a meeting with the Claims Review Board for further administrative review. A meeting has been scheduled with the Claims Review Board at 10:00 a.m. Monday, May 14, 1984, in Room 334 of the Transportation Building in Salem.

C. O. Fredrickson, P.E., P.L.S.
Construction Engineer

By O. B. Jackmond
O. B. Jackmond, P.E., P.L.S.
Contract Administration Engineer

OBJ:mk

cc: Al Harwood
Walt Bartel (Jim Cochell)

bc: Steve Macnab/attach.
Jack Sollis/attach.

April 9, 1984

Cascade Construction Co., Inc.
P. O. Box 4267
Portland, OR 97208

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Re: SW 89th - Pacific Highway
Contract No. 9375

We have your letter of April 2 requesting a Claim Review Board meeting on behalf of your subcontractor, Dirt and Aggregate Interchange, Inc.

The Construction Section has not had the opportunity to review and discuss this claim with you and your subcontractor. This would be the next step in the Division's internal claim review process.

We therefore invite you and your subcontractor to meet with us in the Construction Office at 10:00 a.m. on April 18, 1984 to discuss this matter. If the issue remains unresolved following this meeting, a meeting with the Claim Review Board will be arranged upon your request.

Sincerely,

C. O. Fredrickson, P.E., P.L.S.
Construction Engineer

By

O. B. Jackmond, P.E., P.L.S.
Contract Administration Engineer

OBJ:mk

cc: Al Harwood
Walt Bartell (Jim Cochell)

OB/L06

Rec'd APR 2 1984 George R. Morton

DIRT & AGGREGATE INTERCHANGE, INC.

GENERAL CONTRACTORS
20905 N.E. SANDY BLVD., • TROUTDALE, OREGON 97060
(503) 661-5093

March 28, 1984

George R. Morton
Vice President, Engineering
Cascade Construction Co., Inc.
General Contractors
P.O. Box 4267
Portland, Oregon 97208

Re: Southwest 89th - Pacific Highway OSHD 9375

Dear George:

We were extremely disconcerted to learn of the position that the State is taking on bid item 12. They have apparently made a complete reversal of their previous position.

A brief history of this problem may help to clarify our position. We bid this job to perform 16,420 cubic yards of embankment at $3.90 a cubic yard for item 12. This totalled $64,038.00. This item was labeled embankment. However, as is customary, it included all the excavation in the roadway together with the embankment and other incidental work. The major features of the work were excavation, haul and embankment. We have actually performed more work than was originally called for in the 16,420 cubic yards of embankment. The reason for this is that the State lowered the elevation of the road grade but failed to change the quantities of embankment and failed to show any changes in the quantity of excavation on the mass diagram profiles contained in the drawings. The net result of lowering the roadway was that we performed substantially more excavation and substantially less embankment. The result of this was that our cost went up and our revenue went down. Our revenue decreased because we were only being paid for the embankment. The State has only partially paid for the work performed.

We have sent you our claim in the amount of $36,695.08 with our letter of March 1, 1984. We derived this amount by totalling our cost on this item, $75,684.10 and subtracting from that the amount already paid, $38,988.03. We are also claiming for interest at 18% pursuant to the statute. We believe we are entitled to interest from 30 days past pay estimate No. 16. We would have presented this claim much earlier had the State cooperated with us and given us the quantities. They were the only ones surveying out there and they had a duty to give us the quantities when we asked for them. We enclose another copy of the 1 March letter with the breakout of the claim.

To review the contractual matters, on pay estimate No. 16, dated approximately May 19, 1983, the State reduced the embankment item, item 12, from 13,460 cubic yards to 9,669 cubic yards. This item was adjusted again on pay estimate 18, dated approximately February 14, 1984, up to 9,997 cubic yards. After the original reductions were made on pay estimate No. 16, we began to inquire as to the State's reasoning. Your letters of June 15, 1983 and September 20, 1983, show your effort to get the State to cooperate with us and tell us exactly what the quantities were. In an attempt to keep things moving, our construction engineer, Matthew Warrington, wrote his letter of November 11, 1983 to you. We assume that you passed that on to the State.

After a considerable amount of time and insistent requests on our part, the State finally provided us, in February of 1984, with their breakdowns of the actual amount of excavation performed on the project that was incidental to the embankment. From that information, we were able to piece together what happened.

The State has now taken the incredulous position that they don't need to pay us anything because we did not give them adequate notice.

We request that you request an immediate Claims Review Board hearing on this matter. If the State is either not willing to give us a Claims Review Board hearing, or if the Claims Review Board hearing is unfavorable, we will simply resort to whatever legal action is necessary. We are extremely upset over the State's unreasonable and unconscionable position. We are absolutely certain of our position and we see no reason to delay legal action if that is what is going to be necessary. Please give the State 15 days to respond and if they do not respond, we will take whatever action is appropriate.

Very truly yours,

Henry H. Pelfrey

Henry H. Pelfrey
President

RP:as

Enclosure

cc: Joseph A. Yazbeck, Jr., Counsel

DIRT & AGGREGATE INTERCHANGE, INC.

GENERAL CONTRACTORS
20905 N.E. SANDY BLVD., • TROUTDALE, OREGON 97060
(503) 661-5093

March 1, 1984

CASCADE CONSTRUCTION COMPANY
P. O. Box 4267
Portland, Oregon 97208

ATTENTION: George Morton

RE: S. W. 89th Avenue - Pacific Highway
Tualatin (FAU 9282)
O. S. H. D. Number 9375

Gentlemen:

Enclosed herewith for your review is our breakdown of Bid Item No. 12, Embankment, as it was originally bid and the breakdown of the actual work performed for Bid Item No. 12 utilizing the same unit prices.

Please set up a meeting with Al Harwood, Marion Craft, Jim Cochell, yourself and ourselves to resolve this matter.

Very truly yours,

DIRT & AGGREGATE INTERCHANGE, INC.

Richard H Pelfrey

Richard H. Pelfrey
Contract Administrator

RHP/glp

Enclosure

cc: w/Enclosure
Al Harwood
Marion Craft
Jim Cochell

We are a minority owned business enterprise.

Send copy to [illegible]

STATE OF OREGON **INTEROFFICE MEMO**

RECEIVED
FEB 17 1984
CONSTRUCTION SECTION
CE 1 CAS ✓ JOS OCS SCC SSO 2 KM
OL LS TC FE CP
OM MRE PPM CE
TOS ME
US PDM
CSA Metro Region TAM
CO PA FM LM

TO: MEMO TO THE FILE

DATE: February 15, 1984

FROM: Marion Craft
MARION CRAFT
Metro Region Construction Engineer

SUBJECT: SW 89th AVE.-PACIFIC HWY. (TUALATIN)
SW Nyberg Road
Contract No. 9375

On February 14, 1984, a meeting was held in the Region small conference room with Al Harwood, Jim Cochell, Richard Pelfry, Henry Pelfry, George Morton, and myself. The meeting was called to discuss the claim by Dirt and Aggregate concerning removal of a 100 foot diameter concrete footing, which had been discussed before, and a new claim from Dirt and Aggregate concerning embankment and excavation quantities.

At a previous meeting (see my memo dated July 21, 1983), we had discussed the removal of the concrete footing. We agreed we owed the contractor something and at the conclusion of the July 21 meeting, Jim Cochell and Dirt and Aggregate were to review their records for appropriate hours spent on the removal of the footing, and Al Harwood was going to check with the Construction Section on appropriate hourly rates for equipment. This was done and an approximate amount for a settlement is shown on Dirt and Aggregate's January 27, 1984 letter. Jim Cochell still has some minor differences (about $500 less), and will proceed with a price agreement to take care of this claim.

The embankment-excavation problem was discussed at some length. Using approximate numbers, the plans indicate an embankment of 16,200 cubic yards, with an excavation on the job of about 12,800 cubic yards, and the rest to be supplied by the contractor. About 10,000 cubic yards of embankment were placed and paid for, with about 3,600 yards disposed of by the contractor. We agreed this was a significant change in the plans and the contract, and, as a start, we owed the contractor for the disposal of the 3600 yards of material. Also, if any fixed costs, mobilization, etc., could be shown attributable to the embankment bid item, we would consider at least a part of those costs.

Jim Cochell made a tentative proposal for us and the contractor to consider, as follows:

load	3600 yards	@ $1.00	=	$ 3,600.
disposal	3600 yards	@ $0.50	=	1,800.
haul	~~8~~ mi. //	@ $0.25/yd. mi.	=	7,200.
		Total		$12,600.

The meeting ended with the understanding that Dirt and Aggregate would reanalyze their position on the disposal of the 3600 yards of material and any costs they could support on the embankment item, due to the item being reduced by about 36%.

125-1387

MC/gw cc Jim Cochell

ORIGINAL

SW 89TH AVE ~ PACIFIC HWY

BID ITEM NO 12 SUMMARY

EMBANKMENT IN PLACE 16,420 C.Y.

WORK ITEMS INVOLVED:

1) SUBGRADE PREPARATION

STREET AREA	32,500 S.Y.	@ 0^{45}/S.Y.	14,625
CONC. SIDEWALK	5,400 S.Y.	@ 0^{45}/S.Y.	2,43
CONC. DRIVEWAY	60 S.Y.	@ 0^{45}/S.Y.	2
A.C.P. SIDEWALK	240 S.Y.	@ 0^{45}/S.Y.	108
CONC. CURB	13,050 S.Y.	@ 0^{05}/L.F.	652
A.C.P. APPROACHES	8 EA	@ 150^{00}/EA	1,20
CONTOUR SEEDING AREA	14,520 S.Y.	@ 0^{10}/S.Y.	1,452
		TOTAL =	$ $20{,}494^{50}$

2) EMBANKMENT

PLACING	16,420 C.Y.	@ 0^{50}/C.Y.	$8{,}210^{00}$
COMPACTING	16,420 C.Y.	@ 0^{30}/C.Y.	$4{,}926^{00}$
		TOTAL =	$ 13,136

3) EXCAVATION

EXCAVATE	12,729 C.Y.	@ 1^{00}/C.Y.	$12{,}729^{00}$
HAUL	12,729 C.Y.	@ 1^{00}/C.Y.	$12{,}729^{00}$
		TOTAL =	$ $25{,}458^{00}$

4) IMPORT

EMB. - EXC. - DITCH EXC. = IMPORT

16,420 C.Y. - 12,729 C.Y. - 1415 C.Y. = 2276 C.Y.

EXCAVATE	2,276 C.Y.	@ 1^{00}/C.Y.	$2{,}276^{00}$
HAUL	2,276 C.Y.	@ 1^{00}/C.Y.	$2{,}276^{00}$
		TOTAL =	$4{,}552^{00}$

GRAND TOTAL = $ $63{,}640^{50}$

WORK ITEMS INVOLVED:

) SUBGRADE PREPARATION

STREET AREA	32,500 S.Y.	@ $0^{\underline{45}}$/S.Y.	14,625
CONC. SIDEWALK	5,400 S.Y.	@ $0^{\underline{45}}$/S.Y.	2,43
CONC. DRIVEWAY	60 S.Y.	@ $0^{\underline{45}}$/S.Y.	2
A.C.P. SIDEWALK	240 S.Y.	@ $0^{\underline{45}}$/S.Y.	108
CONC. CURB	13,050 S.Y.	@ $0^{\underline{05}}$/L.F.	652
A.C.P. APPROACHES	8 EA.	@ $150^{\underline{00}}$/EA.	1,20
CONTOUR : SEEDING AREA	14,520 S.Y.	@ $0^{\underline{10}}$/S.Y.	1,452
		TOTAL =	\$20,494

2) EMBANKMENT

PLACING	16,420 C.Y.	@ $0^{\underline{50}}$/C.Y.	8,210
COMPACTING	16,420 C.Y.	@ $0^{\underline{30}}$/C.Y.	4,926
		TOTAL =	\$13,136

3) EXCAVATION

EXCAVATE	12,729 C.Y.	@ $1^{\underline{00}}$/C.Y.	12,729
HAUL	12,729 C.Y.	@ $1^{\underline{00}}$/C.Y.	12,729
		TOTAL =	\$25,458

4) IMPORT

EMB. – EXC. – DITCH EXC. = IMPORT

16,420 C.Y. – 12,729 C.Y. – 1415 C.Y. = 2276 C.Y.

EXCAVATE	2,276 C.Y.	@ $1^{\underline{00}}$/C.Y.	$2,276^{\underline{00}}$
HAUL	2,276 C.Y.	@ $1^{\underline{00}}$/C.Y.	2,276
		TOTAL =	4,552

GRAND TOTAL = \$ $63,640^{\underline{50}}$

UNIT PRICE:

$63,640^{\underline{50}} \div 16,420$ C.Y. = $3^{\underline{876}}$/C.Y.

USE – $^{\underline{90}}$/C.Y.

ACTUAL WORK PERFORMED FOR BID ITEM#

SUBGRADE PREPARATION

SAME AS ORIGINAL BID $ 20,49

EMBANKMENT

PLACING 9,997 CY @ $0.50 = $ 4,998
COMPACTION 9,997 CY @ $0.30 = 2,999
$ 7,997

EXCAVATION

EXCAVATN 13,600 CY @ $1.00 = $ 13,600
HAUL 13,600 CY @ $1.00 = 13,600
$ 27,200

EXPORT

EXCAVATION + DITCH EXC. − EMBANKMENT = EXP
13,600 CY + 1101 CY − 9,997 CY = 4,70

LOAD 4,704 CY @ $1.00 = $ 4,704
HAUL 4,704 CY @ $2.75 = 12,936
DUMP FEE 4,704 CY @ $0.50 = 2,352
$ 19,992

TOTAL $ 75,684.10

9375 F

DATE: April 5, 1984

TO: Oregon Transportation Commission CON

FROM: H. S. Coulter
State Highway Engineer

SUBJECT: Request for Increase in Project Authorization
SW 89th Ave.-Pacific Hwy. (Tualatin) Section
FAU 9282 (Nyberg Rd.), Washington County
Contract No. 9375

This federal-aid project has been completed and it is now apparent that the final cost will exceed the project authorization by $88,200 or 5.1 percent.

There were a large number of variations from contract quantities on this project, some of them being increases and others decreases from the anticipated amounts. The net result of these offsetting changes is an increase of slightly over $47,000.

Contributing largely toward the overrun of the contract amount was an additional quantity of paving material required at both ends of the project and at the crossing of SW Boones Ferry Road. The extra material was necessary in order to make proper transitions to existing roadways and cost $54,000 more than was anticipated.

Another $24,000 was required to subexcavate undesirable material from the area of a large abandoned sludge tank and to backfill the area with granular material for stability.

The cost of construction engineering exceeded the amount set up for that purpose in the project authorization. This was due to the necessity for additional inspection on the additional quantities of various materials and work, and the administration of a relatively large number of change orders.

There are sufficient funds available in the category of work and all the increase is eligible for federal participation.

I recommend that the authorization be increased by $88,200 to a new total of $1,823,714.85. This matter will be on the consent calendar for the April 16 meeting.

HHP:mk sl

bc Fred D. Miller
R. W. Gormsen
C. O. Fredrickson

V. E. Skoog
E. L. Hardt
George Bell

STATE OF OREGON **INTEROFFICE MEMO**

Highway Construction 378-6318 FILE: CON 5

TO: W. E. Schwartz
Ass't. State Highway Engineer

DATE: March 30, 1984

FROM: O. B. Jackmond
O. B. Jackmond, P.E., P.L.S.
Contract Administration Engineer

SUBJECT: Request for Increase in Project Authorization
SW 89th Ave.-Pacific Hwy. (Tualatin) Section
FAU 9282 (Nyberg Rd.), Washington County
Contract No. 9375

This federal aid project has been completed and it is now apparent that the final cost will exceed the project authorization by $88,200.00 or 5.1 percent.

There was a large number of variations from contract quantities on this project, some of them being increases and others decreases from the anticipated amounts. The net result of these offsetting changes is an increase of slightly over $47,000.

Contributing largely toward the overrun of the contract amount was an additional quantity of paving material required at both ends of the project and at the crossing of SW Boones Ferry Road. The extra material was necessary in order to make proper transitions to existing roadways and cost $54,000 more than was anticipated.

Another $24,000 was required to subexcavate undesirable material from the area of a large abandoned sludge tank and to backfill the area with granular material for stability.

The cost of construction engineering exceeded the amount set up for that purpose in the project authorization. This was due to the necessity for additional inspection on the additional quantities of various materials and work, and the administration of a relatively large number of change orders.

There are sufficient funds available in the category of work and all the increase is eligible for federal participation.

Attached is a rough draft letter to the Transportation Commission requesting an increase of $88,200. Also attached is a copy of the Expected Overrun of Project Authorization form.

OBJ:HHP:mk

Attach.

cc: E. L. Hardt
J. W. Cochell
R. D. Church
W. F. Cobine

NOTED
W. E. SCHWARTZ

RECEIVED
STATE HWY ENGR
APR 4 '84
REFER TO
FOR

Info	Invest	R/D	D/R	Sign	Act	File

81-125-1387

9375 F

rll

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. IX-9282(4)

2. STATE PROJECT NO. See Below

2A. COUNTY NAME Washington

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division
2-24-84

4. PROGRAM NO.

5. ITEM NO. 80112

6. TO

Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 12/19/83	8. FEDERAL ROUTE NUMBER FAU 9282	9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION:

SW 89th Avenue - Pacific Highway (Tualatin)

11. GENERAL DESCRIPTION OF WORK

Relocate left turn signal head and left turn illuminated sign

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☒ XX CONSTRUCTION PROCEED ON XXXXXXXXXXXXXXXX FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

Contingent upon modification of Project Agreement if additional funds are required, I approve the advance authorization date of 12/19/83 as requested in Mr. Fredrickson's letter of 2/16/84 as being cost effective for the use of State forces to proceed with the above work. State Force Order No. 10 is approved for a TEC of $1,000 Federal Funds $850.

RECEIVED
STATE HWY ENGR
MAR 5 '84
REFER TO Potter
FOR
Info Invest R/D D/R Sign Act File

Orig. to
3/5

14. DATE 2/24/84	15. SIGNATURE OF APPROVING OFFICIAL G. K.	16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9375

OREGON STATE HIGHWAY DIVISION

FIELD ENGINEER'S WEEKLY REPORT

FOR CONSTRUCTION PROJECTS ONLY
CONSTRUCTION AND BRIDGE SECTION

SECTION: S.W. 89th Ave.-Pacific Hwy. (Tualatin)
WEEK ENDING: 10-1-83
SECTION PREFIX: 234-1063
HIGHWAY: Nyberg Rd. FAU 9282
COUNTY: Washington
NAME OF JOB: S.W. 89th Ave.-Pacific Hwy.
KIND OF WORK: Grading, Paving, Signals and Landscaping
CONTRACTOR: Cascade Construction Company
CONTRACT NUMBER: 9375
FEDERAL AID PROJECT NUMBER: IX-9282
DATE OF CONTRACT: Sept. 29, 1981
DATE WORK STARTED: 11-4-81
ESTIMATED COMPLETION DATE:
AVERAGE FORCE ON PROJECT FOR THE WEEK
MEN: SUPERVISION:
SPECIFIED WORK DAYS:
WORK DAYS USED:
SPECIFIED CALENDAR DAYS: 400
CALENDAR DAYS USED: 467
SPECIFIED COMPLETION DATE:
PERCENT OF TIME ELAPSED: 117
PROJECT AUTHORIZATION: $ 1,735,514.85
EXCLUSIVE OF ENGINEERING: $ 1,829,000.00
ENGINEERING AUTHORIZATION: $ 123,414.39
PERCENT OF CONTRACT COMPLETED BASED ON ESTIMATED COST: 97
ESTIMATED COST OF COMPLETED PROJECT, EXCLUSIVE OF ENGINEERING: $ 1,648,549.08
ENGINEERING COST TO DATE: $ 202,761.31
PERCENT OF CONTRACT COMPLETED BASED ON TOTAL AUTHORIZATION: 100
ESTIMATED PERCENT OVERRUN UNDERRUN: 4.9 %
PERCENT OF AUTHORIZATION: 164.3 %
DATE PROJECT WAS COMPLETED: 1-22-83

ESTIMATED PERCENT COMPLETE (ROADWORK)

CLEARING	DRAINAGE	GRADING	BASE	OIL AND/OR PAVE.	MAT'L PROD	STRUCTURE	SIGNAL
100	100	100	100			100	100

	GRADING	Lime Tr. Base SURFACING	C.T.B.	OIL & BITUMINOUS MACADAM	PAVING
MILES IN PROJECT	0.83	0.83	0.83		0.83
MILES PARTIALLY COMPLETED					
MILES COMPLETED					
TOTAL ESTIMATED QUANTITIES (CONTRACT)	16,420	32,500	13,000		8,000
TOTAL QUANTITIES CORRECTED TO DATE	16,420	32,500	14,625		10,743
ESTIMATED QUANTITIES MOVED OR PLACED TO DATE	16,256	32,500	14,625		10,743
AVERAGE DAILY QUANTITIES					
AVERAGE DAILY QUANTITIES NECESSARY TO COMPLETE PROJECT ON TIME					
NUMBER OF SHIFTS PER DAY					
HOURS PER SHIFT					

EQUIPMENT USED DURING THE WEEK:

ESTIMATED PERCENT COMPLETE (STRUCTURES)

BRIDGE NO.								
PERCENT								

	WEATHER	WORK DAYS CHARGED	HOURS DELAY	CAUSE OF DELAY
SUNDAY		0		
MONDAY		0		
TUESDAY		0		
WEDNESDAY		0		
THURSDAY		0		
FRIDAY		0		
SATURDAY		0		

K

RECEIVED
OCT 5 1983
CONSTRUCTION SECTION

CE
CAE
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CA
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TC
FE
CP

GENERAL DESCRIPTION OF ACTIVITIES FOR THE WEEK

SUNDAY	
MONDAY	
TUESDAY	
WEDNESDAY	
THURSDAY	
FRIDAY	
SATURDAY	

REMARKS

Project was completed on January 22, 1983 - Semi-Final report is being worked on. Work still remaining on P.A. #6 & 7.

SIGNED ______ LOCATION Sylvan

PRIME RESIDENT SUBMIT 2 COPIES WHEN BRIDGES AND GRADING BOTH ARE INVOLVED, SUBMIT 3 COPIES

Tualatin City

ROAD DESIGN SECTION 378-6558

September 23, 1983

E. L. Hardt
Region 1 Engineer, PORTLAND

W. H. Wakerlig
Right of Way Descriptions Supervisor

S.W. 89th Ave.-Pacific Hwy. (Tualatin)
S.W. Nyberg Road
Washington County

RECEIVED
SEP 27 1983
ROAD DESIGN SECTION
Do Not File ☐
Return To
Bring Up
Action

We are forwarding herewith a reproducible map (9B-17-15) covering the subject survey for your verification, narrative, professional seal, signature and submittal to the county per ORS 209.250.

The narrative shall explain the purpose of the survey, the basis on which lines were established and which found monuments and deed elements controlled the lines established or reestablished.

If, the narrative is a separate document, the narrative and the map should be referenced to each other and the narrative should contain additional information as follows:

1. Location of survey by ¼ Section, Donation Land Claim, Township and Range.
2. Date of Survey.
3. Surveyor's Seal.
4. Surveyor's business name and address.

By:

Arthur L. Dean
Sr. Designer Draftsman

ALD:rlr
Attachment

rll 9375

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. IX-9282(4)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Washington

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division
8-30-83

4. PROGRAM NO.

5. ITEM NO. 80112

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 7/25/83

8. FEDERAL ROUTE NUMBER FAU 9282

9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION: SW 89th Avenue - Pacific Highway (Tualatin)

11. GENERAL DESCRIPTION OF WORK: Furnish and install weather proof circuit breaker

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED [illegible] FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

Contingent upon modification of Project Agreement if additional funds are required, I approve the advance authorization date of 7/25/83 as requested in Mr. Keasey's letter of 8/23/83 as being cost effective for the use of State Forces to proceed with the above work. State Force Order No. 9 is approved for a TEC of $600 Federal Funds $510

RECEIVED
STATE HWY ENGR
SEP 2 '83
REFER TO Potter
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Orig to 9/2

14. DATE 8/30/83

15. SIGNATURE OF APPROVING OFFICIAL Walach

16. TITLE Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9375 8-2-83 234-2529

(ORIGINAL)

FORM APPROVED BY
COMPTROLLER GENERAL,
U.S. MAY 12, 1966

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

VOUCHER FOR WORK PERFORMED UNDER PROVISIONS OF THE FEDERAL AID AND FEDERAL HIGHWAY ACTS, AS AMENDED

STATE VOUCHER NO.

FHWA VOUCHER NO.

FHWA SCHEDULE NO.

APPROPRIATION

THE UNITED STATES, DR., TO *(Insert official or depositary named in project agreement)*
Treasurer of the State of Oregon

ADDRESS
Capitol Bldg.
Salem, OR 97310

PAID BY
(For use of Paying Office)

STATE
Oregon

VOUCHER TYPE *(Check Appropriate Block)*
☐ CURRENT BILLING
☐ OTHER PROGRESS
☒ FINAL VOUCHER (*)

VOUCHER PERIOD
FROM 3/16/81
TO 3/31/83

FEDERAL AID PROJECT NO.
IX9282 (3)

(*) Use Form FHWA-1447 for Final Voucher for a project constructed under certification acceptance or secondary road procedures (23 U.S.C. 117).

	TOTAL ACTUAL COST	TOTAL PARTICIPATING COST	PRO-RATA OF PARTICIPATING COST CLAIMED FROM U.S.	TOTAL AMOUNT CLAIMED FROM U.S.	LESS PREVIOUS PAYMENTS	NET AMOUNT CLAIMED
823	$234,406.88	$232,403.03	85%	$197,542.58	$197,542.58	$ 0.00
772	155,000.00	155,000.00	85%	131,750.00	131,750.00	0.00
	$389,406.88	$387,403.03	85%	$329,292.58	$329,292.58	$ 0.00

I certify that the costs shown in this voucher have been incurred in accordance with terms of project agreements; applicable State and Federal laws or regulations; and that no claim has previously been submitted for costs claimed.

STATE HIGHWAY AGENCY
Oregon

DATE
8/2/83

SIGNATURE OF AUTHORIZED OFFICIAL
Controller

I certify that supporting records for costs claimed, and the referenced project (if applicable), have been subjected to required reviews, approvals and inspections by the Federal Highway Administration and that the amount approved is justly due.

AMOUNT SUBMITTED
$ 0.00

ADJUSTMENTS

AMOUNT APPROVED

SIGNATURE OF FHWA REPRESENTATIVE
(SIGN ORIGINAL ONLY)

DATE APPROVED

FORM PR-20
(Rev. 5-78)

PREVIOUS EDITIONS ARE OBSOLETE

STATEMENT OF COSTS INCURRED UNDER PROJECT AGREEMENT

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT	NOTATIONS (Payee must not use this column)
	S.W. 89th Ave.-Pacific Hwy. (Tualatin) Washington County					
	Type Code ROWA					
	Right of Way (Sta. 53+00 To Sta. 92+00)	All	Required		$364,350.00	
	Total Right of Way				$364,350.00	
	Acquisition Expense					
	State	All	Required		23,053.03	
					$387,403.03	
	Nonparticipating Items					
	Acquisition	All	Required		2,003.85	
	Total Cost				$389,406.88	
	Participating costs are for ROWA actually incorporated in the final project and all costs have been previously certified by the Right of Way Engineer.					
	Revised ROWA plans were approved 5/25/83.					
	Prepared based on Participating costs as shown on Federal Billing as of 6/30/83.					
	AMOUNT CARRIED FORWARD					

	234	2527	298	00	N	9		.13CR	1,092.22
	234	2527	407	00	P	1			650.15
	234	2527	412	00	P	1			127.56
	234	2527	414	00	P	1			385.26
	234	2527	930	00	P	1			202.31
			TOT		P1				1,365.28
			** JOB TOTALS **				**	**	1,365.28 **
89TH-I-5(TUALATIN)	CONT NO		* FA PROJ NOS XI 9282003 100 X10 9282003						STATE
	234	2529	295	00	N	9	Tr. City		14,100.00
	234	2529	296	00	N	9	" St. 270.58CR	270.58CR	343,392.58CR
	234	2529	298	00	N	9	" Fed 270.58	270.58	329,292.58 ✓
	234	2529	401	00	P	1	NET Lost of Land		207,675.00 ✓
	234	2529	401	00	P	2	" " "		155,000.00 ✓
	234	2529	403	00	P	1	Value of Bldgs & Equip.		1,675.00 ✓
	234	2529	407	00	P	1	Appraisals, wit. Fees, Etc		9,295.07 ✓
	234	2529	407	00	N	1			2,000.00 ✓
	234	2529	412	00	P	1	Title Cost & Record Fees		2,409.94 ✓
	234	2529	413	00	P	1	Taxes		837.42 ✓

ACCOUNT SUMMARY - EXPENDITURES & LEDGERS

AUGUST 1983

PAGE 1094

DESCRIPTION		PREFIX	FUNCTION	SUB	F.	GR	CURRENT MONTH	FISCAL YEAR TO DATE	GRAND TOTAL TO DATE
	234	2529	413	00	N	1	Taxes		3.85 ✓
	234	2529	414	00	P	1	Negotiation Exp.		6,721.20 ✓
	234	2529	415	00	P	1	Reloc. Comp.		42.04 ✓
	234	2529	426	00	P	1	Legal		180.21 ✓
	234	2529	430	00	P	1	Appr. Rev.		487.60 ✓
	234	2529	913	00	P	1	R/W Liais. & Reloc. Plan		76.49 ✓
	234	2529	920	00	P	1	Prog. Sec.		14.94 ✓
	234	2529	930	00	P	1	R/W office Exp	5.13	2,555.00 ✓
	234	2529	950	00	P	1	Training		433.12 ✓
			TOT		P1			5.13	232,403.03
			TOT		P2				155,000.00
			TOT		N1				2,003.85
			** JOB TOTALS **				**	5.13 **	389,406.88 **
SUNSET HWY-LEAHY RD	CONT NO		FA PROJ NOS X10 9326009 100						STATE
	234	2537	296	00	N	9	4,429.72CR	4,978.24CR	130,054.67CR
	234	2537	297	00	N	9			10,280.72
	234	2537	298	00	N	9	4,429.72	4,978.24	119,773.95
	234	2537	401	00	P	1			40,470.00
	234	2537	403	00	P	1			1,025.00
	234	2537	404	00	P	1			48,747.00
	234	2537	405	00	P	1			2,953.00
	234	2537	407	00	P	1			11,575.08
	234	2537	409	00	P	1			265.99
	234	2537	412	00	P	1	51.20	67.59	4,737.70
	234	2537	413	00	P	1			175.07
	234	2537	413	00	N	1			22.19CR

OREGON STATE HIGHWAY DEPARTMENT 09/22/83 PAGE 163
FHWA BILLING VOUCHER

BILLING NUMBER 09

PREFIX	GRP FL	FED AID PROJ APPR	AGREEMENT AMOUNT	TOTAL COSTS TO DATE	PARTIC. AMOUNT	% OF PARTIC.	FEDERAL SHARE	AMOUNT PREV. CLAIMED	ADJUSTMENT AND CODE	AMOUNT OF THIS VOUCHER
203-2535	1	SOS -0300-008 APPR-680	8,832.00	10,256.26	10,256.26	85.77	8,796.79	8,796.79		
203-2536	1	X10 -9718-005 APPR-772	148,750.00	103,089.41	103,087.63	85.00	87,624.49	87,624.49		
203-2539	1	HES -9674-004 APPR-141	81,000.00	30,206.30	30,206.30	90.00	27,185.67	27,185.67		
207-2504	1*	OS -0700-001 APPR-627	7,116.58	13,381.52	8,294.38	85.80	7,116.58	7,116.58		
224-2520	1*	OS -2400-001 APPR-627	2,082.04	2,426.62	2,426.62	85.80	2,082.04	2,082.04		
224-2522	1*	M -1830-003 APPR-W32	125,616.46	142,454.59	142,454.59	88.18	125,616.46	125,616.46		
224-2523	1	M -1705-006 APPR-W32	846,240.00	991,615.43	991,531.26	88.15	874,034.81	846,240.00	27,794.81 B	
224-2526	1*	RS -A590-002 APPR-075	27,700.50	31,424.28	31,424.28	88.15	27,700.50	27,700.50		
224-2536	1	X10 -1830-006 APPR-178	93,500.00	4,500.39	4,500.39	85.00	3,825.33	3,825.33		
224-2539	1	M -1720-003 APPR-W32		1,429.48	1,429.48	88.15	1,260.09		1,260.09 A	
225-2505	1*	SOS -2500-002 APPR-680	101.05	279.41	117.77	85.80	101.05	101.05		
230-2513	1*	SOS -3000-002 APPR-680	4,186.23	4,880.76	4,880.76	85.77	4,186.23	4,186.23		
234-2527	1	BROS-3400-007 APPR-117	4,000.00	1,365.28	1,365.28	80.00	1,092.22	1,092.22		
234-2529	1*	XI -9282-003 APPR-823	197,542.58	234,406.88	232,403.03	85.00	197,542.58	197,542.58		
	2*	X10 -9282-003 APPR-772	131,750.00	155,000.00	155,000.00	85.00	131,750.00	131,750.00		
234-2529		PREFIX TOTALS	329,292.58	389,406.88	387,403.03		329,292.58	329,292.58		
234-2537	1	X10 -9326-009 APPR-772	255,000.00	141,469.48	141,085.32	85.00	119,922.52	119,922.52		
236-2515	1*	RRO -000S-037 APPR-685	9,793.87	10,882.74	10,882.08	90.00	9,793.87	9,793.87		
236-2516	1	SOS -3600-001 APPR-680	4,280.00	3,675.13	3,675.13	85.77	3,152.16	3,152.16		
302-2507	1	M -2110-003 APPR-W32	154,700.00	311,765.70	171,568.99	81.80	140,343.43	140,343.43		
302-2508	1*	M -2120-002 APPR-W32	11,928.17	15,727.07	13,527.07	88.18	11,928.17	11,928.17		
303-2528	1	XI -9665-008 APPR-823	24,918.91	32,100.34	31,542.40	85.00	26,811.04	24,918.91	1,892.13 B	
303-2531	1*	X10 -9714-005 APPR-772	21,436.69	25,238.08	25,219.63	85.00	21,436.69	21,436.69		
303-2532	1	X10 -9665-009 APPR-772	55,590.00	76,529.51	66,615.24	85.00	56,622.95	55,590.00	1,032.95 B	
303-2534	1	X10 -9659-009 APPR-772	7,990.00	8,754.13	8,754.13	85.00	7,441.01	7,441.01		
	2	XI -9659-009 APPR-823	12,155.00	14,300.00	14,300.00	85.00	12,155.00	12,155.00		
303-2534		PREFIX TOTALS	20,145.00	23,054.13	23,054.13		19,596.01	19,596.01		

9375

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6-2

Date: July 5, 1984

To: Dale E. Wilken
Division Administrator
Federal Highway Administration

From: Gary A. Potter, Manager
Program Section

ORIGINAL SIGNED BY
GARY A. POTTER

Subject: Program Change
Item No. 80112
Project No. M-9282(2)
S.W. 89th Ave.-I-5 Freeway (Tualatin)
Washington County

I request approval of a minor program change to adjust the estimated preliminary engineering costs to reflect more accurately the scope of work, based on the attached justification letter from Mr. Terpin dated June 24, 1983.

Approval of this request will involve an increase of $61,720.00 in total cost and obligation of $52,970.00 in Federal Funds with revised financing as follows:

	TEC	FF	%
Present	$ 263,120	$ 225,755	85.8
Previous	201,400	172,785	
Difference	$ 61,720	$ 52,970	

WH:me
Attachment

cc:		
	E.L. Hardt	(Metro)
	F.E. Terpin	
	Karen Bunk	(Metro)
	Wayne Schulte	(Metro)
	Gary Zehner	
	Shirley Williams	

Form 734-3122

wks
G D

9375 5-24-83 8

rll

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. IX-9282(4)
2. STATE PROJECT NO. See below
2A. COUNTY NAME Washington

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.
5. ITEM NO. 80112

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 4/14/83
8. FEDERAL ROUTE NUMBER FAU 9282
9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION:
SW 89th Avenue - Pacific Highway (Tualatin) Section

11. GENERAL DESCRIPTION OF WORK
Provide electrical service to irrigation controller

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☒ CONSTRUCTION PROCEED ON ~~[illegible]~~ FORCE ACCOUNT BASIS
☐ OTHER *(Specify)*

13. REMARKS

Contingent upon modification of Project Agreement if additional funds are required, I approve the advance authorization date of 4/14/83 as requested in Mr. Keasey's letter of 5/19/83 as being in the public interest for the use of PGE Forces to proceed with the above work. State Force Order No. 8 representing work to be done by Portland General Electric forces is approved for a TEC of $1,176.34 Federal Funds $1,000.

RECEIVED
STATE HWY ENGR
MAY 27 '83
REFER TO Potter
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Orig to
5/27

14. DATE 5/24/83
15. SIGNATURE OF APPROVING OFFICIAL
16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9375

HIGHWAY DIVISION

REQUEST FOR OUTSIDE BILLING
(OR ADVANCE DEPOSIT TRANSFER)

INVOICE NUMBER

DATE 5/4/83	PURCHASE ORDER NUMBER	☐ PARTIAL ☒ FINAL	PRIOR REQUEST NUMBER	BILLING REQUEST NUMBER CA 1484

CODE

BILL TO:

Tualatin Fire District
8405 Elligsen Road
Tualatin, OR 97062

CREDIT DISTRIBUTION

322	$1,268.85

DESCRIPTION: (Describe the service rendered, location, etc. Refer to agreements, letters and orders by which payer authorized the service.)	TOTAL
Final Settlement on IX-9282(4), S.W. 89th Ave.-Pacific Hwy. (Tualatin)	
Fire Pre-emption System Complete	$ 16,918.09
Less: Federal Funds	<14,380.38>
Less: Advance Deposit	<1,268.85>
Less: State Share of Project (50%)	<1,268.86>
Balance due from Tualatin Fire District	$ -0-

PROGRAM SECTION
MANAGER ________ PROJECT UNIT ________
MAY 18 1983
MAN. ASSIST. ________ PROGRAM UNIT ________
REFER TO ________
FOR ________

TUALFRD 004031

IF YOU HAVE QUESTIONS ON THIS INVOICE, PLEASE CONTACT:
Diane Galida PH: 1-800-452-7813 Ext. 85035 FOR CORRECTNESS OF CHARGES
OR ________ PH: ________ PREPARER OF INVOICE

Advance Deposit Amount	$ 1,268.85
Advance Deposit Previously Transferred to Highway Fund	$ -0-
Balance	$ 1,268.85
Transfer to Highway Fund	$ 1,268.85
Refund Due	$ -0-

AMOUNT DUE $ -0-

SUBMITTED BY
Diane Galida

APPROVED BY

9375

6

April 6, 1983

CON

Cascade Construction Co., Inc.
P. O. Box 4267
Portland, Oregon 97208

Time Extension Request
SW 96th Ave.-Pac. Hwy. (Nyberg Rd.)
Contract No. 9375
FAP No. IX-9282(4)

Your request for 67 calendar days of additional contract time in which to complete the above project has been carefully reviewed. A contract time extension of 67 days is granted due to the State's late delivery of box culvert drawings and due to delays resulting from the telephone line relocation work done by General Telephone.

W. E. Schwartz, P.E.
Assistant State Highway Engineer
for Operations

OBJ:mk st

bc H. S. Coulter
C. T. Keasey
Al Harwood w/att.
Jim Cochell w/att.
FHWA w/att.
Bob Church

STATE OF OREGON **INTEROFFICE MEMO**

TO: BRYANT JACKMOND
Contract Administration Engineer

DATE: March 23, 1983

FROM: Marion Craft
MARION CRAFT
Metro Region Construction Engineer

SUBJECT: SW 89th AVENUE-PACIFIC HIGHWAY
Contract No. 9375

Attached is a time extension request from Cascade Construction Company requesting a 67-day extension, which is the amount of the overrun on the job. Also included is Jim Cochell's letter with some pertinent facts and his recommendation.

The contractor is asking for 67 days due to the holdup in getting shop drawings for the box culvert at Sta. 81+70, beginning at the first of the job. He also lists five other reasons for a possible time extension.

Jim Cochell has recommended 44 days due to the delay in getting detailed drawings for the box culvert to the contractor, and 36 days due to a conflict with General Telephone lines and our storm sewer system. The telephone lines had been installed with information we gave the contractor on preliminary plans. According to Jim, this information (grade lines) was changed in the final plans and made necessary another relocation of General Telephone lines. We paid for the extra move.

I recommend we grant the 67 days, 44 due to the box culvert delay and 23 due to the additional telephone line conflict.

4-1-83

W. E. Schwartz -

I concur with Region and Project Mgr. and recommend a time extension of 67 calendar days.

The box culvert was original contract work and was of a size not appropriately covered by standard drawings. A special drawing had to be made and was sent to the contractor substantially after contract award.

The telephone line relocation was done under Force Order and was FHWA participating.

Jackmond

MC/gw
Attachment
cc Jim Cochell

RECEIVED
MAR 24 1983
CONSTRUCTION SECTION
CE
CAE
FOE
OCS
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OM
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CP

Contains Recycled Material

9375

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

2-1-83

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. IX-9282(4)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Washington

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 80112

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 1/19/83

8. FEDERAL ROUTE NUMBER FAU 9282

9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION:
SW 89th Avenue - Pacific Highway (Tualatin) Section

11. GENERAL DESCRIPTION OF WORK
Credit to project - See below

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* See below

RECEIVED
STATE HWY ENGR
FEB 8 83
REFER TO Swan
FOR

Info	Inves	R/D	D/R	Sign	Act

Orig to 21

13. REMARKS

As requested by Mr. Keasey's letter of 1/24/83, I approve, as a means of documentation, SFO #7 for a credit of $9,305.65 Federal Funds $7,910 for work performed under contract 9375 for McDonalds, Inc.

The above approval action is granted only to expedite final acceptance of project and does not approve of this method of performing work for others under a Federal-aid contract without confirmed advance approval at PS&E which would consider, in addition to the necessity and propriety, the costs of engineering.

14. DATE 2/1/83

15. SIGNATURE OF APPROVING OFFICIAL G. K. Hassner

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9375 11-10-82

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. IX-9282(4)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Washington

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 80112

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 11/10/82

8. FEDERAL ROUTE NUMBER FAU 9282

9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION: SW 89th Ave. - Pacific Highway (Tualatin) Section

11. GENERAL DESCRIPTION OF WORK Utility adjustment

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

- ☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
- ☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
- ☐ ACQUISITION OF RIGHT-OF-WAY
- ☐ CONSTRUCTION — ADVERTISE FOR RECEIPT OF BIDS
- ☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
- XX OTHER *(Specify)* Utility Adjustment

13. REMARKS

As requested in Mr. Swan's letter of 10/29/82 with appropriate documentation, and based on the fact that FHWA and ODOT have long advocated a policy of having a utility adjust their facilities in advance of the construction project, and in order to maintain this policy without hardship or unjust costs to the utility, I concur that it is in the public interest to reimburse the General Telephone Company for the cost of a portion of their second relocation of buried telephone line caused by design changes after their initial move requested by ODOT. Your are authorized to reimburse General Telephone Company a lump sum amount of $3,885 Federal Funds $3,302.

RECEIVED
STATE HWY ENGR
NOV 17 '82
REFER TO Mockrery
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Orig to 11/17

14. DATE 11/10/82

15. SIGNATURE OF APPROVING OFFICIAL G. K. Hossner

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9375

L.

October 29, 1982

TO: D. E. Wilken, Division Administrator
Federal Highway Administration

FROM: D. E. Swan D E Swan
Program Control Engineer

SUBJECT: Second Relocation of Buried Telephone Facilities
General Telephone Company
S.W. 89th Ave.-Pacific Hwy. (Tualatin) Section
FAU 9282 (S.W. Nyberg Road)
Washington County
Project No. IX-9282(4)

General Telephone Company (GTE) was sent preliminary plans for the subject project on January 16, 1981 and advised by the City of Tualatin of the conflict between their buried telephone facilities and the proposed construction.

GTE, utilizing the grades shown on the preliminary plans, started their relocation work on July 6, 1981 and completed it on August 7, 1981. A grade change lowering the grade was made on August 4, 1981. The grade change necessitated the lowering of outlet pipes from inlets at Stations 79 and 80. The lowering of the pipes caused a conflict with GTE's relocated buried conduits requiring a second relocation. The grade change was incorporated into the construction plans sent to GTE on September 4, 1981. Supporting data is attached.

GTE responded to the City's request by proceeding with the relocation of their facilities to a grade that would accommodate the highway construction shown on the preliminary plans. GTE then had to readjust a portion of their relocated facilities to accommodate the revised lower construction grades.

GTE did, in good faith and with the best information available, relocate their facilities in a timely manner which was to the best interest of the public and the State's project. In an effort to prevent delay to construction, the State has continually encouraged utilities to proceed with relocation of conflicting facilities based on the information contained in preliminary plans.

RECEIVED
TECHNICAL SERVICES

NOV 2 '82

REFER TO

FOR

Info	Inves	R/D	D/R	Sign	Act	File

An invoice has been received from GTE, in the amount of $3,885, for the cost of the second relocation of their buried telephone facilities. It is the State's opinion that GTE is entitled to reimbursement for the cost of the second relocation. Federal participation in the relocation cost of $3,885 is requested.

JMC/DES/llr
Attachments
cc: E. S. Hunter
Jack M. Cartwright
J. W. Cochell
Ted Inloes

9375 Wash. Co

ROAD DESIGN SECTION DES 16

June 29, 1982

James Cochell
Project Manager

Donald R. Adams, P.E.
Final Design Engineer

Sign Shop Drawings
SW 89th Ave.-Pacific Hwy. (Tualatin)
FAU 9282 (Nyberg Rd.)
Washington County
Contract No. 9375

Versteeg
Anderson
Adams
Olson
Sullivan
Terpin
Trout
Wekerlig

RECEIVED
JUN 29 1982
ROAD DESIGN SECTION

Do Not File ☐
Return To
Bring Up / /
Action

Attached find three sets of approved shop drawings for the Type "U" signs on the above named project.

One set should be retained by you for field inspection purposes, one set forwarded to Don Wackerbarth's office for shop inspection of the signs and one set sent to Traffic Safety Supply Co. for sign fabrication.

As a point of information, all sign shop drawings should be sent to Road Design. Any other routing just delays their approval.

WGB:rw

Attachments

cc: C. Y. Keasey
E. L. Hardt
W. G. Beard

~~BHE~~

~~Elmer~~ ?

FORM [illegible]

OREGON STATE HIGHWAY DEPARTMENT

INTER-DEPARTMENT CORRESPONDENCE

2131 S.W. Scholls Ferry Road
June 21, 1982

To: L.E. George
Traffic Engineer

PROJECT: S.W. 89th Ave.-Pacific Hwy
BRIDGE NO.:
CONTRACT NO.: 9375

TRANSMITTED HEREWITH FOR APPROVAL, 4 COPIES OF THE FOLLOWING:

1. Type U sign shop drawings.
2.
3.
4.
5.

PLEASE RETURN COPIES TO:

RESIDENT ENGINEER 3 COPIES.
MATERIALS INSPECTOR ____ COPIES.
CONTRACTOR ____ COPIES.
SUBCONTRACTOR ____ COPIES.
SUPPLIER ____ COPIES.

NOTED
ELMER SCOFIELD

NOTED
W.R. ZIRBES

James W. Cochell
RESIDENT ENGINEER

ENCL.

CC REGIONAL ENGINEER

NOTED
DWAYNE HOFST TTER

RECEIVED
JUN 23 1982
TRAFFIC ENGINEERING

NOTED
L E GEORGE

9375

L

ROW 18-2

June 29, 1982

Mr. Don Hawkins
Real Estate Representative
Burlington Northern Railway Co.
800 Central Building
Seattle, WA 98104

Extension of Permit of Entry
S.W. 89th Ave. - Pacific Highway
(Tualatin) Section
S.W. Nyberg Road
Washington County
ROW File 51253
ODOT Agreement No. RR-1076
Project No. IX-9282(4)
BN File RE-2293 - Tualatin, OR

RAILROAD COMPANIES
FILE No. 1076

Dear Don:

Attached is your copy of the original of the Advance Right-of-Entry Agreement relating to the subject project. It has been signed by Mr. Boyd on behalf of the Department of Transportation.

Thanks for your cooperation in this matter.

Cordially,

Roger D. Trygstad, PE
Railroad & Utility Engineer

RDT/llr
cc: D. D. Gonrowski, BN Portland
bc: J. B. Boyd - w/copy
C. T. Keasey - w/copy
Robert Gormsen - w/our original
D. E. Swan - w/copy
Ed Hardt - w/copy
Jim Cochell - w/copy

On diary
7/2/82
filed in
agree
book

SCHNITZER INVESTMENT CORP.

3200 N.W. Yeon Ave   P.O. Box 10047, Portland, Oregon 97210   Phone 503/224 9900   Telex/W U 36-0144

9375

L.

May 11, 1982

Oregon Department of Transportation
State Highway Division
Office of State Highway Engineer
Transportation Building
Salem, OR 97310

Gentlemen:

Enclosed is a duplicate original Notice of Claim from Schnitzer Investment Corp.

Sincerely,

SCHNITZER INVESTMENT CORP.

Frederick C. Rusina
General Counsel

FCR/dr
Enclosure

Certified Mail - RRR

RECEIVED
STAT HWY ENGR

MAY 13 '82

REFER TO
Sollie

FOR

Info	Inves	R/D	D/R	Sign	Act	File
					☒	

Orig to
5-13-82

THE SCHNITZER GROUP

NOTICE OF CLAIM

TO: CITY OF TUALATIN, OREGON, MICHAEL A. McKILLIP, Public Works Director for City of Tualatin, STEPHEN A. RHODES, City Administrator of Tualatin, WASHINGTON COUNTY, OREGON, and OREGON DEPARTMENT OF TRANSPORTATION - STATE HIGHWAY DIVISION.

YOU AND EACH OF YOU TAKE NOTICE, in accordance with the provisions of ORS 30.260 through 30.300, that Schnitzer Investment Corp., 3200 N.W. Yeon, P.O. Box 10047, Portland, Oregon 97210, hereby makes claim against you and each of you.

THIS CLAIM stems from the failure to comply with the City of Tualatin's Flood Plain District ordinance, enacted by the City of Tualatin on or about January 15, 1982, in constructing the Tualatin/Sherwood Road bypass project. Schnitzer Investment Corp. owns real property in the City of Tualatin, located immediately south of said road on the west side of Martinazzi Avenue, and will suffer substantial harm from flooding and a permanent loss of its right and ability to develop said property if the road is completed as now designed.

On or about August 24, 1981, the City of Tualatin adopted Resolution No. 984-81, accepting right-of-way deeds for the construction of the Tualatin/Sherwood Road bypass. Among the deeds accepted by said resolution was a "Bargain & Sale Correction Deed" granted by The Hervin Company which restricts the finished grade of the road to 118.0 feet between Engineer's Station 77+50 and 80+15, resulting in approximately 190 feet of median strip of the road being below elevation 118. The road section referenced in the deed is immediately north of Schnitzer Investment Corp.'s property and construction in accordance with the deed restriction will cause permanent and irreparable harm to Schnitzer's property, in that the natural course of floodwaters in the floodway will be altered and the floodwaters collected and accelerated as they flow onto Schnitzer's property.

The above-referenced Flood Plain District ordinance provides that a development permit shall be obtained prior to construction or development of any area of special flood hazard as established by the ordinance. § 2704.1. The definition of development at § 2702 of the ordinance includes "filling" within the area of special flood hazard. No such permit was sought or granted for the Tualatin/Sherwood Road bypass. The State of Oregon Highway Division has not established that the additional fill within the floodway and design of the road in accordance with the deed restriction imposed by The Hervin Company will not exacerbate flooding problems of downstream property owners. § 2710 of the ordinance requires written certification prior to construction of a fill in a flood hazard area that the filled lands "will not change the flow of surface water*** in such a way as to cause added or increased damage to adjacent properties or structures either upstream or downstream of the proposed improvements."

It is our understanding that, upon its completion, the road will be deeded to Washington County. This letter is to notify each and all of you that Schnitzer Investment Corp. intends to file a claim against each of you for damages in the amount of $50,000. Our claim is based on the damages we expect to sustain as a result of the Sherwood/Tualatin Road bypass project, and, in particular (1) the alteration of the natural course of surface waters and acceleration of floodwaters onto Schnitzer Investment Corp.'s property; and (2) failure to comply with provisions of the Flood Plain District ordinance enacted to protect rights of adjacent property owners.

SCHNITZER INVESTMENT CORP.

BY: ____________________
Frederick C. Rusina
General Counsel

SCHNITZER INVESTMENT CORP.

3200 N.W. Yeon Ave. P.O. Box 10047, Portland, Oregon 97210 Phone 503/224-9900 Telex/W.U. 36-0144

1)

May 11, 1982

Mr. Darrell Ralls
Director
Department of General Services
1125 Ferry Street, SE
Salem, OR 97310

Dear Mr. Ralls:

Enclosed is an original Notice of Claim from Schnitzer Investment Corp.

Sincerely,

SCHNITZER INVESTMENT CORP.

Fred Rusina
Frederick C. Rusina
General Counsel

FCR/dr
Enclosure

Certified Mail - RRR

cc: Oregon Department of Transportation

Mr. Stephen A. Rhodes
City of Tualatin

Mr. Michael A. McKillip
City of Tualatin

Mr. Gregory S. Hathaway
County of Washington

THE SCHNITZER GROUP

1981 SW 89th Ave.-Pac. Hwy. 9375
(Tualatin) Sec., SW Nyberg Rd. (Gr.,
pav., sign., sig., & landsc.) #3

The Oregon Department of Transportation

ORIGINAL RECORDS

DO NOT REMOVE

FROM TRANSPORTATION BUILDING

The Oregon Department of Transportation

731-0274 (2-88)

19

C & A	6705	8-18-78
	7195	5-23-80; 3-31-81
	7506	8-28-81; 9-10-81
RR	1075	12-18-81
	1076	6-18-81; 6-29-82

R/W & CONSTRUCTION	85%	ST (4%)	CITY (
I-505 FUNDS	1,261,844	133,607	89,071
	85%	ST 15%	15%
MT. HOOD	105,400	18,600	34,775
" "	85% 197,056	—	

#9375.

2.

STATE OF OREGON
RAILROAD & UTILITIES 378-6511

INTEROFFICE MEMO file
ROW 18-2

TO: Robert Gormsen
Commission Services

DATE: December 18, 1981

FROM: Roger D. Trygstad
Railroad & Utility Engineer

SUBJECT: Construction-Maintenance Agreement
Crossing Nos. 3E-036.20 & 3E-036.14-C
Tualatin By-Pass and Boones Ferry Road
City of Tualatin
Washington County
ODOT Agreement No. RR-1075
Project No. IX-9282(4)

RAILROAD COMPANIES
FILE No. 1075

Attached is the State's fully-executed counterpart of a Construction-Maintenance Agreement between the Burlington Northern (Oregon-Washington), Inc. and the Oregon Department of Transportation, Highway Division, calling for the installation of grade crossing protection devices and crossing work at the subject grade crossings. This is a part of the 89th Avenue-Pacific Highway project and is being financed by Interstate Transfer Funds.

The Construction Division will be responsible for monitoring the railroad's work under the terms of this Construction-Maintenance Agreement and approval of the final bill. The Accounting Section will be responsible for auditing the final bill. Section heads should thoroughly review the Agreement to understand the responsibilities their section must bear under the terms of this Agreement.

RDT/llr
Attachment
cc: D. E. Wilken - w/copy of agreement
C. T. Keasey - w/copy of agreement
V. E. Skoog - w/copy of agreement - ATTN: Pete Gonzalez
D. E. Swan - w/copy of agreement (2)
Ed Hardt - w/copy of agreement (2)
J. Cochell - w/copy of agreement

1-7-82
Entered
in
agree
book)

STATE OF OREGON **INTEROFFICE MEMO**

TO: Bruce Boyd
Right of Way Manager

DATE: October 8, 1981

FROM: Roger D. Trygstad
Railroad & Utility Engineer

SUBJECT: Construction-Maintenance Agreement
Crossing No's. 3E-036.20
3E-036.14-C
Tualatin By-Pass Rd. & Boones
Ferry Rd.
City of Tualatin
Washington County
ODOT Agreement No. [redacted]

Attached are two copies of a Construction Maintenance Agreement between the Oregon Department of Transportation, Highway Division and the Burlington Northern (Oregon-Washington) Inc., calling for the installation of grade crossing protection devices and crossing work at the subject grade crossings. This is a part of the 89th Ave.-Pacific Hwy. project and is being financed by Interstate Transfer Funds.

On June 1, 1981, you signed an Agreement for this work. As I explained to you, the new organization of the Burlington Northern has prompted them to re-write the agreements and put them in their format. This matter is, therefore being re-processed. There is a slight difference in the cost between this Agreement and the previous one that you signed. Burlington Northern determined that they had missed a small item which raises our cost by $5,662 to a total of $151,462.

Please review the Agreement and if it is found satisfactory, sign it on behalf of the Oregon Department of Transportation and return it to my office for transmission to the Railroad.

RDT/vlw
Attach.

cc: Robert Gormsen

Sg by Boyd
10-12-81
Ew nov 7

9375

CITY OF TUALATIN
18880 SW MARTINAZZI AVE. PO BOX 369
TUALATIN, OREGON 97062
(503) 638-8891

October 23, 1981

Mr. D. E. Swan
Operation Programming Engineer
Department of Transportation
Highway Division
Transportation Building
Salem, Oregon 97310

REFERENCE: BY-PASS FUNDING

Dear Mr. Swan:

Enclosed please find copies of the approved staff recommendations, resolutions and power of attorney for the above referenced project.

If you have any questions regarding this matter, please contact me at 638-2633.

Thank you,

Jan Nelson
Administrative Secretary

JN/

Enclosure

RESOLUTION NO. 56-81

A RESOLUTION AUTHORIZING EXECUTION OF A LIMITED POWER OF ATTORNEY TO ALLOW THE OREGON DEPARTMENT OF TRANSPORTATION TO DRAW ON FUNDS DEPOSITED IN THE STATE OF OREGON INVESTMENT POOL BY THE URBAN RENEWAL AGENCY OF THE CITY OF TUALATIN FOR THE PURPOSE OF FUNDING ROADWAY IMPROVEMENTS IN THE VICINITY OF S.W. NYBERG STREET BETWEEN INTERSTATE 5 AND S.W. 89TH AVENUE.

BE IT RESOLVED BY THE CITY OF TUALATIN DEVELOPMENT COMMISSION-THE URBAN RENEWAL AGENCY OF THE CITY OF TUALATIN, OREGON THAT:

Section 1. The Chairman and the Administrator by and they hereby are authorized to execute that certain power of attorney titled "Limited Power of Attorney - Local Government Investment Pool" for the purpose of allowing the Highway Division of the Oregon Department of Transportation to withdraw funds from the Renewal Agency's State of Oregon Investment Pool account to provide the Agency's share of funds necessary to acquire right-of-way and roadway improvements in the vicinity of S.W. Nyberg Street, between S.W. 89th Avenue and Interstate 5, a copy of which is marked Exhibit "A", attached hereto and by this reference incorporated herein.

INTRODUCED AND ADOPTED this 12th day of October 1981.

THE CITY OF TUALATIN DEVELOPMENT
COMMISSION - THE URBAN RENEWAL
AGENCY OF THE CITY OF TUALATIN

BY: ____________________
Chairman

ATTEST:

BY: Yvonne L Addington
Administrator

☐The City of Tualatin Development Commission
☐The Urban Renewal Agency of the City

October 8, 1981

City Development Commission
City of Tualatin

Members of the Commission

BYPASS FUNDING

Attached is a letter from D.E. Swan at the Highway Division, requesting the balance of the City share for construction of the bypass. The attached power of attorney is similar to the one authorized on September 14, 1981 for the advanced deposit for construction funds in the bypass.

RECOMMENDATION

It is recommended that the attached resolution be adopted authorizing the Chairman and Administrator to execute the attached limited power of attorney, local government investment pool.

Sincerely,

Michael A. McKillip

Michael A. McKillip
City Engineer

MAM/lls

Attachments

Approved by City of Tualatin
Development Commission
(Urban Renewal Agency of the City)
Date 10/12/81
[illegible], secretary

☐P.O.Box 426, Tualatin, Oregon 97062 ph.(503)638-6891

RESOLUTION NO. 55-81

A RESOLUTION AUTHORIZING EXECUTION OF A LIMITED POWER OF ATTORNEY TO ALLOW THE OREGON DEPARTMENT OF TRANSPORTATION TO DRAW ON FUNDS DEPOSITED IN THE STATE OF OREGON INVESTMENT POOL BY THE URBAN RENEWAL AGENCY OF THE CITY OF TUALATIN FOR THE PURPOSE OF FUNDING ROADWAY IMPROVEMENTS IN THE VICINITY OF S.W. NYBERG STREET BETWEEN INTERSTATE 5 AND S.W. 89TH AVENUE.

BE IT RESOLVED BY THE CITY OF TUALATIN DEVELOPMENT COMMISSION - THE URBAN RENEWAL AGENCY OF THE CITY OF TUALATIN, OREGON THAT:

Section 1. The Chairman and the Administrator by and they hereby are authorized to execute that certain power of attorney titled "Limited Power of Attorney - Local Government Investment Pool" for the purpose of allowing the Highway Division of the Oregon Department of Transportation to withdraw funds from the Renewal Agency's State of Oregon Investment Pool account to provide the Agency's share of funds necessary to acquire right-of-way and roadway improvements in the vicinity of S.W. Nyberg Street, between S.W. 89th Avenue and Interstate 5, a copy of which is marked Exhibit "A", attached hereto and by this reference incorporated herein.

INTRODUCED AND ADOPTED this 14th day of September, 1981.

THE CITY OF TUALATIN DEVELOPMENT
COMMISSION - THE URBAN RENEWAL
AGENCY OF THE CITY OF TUALATIN

BY: ______________________
Chairman

ATTEST:

BY: Yvonne L Addington
Administrator

EXHIBIT "A"

LIMITED POWER OF ATTORNEY
LOCAL GOVERNMENT INVESTMENT POOL

The City of Tualatin Development Commision - the Urban Renewal Agency of the City of Tualatin - hereby appoints the Investment Manager of the Oregon State Excess Fund, as attorney in fact for it and said officer shall have the power of attorney to negotiate warrants made payable to the Oregon State Department of Transportation, Highway Division and deliver to said officer by either H. S. Coulter, State Highway Engineer; Vernon E. Skoog, Highway Division Controller; Frank R. Griffin, Highway Division Assistant Controller; or Richard Hacek, Highway Division Assistant Controller for the State of Oregon, for the purpose of depositing the proceeds of such warrants to the account of the Oregon State Department of Transportation, Highway Division, with the Oregon State Treasurer.

The City of Tualatin Development Commission - the Urban Renewal Agency of the City of Tualatin - has deposited with the State of Oregon Investment Pool the sum of $182,890.00 in Account No. 4487. The purpose of this deposit is to create a fund from which to pay its share of the cost of certain improvements to be made in connection with the S.W. 89th Avenue/ Interstate 5 section of S.W. Nyberg Street, or otherwise known as the Tualatin-Sherwood Bypass.

By this document it authorizes the Highway Division of the State of Oregon, Department of Transportation to draw on the account created by this instrument for the purposes above-stated with the State Excess Fund. The authorized signatures of withdrawal will be one of any of the following: H. S. Coulter, Vernon E. Skoog, Frank R. Griffin, or Richard J. Hacek. The signature of either upon a voucher in a form acceptable to the custodians of the State Investment Pool shall constitute proper authority for the withdrawal of money up to the total amount of the deposit identified above.

The authorized signatures of the above individuals shall be furnished by the Highway Division of the Department of Transportation to the State Treasury Department.

This power of attorney was authorized by the Board of Commissioners of the City of Tualatin Development Commission - the Urban Renewal Agency of the City of Tualatin - thes 14th day of September, 1981 by a vote of the majority of a quorum of its governing body.

Chairman, Board of Commissioners

Yvonne L Addington
Administrator

9375 10-23-81 CON 21-8

U. S. DEPARTMENT OF TRANSPOR TION
FEDERAL HIGHWAY ADMINIS ATION

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. IX-9282(4) Wash. Co.

2. STATE PROJECT NO. See below

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 80112

2A. COUNTY NAME Washington

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 10/23/81

8. FEDERAL ROUTE NUMBER FAU 9282

9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION:
SW 89th Avenue - Pacific Highway (Tualatin) Section

11. GENERAL DESCRIPTION OF WORK
Revised Railroad Agreement

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)* See below

13. REMARKS

As requested in Mr. Swan's letter of 10/16/81 I approve the revised agreement with Burlington Northern Railroad Company (Formerly Oregon Electric Railway) at a TEC of $151,462 Federal Funds $128,743. Also, as requested, I concur that initial date of authorization to proceed on 9/2/81 is still effective date to proceed.

(Increase TEC $5,662 Federal Funds $4,813. This program change does not require additional obligation of funds)

RECEIVED
STATE HWY ENGR
OCT 30 '81
REFER TO Moehring
F
Info Inves. File

T.
11/2

14. DATE 10/23/81

15. SIGNATURE OF APPROVING OFFICIAL G. K. Hosner

16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9375

2.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.: PRO 6-2

October 16, 1981

TO: Dale E. Wilken
Division Administrator
Federal Highway Administration

FROM: D. E. Swan
Operation Programming Engineer

SUBJECT: Project No. IX-9282(4)
S.W. 89th Ave.-Pacific Hwy. (Tualatin) Sec.
Washington County

Enclosed for your approval is one copy of proposed agreement between Burlington Northern Railroad Company and the State Highway Division on the subject project. This proposed agreement replaces the previous agreement dated June 1, 1981, which was forwarded under our letter of August 17, 1981 and reflects an increase in the estimated total cost for work by the railroad to $151,462.

I further request concurrence that the previous authorization to proceed with work by the railraod as of September 2, 1981 is still the effective date.

Approval of the revised proposed railroad agreement will not require an increase in total cost in federal fund obligation on the project at this time.

CL/lms

cc: R. Trygstad
General Files

Form 734-3122

9375

[redacted]

Tualatin

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION

INTER-OFFICE CORRESPONDENCE
Salem, Oregon

October 14, 1981

FILE:

Duane O. Christensen

FROM: Duane O. Christensen
Final Design Engineer

SUBJECT: S.W. 89th Ave.-Pacific Hwy.
Tualatin Section
FAU 9282 (S.W. Nyberg Rd.)
Washington County

TO:
RESIDENT ENGINEER
J. W. Cochell
2131 Scholls Fy. Rd.
Portland, Oregon 97221

The attached lists are the results of profile grade computations made by the 370 IBM system. If a revised computation is required showing additional breaks or correcting errors, mark the requirements on the data sheets clearly, with a note of explanation, and return to the Road Design Engineer for a rerun. The columns contain data as indicated below:

STATION	ELEVATION	OFFSET	TAN. ELEVATION	GRADE AHEAD
526+00	172.01	0.03	171.98	.355645
526+50	172.16	0.0	172.16	.355645

The profile grades included in this tabulation are as follows:

9193 00	Mainline	Centerline	Profile Grade
9193 01	Mainline	Centerline	Subgrade

____Versteeg________
____Anderson____ LW
____Christensen____
____Olson________
____Sullivan________
____Terpin________
____Trout________
____Wekerlig________

RECEIVED
OCT 14 1981
ROAD DESIGN SECTION

Do Not File ☐
Return To________
Bring Up ___/___/___
Action________

LW:rw

Attachment

9375

WASHINGTON COUNTY
ADMINISTRATION BUILDING — 150 N. FIRST AVENUE
HILLSBORO, OREGON 97123

BOARD OF COMMISSIONERS
VIRGINIA DAGG, Chairman
LYELL GARDNER, Vice Chairman
JIM FISHER
BONNIE L. HAYS
LUCILLE WARREN

DEPT. OF PUBLIC WORKS
ROOM 201
(503) 648-8886

10-1-81
~~August 10, 1981~~

Jon Rose
Federal Aid Specialist
ODOT
5821 NE Glisan
Portland, OR 97213

Dear Mr. Rose:

Enclosed is one set of signed preliminary plans for the traffic signal work on the Nyberg Road improvements between 89th and Pacific Highway (I-5).

Sincerely,

Marty Nizlek

Martin C. Nizlek
Transportation Division Manager

MCN:ER:ss
enclosure

From Metro JON ROSE
Date 10-1-81
To BUZ SWAN
[✓ Program Mgmt.] Traffic Region 1

Comments: For the records here is a set of plans for signal work on the Tualatin Bypass (89th - I-5), approved by Washington County. The County had no comments or suggestions.

Jon Rose

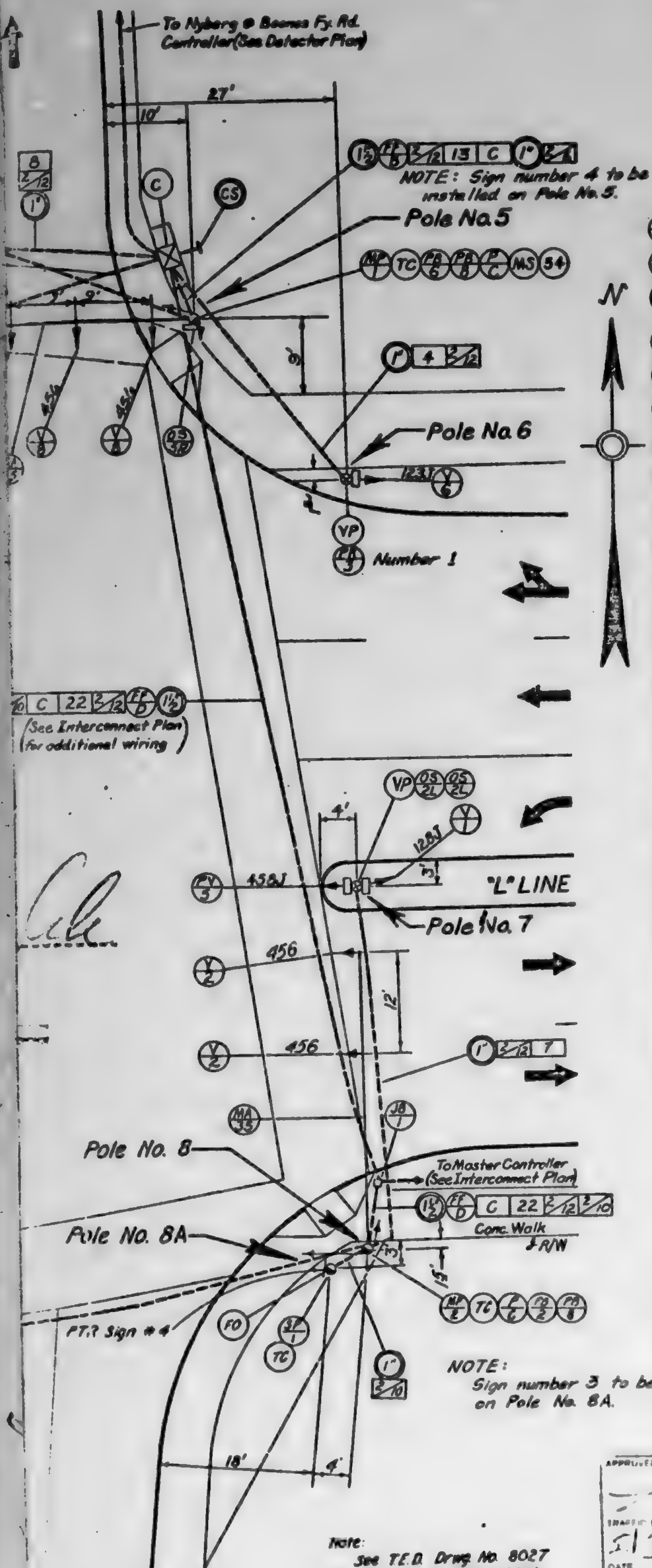
SIGNAL PLAN
S.W. BOONES FERRY RD. AT "L" LINE

SCALE 0 10 20 FEET

PRELIMINARY COPY

MAY 21 1981

SUBJECT TO MUTUAL REVIEW



To Nyberg @ Boones Fy. Rd. Controller (See Detector Plan)
10'
27'
Pole No. 5
Pole No. 6
Number 1
(See Interconnect Plan for additional wiring)
"L" LINE
Pole No. 7
456
12'
Pole No. 8
Pole No. 8A
To Master Controller (See Interconnect Plan)
Conc. Walk
R/W
Sign # 4
18'
4'
N

NOTE: Sign number 4 to be installed on Pole No. 5.

NOTE: Sign number 3 to be installed on Pole No. 8A.

Note: See T.E.D. Drwg. No. 8027 for Pole No. 8A signing details

L E G E N D.

EX/1	Maintain and protect existing power pole (power source)
C	Install Model 170 controller in Model 332 cabinet
AC	Install Type 6 modified (21" x 14" x 39") amplifier cabinet with 4 detector amplifiers and one 15 amp SPST circuit breaker
MP/T	Install type (T) standard traffic signal mast arm pole
MA/L	Install (L) foot traffic signal mast arm
VP	Install vehicle signal pedestal with transformer base
V/Ph	Install phase (Ph) vehicle signal
PV/Ph	Install phase (Ph) programmed vehicle signal
P/T	Install type (T) modified pedestrian signal
PB/Ph	Install phase (Ph) pedestrian pushbutton with instruction sign
OS/3R	Install interior-illuminated *right arrow "ONLY"* sign
OS/2L	Install interior-illuminated "*LEFT* TURN SIGNAL" sign
PR/1	Install "STOP HERE ON RED LIGHT" part-time restriction sign with 12-inch red single section head
PR/3	Install "NO RIGHT TURN" part-time restriction sign
TC	Install terminal cabinet
54	Install service cabinet with 50 amp SPST circuit breaker
MS	Install 120 volt meter base
JB/1	Install 17 1/4" x 10 1/2" x 12" reinforced concrete pull box (See detail)
C	Install one No. 12 type THWN wire (signal system common)
N	Install (N) No. 14 type THWN wires
N/G	Install (N) No. (G) type TW wires
S	Install (S) inch electrical conduit
CS	Install 2 inch conduit stub (cap ends)
FX/Ch	Install channel (Ch), (X)-way fire pre-emption detector unit
FF/Ch	Install channel (Ch) fire pre-emption detector feeder cable

J = Signals mounted on Type J modified mount (See detail)
T = Type shown
L = Length shown
N = Number of conductors shown
S = Size shown
123 = 8" R, 8" Y, 8" G
423 = 12" R, 8" Y, 8" G
458 = 12" R, 12" Y, 12" GLTA
X = Number shown
Ph = Phase shown
G = AWG size shown
Ch = Channel shown
128 = 8" R, 8" Y, 12" GLTA
456 = 12" R, 12" Y, 12" G

SP/1	*Install type 1 standard strain pole (cut to 20' height and cap with removable watertight pole cap)*
FO	*Install Fibre-optic sign (see details and special provisions.)*

NOTE:
See T.E.D. No. 8026 for Signal Pole Bracket Detail for sign mounting.

APPROVED
F. E. George
TRAFFIC ENGINEER
5/7/81
DATE

DESIGNED BY: AA
CHECKED BY: W.Z.

OREGON STATE HIGHWAY DIVISION

TRAFFIC SIGNAL INSTALLATION
S.W. 89TH AVENUE – PACIFIC HIGHWAY (TUALATIN) SEC.
FAU 9282 (S.W. NYBERG RD.)
WASHINGTON COUNTY

DATE March 1981
ACCOMPANIED BY DWGS. 1470, 1471, 1472, 1473, 1480, 1481, 1488, 1489, 35009, 35010, 2990, 2991 & 8013 thru 8027

T.E. DWG NO. 8012

9375

September 25, 1981

ACC

Michael McKillip
Director of Public Works
18880 S.W. Martinazzi
P.O. Box 369
Tualatin, Oregon 97062

Dear Mr. McKillip:

On September 24, 1981 the Highway Division received a satisfactory bid from Cascade Construction Company, Inc., P.O. Box 4267, Portland, Oregon 97208 for the S.W. Nyberg Road project.

We anticipate the financial sharing of the construction cost to be:

Contractor's Bid (City Share)	$1,326,535.87
Anticipated Additional Items:	191,975.00
SUBTOTAL	$1,518,510.87
4 1/2% Contingencies	68,332.99
8% Engineering	121,480.87
ESTIMATED CONSTRUCTION COST	$1,708,324.73
Less Federal Funds	1,452,076.02
Less State Share	123,240.00
CITY SHARE	$ 133,008.71
Less 65% Early Advance Deposit	106,290.00
BALANCE OF CITY SHARE	$ 26,718.71
	$ 26,720.00 (Rounded)

We have awarded the contract, please submit the balance of City's Share, $26,720, according to the instructions for the option of your choice listed on the attached sheet.

Very truly yours,

D. E. Swan
Operation Programming Engineer

GEE:pf
Attachment

bcc w/AD # 958: Jon Rose, Metro
Vern Skoog - Please return completed AD # 958
when advance deposit is received.

September 25, 1981

ACC

Tualatin Fire District
8408 Elligsen Road
Tualatin, Oregon 97062

Gentlemen:

On September 24, 1981 we received a satisfactory bid from Cascade Construction Company, Inc., P.O. Box 4267, Portland, Oregon 97208 for the Tualatin Bypass project.

According to our Agreement No. 7506, the District shall pay 50% of the required matching funds.

Fire Pre-emption System Complete		$16,918.00
Less: 85% Federal Funds	=	14,380.30
Required 15% Matching Funds	=	$ 2,537.70

FIRE DISTRICT SHARE 50% of $2,537.70 = $1,268.85

Please send your check in the amount of $1,268.85 for your advance deposit to Highway Division Accounting Section, Room 434, Transportation Building, Salem, Oregon 97310.

Very truly yours,

D. E. Swan
Operation Programming Engineer

KEH:pf

bcc w/AD # 961: Jon Rose, Region M Federal Aid Engineer
Vern Skoog - Please return completed AD # 961
when advance deposit is received.

Rec'd
10-19-81
$1268.95 check
per Acctg.

9375

CITY OF TUALATIN
18880 SW MARTINAZZI AVE. PO BOX 369
TUALATIN, OREGON 97062
(503) 638-6891

September 18, 1981

Mr. D. E. Swan, Operations Programming Engineer
Department of Transportation
Highway Division
Transportation Building
Salem, OR 97310

Dear Mr. Swan:

Enclosed please find a copy of Resolution 55-81 adopted by the City of Tualatin Development Commission on September 14, 1981. This Resolution authorized the Chairman and Administrator to sign the enclosed limited power-of-attorney for the local government investment pool.

The enclosed power-of-attorney is in the amount of $182,890.00 which is the total of the amount requested from the City of Tualatin in your letter of September 8, 1981, and the amount requested from Fred Meyer and K-Mart in your letter of September 8, 19[illegible]. Fred Meyer and K-Mart are financing their share of this project through a local improvement district which has been formed by the City of Tualatin. That is why Fred Meyer - K-Mart money is coming from the City of Tualatin.

If you have any further questions or comments about this matter, pleas contact this office as soon as possible.

Sincerely,

Michael A. McKillip

Michael A. McKillip
City Engineer

MM/ek

Enclosure

cc: Hwy Acctng
Jan Peterson

9-23-81
$282,000 in
Investment Pool
says Jan Peterson.
G

☐The City of Tualatin Development Commission
☐The Urban Renewal Agency of the City

September 11, 1981

Development Commission
City of Tualatin

Members of the Commission

BYPASS FUNDING

On September 24, 1981 at 9:00 a.m., the State Highway Division will be receiving bids for construction of the By-Pass in the City of Tualatin. Prior to awarding the contract for the construction of the By-Pass, the City must deposit its share of funds with the State Highway Division. By depositing the funds prior to the bid opening, this will enable the State Highway Division to award the contract immediately for construction of the By-Pass. At this time the City is being requested to deposit 65 percent of its share plus the amount to be paid by K-Mart and Fred Meyer for the signal installation. Sixty-five percent of the City share is calculated to be $106,290.00. The deposit for the Fred Meyer/K-Mart signal is calculated to be $76,600.00.

Attached is the Resolution authorizing the Chairman of the Board of Commisisoners and the Administrator to execute the attached Limited Power of Attorney, Local Government Investment Pool, to enable the State Highway Division to receive money from the City of Tualatin as required by the project.

RECOMMENDATION

It is recommended that the attached Resolution be adopted authorizing the Chairman and Administrator to execute the attached Limited Power of Attorney, Local Government Investment Pool.

Sincerely,

Michael A. McKillip

Michael A. McKillip
City Engineer

MAM/cd
Attachments

Approved By Tualatin City Council
Date 9/14/81
Recorder for secretary

☐P.O.Box 426, Tualatin, Oregon 97062 ph.(503)638-6891

EXHIBIT "A"

LIMITED POWER OF ATTORNEY
LOCAL GOVERNMENT INVESTMENT POOL

The City of Tualatin Development Commision - the Urban Renewal Agency of the City of Tualatin - hereby appoints the Investment Manager of the Oregon State Excess Fund, as attorney in fact for it and said officer shall have the power of attorney to negotiate warrants made payable to the Oregon State Department of Transportation, Highway Division and deliver to said officer by either H. S. Coulter, State Highway Engineer; Vernon E. Skoog, Highway Division Controller; Frank R. Griffin, Highway Division Assistant Controller; or Richard Hacek, Highway Division Assistant Controller for the State of Oregon, for the purpose of depositing the proceeds of such warrants to the account of the Oregon State Department of Transportation, Highway Division, with the Oregon State Treasurer.

The City of Tualatin Development Commission - the Urban Renewal Agency of the City of Tualatin - has deposited with the State of Oregon Investment Pool the sum of $182,890.00 in Account No. 4487. The purpose of this deposit is to create a fund from which to pay its share of the cost of certain improvements to be made in connection with the S.W. 89th Avenue/Interstate 5 section of S.W. Nyberg Street, or otherwise known as the Tualatin-Sherwood Bypass.

By this document it authorizes the Highway Division of the State of Oregon, Department of Transportation to draw on the account created by this instrument for the purposes above-stated with the State Excess Fund. The authorized signatures of withdrawal will be one of any of the following: H. S. Coulter, Vernon E. Skoog, Frank R. Griffin, or Richard J. Hacek. The signature of either upon a voucher in a form acceptable to the custodians of the State Investment Pool shall constitute proper authority for the withdrawal of money up to the total amount of the deposit identified above.

The authorized signatures of the above individuals shall be furnished by the Highway Division of the Department of Transportation to the State Treasury Department.

This power of attorney was authorized by the Board of Commissioners of the City of Tualatin Development Commission - the Urban Renewal Agency of the City of Tualatin - thes 14th day of September, 1981 by a vote of the majority of a quorum of its governing body.

Chairman, Board of Commissioners

Yvonne L Addington

Administrator

RESOLUTION NO. 55-81

A RESOLUTION AUTHORIZING EXECUTION OF A LIMITED POWER OF ATTORNEY TO ALLOW THE OREGON DEPARTMENT OF TRANSPORTATION TO DRAW ON FUNDS DEPOSITED IN THE STATE OF OREGON INVESTMENT POOL BY THE URBAN RENEWAL AGENCY OF THE CITY OF TUALATIN FOR THE PURPOSE OF FUNDING ROADWAY IMPROVEMENTS IN THE VICINITY OF S.W. NYBERG STREET BETWEEN INTERSTATE 5 AND S.W. 89TH AVENUE.

BE IT RESOLVED BY THE CITY OF TUALATIN DEVELOPMENT COMMISSION - THE URBAN RENEWAL AGENCY OF THE CITY OF TUALATIN, OREGON THAT:

Section 1. The Chairman and the Administrator by and they hereby are authorized to execute that certain power of attorney titled "Limited Power of Attorney - Local Government Investment Pool" for the purpose of allowing the Highway Division of the Oregon Department of Transportation to withdraw funds from the Renewal Agency's State of Oregon Investment Pool account to provide the Agency's share of funds necessary to acquire right-of-way and roadway improvements in the vicinity of S.W. Nyberg Street, between S.W. 89th Avenue and Interstate 5, a copy of which is marked Exhibit "A", attached hereto and by this reference incorporated herein.

INTRODUCED AND ADOPTED this 14th day of September, 1981.

THE CITY OF TUALATIN DEVELOPMENT
COMMISSION - THE URBAN RENEWAL
AGENCY OF THE CITY OF TUALATIN

BY: ____________________
Chairman

ATTEST:

BY: Yvonne L Addington
Administrator

9375

VICTOR ATIYEH
GOVERNOR

Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

In Reply Refer to
File No.:
PRO 6-2

September 18, 1981

TO:
Dale E. Wilken
Division Administrator
Federal Highway Administration

FROM:
D.E. Swan
Operation Programming Engineer

SUBJECT:
Interstate Substitution Projects
FY '81 Supplemental Allocation

We propose to utilize the subject supplemental funds in the amount of $15,000,000 on the following listed projects in the Portland and Salem Urban Areas by the end of September 1981.

PORTLAND

Project No.	Section	Work	Purpose	TC	FF
IX-24(23)	52nd-92nd	R/W	Addn't Auth.	$ 1,791,210	$ 1,522,527
IX-26(12)	McLoughlin Ped. U'Xing	P.E.	Increase	3,322	2,820
IX-79(4)	S.W. 72nd Ave. Intchge.	R/W	Auth.	236,000	200,600
IX-79(4)	S.W. 72nd Ave. Intchge.	P.E.	Increase	26,100	22,185
IX-0000(8)	N.W. Thurman-S W. Columbia	P.E.	Increase	10,341	8,790
IX-0000(40)	N.W. Thurman-S.W. Columbia	Con.	PS&E	669,767	569,300
IX-0000(41)	Cornell-Murray	Con.	PS&E	2,893,550	2,459,500
IX-000C(22)	Coliseum Area Traf. Sig.	Con.	PS&E	102,235	86,900
IX-000C(23)	Clackamas Town Center	P.E.	Auth.	16,100	13,685
IX-9064(2)	S.W. 185th Ave.-S.W. Hall Blvd.	P.E.	Increase	7,200	6,120
IX-9088(3)	Main Ave.-Alice Lane	R/W	Addn't Auth.	331,500	281,775
IX-9282(3)	S.W. 89th-I-5 (Tualatin)	R/W	Addn't Auth.	86,859	73,830
IX-9282(4)	S.W. 89th-I-5 (Tualatin)	Con.	PS&E	281,888	239,604
IX-9326(5)	W. Burnside @ Tichner	P.E.	Increase	7,500	6,375
IX-9326(8)	W. Burnside @ Tichner	Con.	PS&E	311,800	265,000
IX-9565(12)	Bancroft-Sellwood	Con.	Increase	352,942	300,000
IX-9565(13)	Oswego Cr. (Sucker Cr.) Br.	Con.	PS&E	2,841,200	2,415,000
IX-9659(3)	Gladstone NCL-S.E. Oatfield Rd.	P.E.	Increase	11,910	10,120

Form 734-3122

IX-9659(5)	Clack. Hwy.-Gladstone N.C.L.	P.E.	Increase	5,300	4,505
IX-9665(6)	Oatfield Rd. @ Aldercrest Dr.	P.E.	Increase	3,250	2,760
IX-9665(11)	Oatfield Rd. @ Thiesen	Con.	PS&E	189,428	161,013
IX-9699(3)	N.E. Glisan-S.E. Glenwood	P.E.	Increase	9,200	7,820
IX-9702(3)	International Way @ Price Fuller	P.E.	Increase	6,100	5,185
IX-9702(6)	Harmony Rd. @ Price Fuller	Con.	PS&E	155,000	131,750
IX-9704(4)	W. Approach Sellwood Br.	Con.	Increase	116,287	98,843
IX-9718(5)	S.E. 97th Ave.-S.E. 122nd Ave.	R/W	Increase	15,000	12,750
IX-9721(1)	S.E. King Rd.-Harmony Rd.	P.E.	Increase	8,000	6,800
IX-9721(2)	S.E. King Rd. @ Price Fuller	Con.	PS&E	7,808	6,636
IX-9823(1)	N.E. 33rd @ Broadway	P.E.	Increase	6,700	5,695
IX-9867(4)	Fariss-Powell Blvd.	R/W	Addn't Auth.	406,175	345,250
IX-9867(5)	Fariss-Powell Blvd. (Unit 1)	Con.	PS&E	1,694,235	1,440,100
IX-9926(6)	Basin Ave.-Going St. Interchange	R/W	Increase	125,000	106,250
IX-9926(7)	Basin Ave.-Going St. Interchange	Con.	PS&E	2,027,662	1,723,512
IX-9956(10)	Columbia Blvd. @ 47th	Con.	PS&E	67,060	57,000
				$14,823,629	$12,600,000

SALEM

IX-1525(2)	Chemawa Rd.-Hickory St.	R/W	Auth.	1,402,500	1,192,125
IX-1525(3)	Verda Lane N.E.-Cherry	Con.	PS&E	1,421,100	1,207,875
					$ 2,400,000
			TOTAL		$15,000,000

CL:bkc
cc: R.N. Bothman
J. Rose
Judy Smith
G. Zehner
P. Stearns
General Files

9375

2.

DES 16

DATE: September 11, 1981

TO: Dale E. Wilken, Division Administrator
Federal Highway Administration

FROM:
H. S. Coulter
State Highway Engineer

SUBJECT: Oregon Project IX-9282(4)
S.W. 89th-Pacific Highway (Tualatin)
S.W. Nyberg Road, Washington County
Your File HFO.6-OR

This is an Interstate Transfer project, generated at the local level by the City of Tualatin and Washington County and was developed under the Oregon Action Plan. The Final Environmental Impact Statement received approval on October 10, 1979. The following are excerpts from the FEIS:

> "3.9 Visual Characteristics
>
> The main effects relate to the visual impacts of the project on existing commercial and residential uses in the extent to which landscaping will relate to the design concerns of the City of Tualatin's Urban Renewal Plan."
>
> "4.9 Visual Characteristics
>
> The selected alternate will include a landscape plan discussed herein. The final landscaping plan will extend for the whole length of the corridor. Landscaping will be maintained by the City of Tualatin."

The City of Tualatin regards this project as a highly visual area. The Urban Renewal standards established for the landscaping reflects their serious concern for the appearance of the gateway to their community. The landscape materials, including trees, are estimated to cost $33,000. This is not considered excessive for this size project.

The full-coverage irrigation system is estimated to cost $45,000 which is not considered expensive compared to other designs. It is more costly than a minimum drip system or no irrigation system at all, which were considered but did not meet the goals or standards of the City. Several meetings were held between our staff and representatives of the City to develop alternate landscape proposals. None were successful in reducing the scale of the landscape proposals satisfactory to the City.

The agreement between Washington County and the City of Tualatin dated April 15, 1980 includes the following statement:

> "Things To Be Done By City:
>
> 1. The City will maintain all areas including the vegetation, trees, shrubs, grass and herbage of the subject bypass route described in Exhibits "A" and "B" attached hereto except for the roadway between the curbs, the curbs, traffic signalization and drainage facilities along said route."

The question whether the trees will at some future date interfere with safe operation of traffic cannot be determined. This type of tree planting is a common practice in many urban areas on Federal projects where speeds are reduced. We have no real justification for denying the City's request for tree planting considering the nature of the project, the anticipated traffic operation and current design practices.

This project is eligible for Federal funds. These funds have been budgeted by the Metropolitan Service District. This project was developed under the Oregon Action Plan and received final EIS approval in October 1979. Project development was a long, arduous process done in total compliance with all local, State and Federal rules and regulations governing the project development process.

The scale and scope of the landscape plan and irrigation system meet the goals of the community and the Urban Renewal landscaping standards developed by the City of Tualatin. The City's landscaping plans and concepts have been approved as presented throughout the Environmental Impact development process, with final approval granted by the State and FHWA in October 1979.

Attached are copies of letters and agreements in support of this essential project. Your early approval of the PS&E documents will permit the orderly contracting of this project and is recommended.

Att.

bc E. S. Hunter
D. H. Moehring
J. H. Versteeg
R. N. Bothman

JHV:ja 1b

STATE OF OREGON
Department of Transportation
Metropolitan Branch

INTEROFFICE MEMO
Telephone: 238-8226
Date: September 9, 1981

File No. 234-1959

RECEIVED
STATE HWY ENG
SEP 1 '81
REF
FOR

Info	Inves	R/2	D/R		

OK

TO: H.S. COULTER
State Highway Engineer

FROM: R.N. BOTHMAN
Administrator Robert Bothman

SUBJECT: Oregon Project IX-9282(4)
SW 89th - Pacific Hwy. (Tualatin)
SW Nyberg Road
Washington County

The landscape plans are an integral part of the Nyberg Road project. The City of Tualatin has, from the very initial phases of project development, desired a boulevard concept with roadside landscaping. The project is part of an urban renewal program, and that program is providing the local match. Nyberg Road will become the key central business district in their urban renewal area. The objective of the city is to develop an attractive arterial that provides significant benefits to the visual character of Tualatin.

The project is a city street. I don't think that street trees will cause any visibility problems or any problem with signing or signals.

The city, through a separate agreement with Washington County, will maintain at their expense the sidewalks, street trees, landscape median, and other landscaped areas. The county will in turn perform the curb-to-curb maintenance of the roadway surface. The urban renewal funds are being used to provide not only the local match, but also the portion of the project in excess of the federal transfer funds available. In addition, the urban renewal program should provide adequate long-range funding for maintaining the street.

The city has a major commitment to funding the project and therefore I see no evidence that would indicate any lack of willingness by the city to provide the necessary maintenance to sustain their own investment.

The FHWA Area Engineer has been involved throughout the development of the project and to my knowledge this is the first indication that there is a problem with landscaping on local city projects. Nearly all our local boulevard projects in small cities such as Tualatin, Gresham, Beaverton and so forth have exactly the same approach to developing their boulevard treatment. The City of Portland is also following the same treatment.

continued...

I can understand the concern of the Federal Highway Administration relative to maintaining these landscaped areas since we have not maintained our landscaped areas in the Portland region. On the other hand, nearly all these projects have a substantial funding (at least 15 percent) from local improvement districts, urban renewal programs, and the like, which are sold to the public on the basis of the boulevard treatment. If there is a conflict, the Federal Highway Administration should quickly advise us so that we can inform the local jurisdictions of their concern and questions about providing landscaping on such projects as Nyberg Road.

We do have a signed agreement with the local jurisdiction which has a standard clause that commits them to maintaining the facility in a manner acceptable to the State and the Federal Highway Administration. I'm not sure how that agreement would be sustained, but in this case, where Washington County is actually responsible, we certainly could refrain from future payments to the county unless they perform the maintenance as required from the Federal Highway Administration and/or ourselves.

In conclusion, we should proceed with the project as designed.

RNB:JS

cc: E.S. Hunter

U.S. Department of Transportation
Federal Highway Administration

NOTED
H. S. COULTER

Memorandum

THE OREGON DIVISION - SALEM

Subject: Oregon Project IX-9282(4)
SW. 89th-Pacific Hwy. (Tualatin)
SW. Nyberg Road, Washington County

Date: September 3, 1981

From: Division Administrator

Reply to Attn. of: HFO.6-OR

To: Mr. H. S. Coulter, State Highway Engineer, ODOT

In reviewing P.S.&E. documents for this project we find that the landscape plans are quite elaborate. Because of the current economic trends, I am concerned that State or local agencies may not be able to provide the necessary maintenance effort to adequately sustain the investment in irrigation and planting installations. It also seems that many of the trees could interfere with the visibility of motorist guide signs and possibly signals.

✓ Please re-evaluate the landscape proposal and advise me of maintenance agreements and/or commitments. P.S.&E. documents will be processed concurrently with your re-evaluation.

G. K. Hassner
for Dale E. Wilken

cy ~~Hunter~~ Bothman) — comments?
HSC
9-8-81

RECEIVED
STATE HWY ENGR
SEP 4'81
REFERRED TO ~~Scott~~
FOR

Info	Inves	R/D	D/R	Sign	Act	File

Seems like if what they say is true - our guys should have taken care of it in the first place. It doesn't seem appropriate to deal with the feds on maintenance

worth a staff discussion

R

STATE OF OREGON
ROAD DESIGN SECTION 378-6558

INTEROFFICE MEMO

TO: Memo to the File

DATE: February 25, 1981

Michael S. Lucker

FROM: Michael Lucker
Designer, ODOT Landscape Unit

SUBJECT: Landscape Development
S.W. 89th Avenue-Pacific Highway (Tualatin)

On February 20, 1981, Merlyn Anderson, ODOT Landscape Architect, James McClure, ODOT Project Coordinator and I met with Michael McKillip, Tualatin Public Works Director and Stephen Curl, Parks Maintenance Foreman. The purpose was to discuss engineering changes and City requests for the landscape portion of the project.

Mr. Curl stated that the plant materials and design were appropriate but requested a sixty foot spacing and 1 1/2"-1 3/4" caliper for the trees to correlate to city standards. We agreed to these changes.

The City also requested the installation of a spray head irrigation system for better plant appearance and reduced maintenance. We agreed to do a cost estimate and also pointed out potential advantages of drip irrigation. Mr. Curl said he would investigate them. We pointed out that irrigation would nearly double the cost of landscaping and everyone agreed that a final decision would have to be made after cost estimates are available. Mr. McKillip stated that he would check water sources for this area.

Also discussed was a moderately steep grass slope near the I-5 ramp that currently presents a maintenance problem. The City requested planting of low shrubs to improve appearance and reduce mowing. We agreed that shrubs could be planted but state maintenance forces would have difficulty with the added responsibility. Mr. Curl then said the City may be able to handle maintenance on an as required and informal basis.

The City also stated that they would like 7 to 10 days notice after road construction and before planting this shrub area to apply a herbicide to reduce furure weed problems. We agreed to this concept and a copy of this letter should notify the Resident Location Engineer of the City's intention.

Another item discussed was the hydrologist's report of a potential floodway between station points 69+00 and 91+00. We noted that the ODOT design staff has reduced the median berm to an almost flat grade to allow lateral water movement and some minor median plant changes would be made.

Contains
Recycled
Materials

The City had previously requested a change from painted to curbed and planted median between station points 91+83 and 97+39. We have included this area in our current planting plan.

All parties agreed that because of the changes, a copy of the plans and final estimate should be forwarded to the City for approval well before contract letting.

ML:rlr

cc: James McClure
Earl Purdy
Michael McKillip
Frank Roberts
James Cochell

STATE OF OREGON
Department of Transportation
Metropolitan Branch

INTEROFFICE MEMO
Telephone: 238-8233
Date: March 5, 1981

File No: 234-1959

TO: Bill Cole
Design Engineer Supervisor

FROM: Jim McClure
Project Development Engineer

JMcClure

SUBJECT: Preliminary Plan Review
S.W. 89th-Pacific Highway (Tualatin) Section
Nyberg Road
Washington County

The purpose of this memo is to document the changes and action taken based on the February 10th preliminary plan review meeting, held at Metro with the City of Tualatin staff. In attendance at the meeting were: Wink Brooks and Mike McKillip representing the city; Frank Roberts, Myron Melick, Elmer Wooldridge, Pam Elmore and Jim McClure representing ODOT.

The first area discussed was my review of the access control lines for the project, consistent with action taken by the Washington County Commission. The commission designated the bypass a "throughway" from Engineer's Station 53+00 to 95+00. The Tualatin City Council approved the access control lines at their February 9th meeting, which were subsequently sent to Hank Wakerlig on February 18th for inclusion into the project right-of-way descriptions.

The revised right-of-way requirements along Boones Ferry Road, between the bypass and Tonka Street, was also approved by the City Council at their February 9th meeting. The initial ten feet of right-of-way required along Boones Ferry Road, based on the original design, will be acquired using project funds. The additional five feet of right-of-way needed for the design revision will be dedicated by the MacDonald's Restaurant Development.

Typical Section Sheets

- City staff requested that all sidewalks not be less than six feet in width, consistent with city standard.
- The raised median islands need to be lowered due to the conflict with the floodway from Boones Ferry Road to the Fred Meyer signalized intersection. This should apply to all raised median islands for design continuity.

____Verstoeg____
____Anderson____
____Christensen____
____Olson____
____Sullivan____
____Terpin____
____Trout____
____Wakerlig____

RECEIVED
MAR 06 1981
ROAD DESIGN
SECTION

Do Not File ☐
Return To____
Bring 'em ___/___
Action____

STATE OF OREGON
Department of Transportation
Metropolitan Branch

INTEROFFICE MEMO
Telephone: 238-8233
Date: March 5, 1981

File No: 234-1959

TO: Bill Cole
Design Engineer Supervisor

FROM: Jim McClure
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Verstoeg
[✓ Anderson]
Christensen
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MAR 06 1981
ROAD DESIGN SECTION

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West of Boones Ferry Road (Sheet 3)

- City staff suggested the drainage easement across Tube Forgings of America's property be shifted west to align with their future street access. This has been evaluated by Elmer Wooldridge with the determination that it is not feasible.
- Modified driveway access slightly in the vicinity of S.W. 89th Avenue and added guardrail for safety purposes. Frank Roberts to handle.
- Check ditch grades north side of bypass, Station 54 to west end of project. Elmer will field check the grades and advise Frank.

Boones Ferry Road Access (Sheet 4)

- Reflect revision of Boones Ferry Road in plans. A minor shift in the curb radius and sidewalk (northwest corner of intersection) was noted to insure proper lane alignment through the intersection of Boones Ferry Road.
- Extend curb and sidewalk south of Tonka Street to tie into the existing curb as shown on the revisions for Boones Ferry Road.
- The paved access into the Hervin property was discussed, but it was decided to leave it as shown on plans.

Martinazzi Street Area (Sheet 5)

- PGE has discussed with the city staff a need for additional utility conduits under the roadway. It was agreed that the location of conduits would be determined by the utility and installed during construction at their cost.
- Relocation of traffic signal pole required in the southwest corner of Nyberg Road and Martinazzi which should be reflected in the signal design plans.
- Change the four foot sidewalk on the east side of Martinazzi to a six-foot width.
- Eastbound left-turn access from Nyberg Road into the K-Mart Shopping Center, near the intersection of Martinazzi Avenue, is not resolved at this time. The only resolution reached is to prohibit southbound left turns from Martinazzi to Nyberg Road, which was concurred with by the City Council at their February 9th meeting.

East End of Project (Sheet 6)

- A field check is needed to see if the existing cross culvert, near the Fred Meyer intersection could be used in lieu of the new 18-inch pipe shown on the plans. Elmer will check in the field and send information to Frank.

- City staff requested that the slope on the north side of Nyberg Road (Sta. 95 to 97) be landscaped. The grass slope in this area is poorly maintained today and since it serves as the entrance to the city, they would like to improve its appearance.
- The painted island shown on the plans, approximately Sta. 92 to 97+40 is to be a raised island with landscaping. The raised island will eliminate the potential left turn safety problems and was approved by the City Council at their February 9th meeting.

Landscaping Plan (Sheet 7)

- The city staff desires to have an irrigation system included in the project, which at this time may be questionable due to the funding limitations on the project.
- Since the city landscaper was not at this meeting, it was concluded that a second meeting with our landscape architectural staff would be appropriate. This meeting was held on February 20th, resolving most of the concerns raised by the city - See Michael Lucker's memo dated February 25 regarding the meeting.

Pipe Data Sheets

- Change electrical conduits to four-inch diameter with 30 inches of cover.
- Change cover for irrigation from 18 inches to 30 inches.

An updated set of preliminary plans reflecting the changes discussed, will be developed by final design. The revised set of plans will then be submitted to the city for their signature approval.

JDM:PE

xc: J. H. Versteeg
D. R. Adams
E. L. Hardt
W. W. Geibel
M. M. Anderson
E. C. Purdy
J. R. Rose
Meeting Attendees

CITY OF TUALATIN
18880 SW MARTINAZZI AVE. PO BOX 369
TUALATIN, OREGON 97062
(503) 638-6891

May 4, 1981

Mr. Ted Inloes
DEPARTMENT OF TRANSPORTATION
State Highway Division
9002 S.E. McLoughlin Blvd.
Milwaukie, Oregon 97222

OE RE RME RCE BE
TE RECEIVED RSM
UE MAY - 6 1981 RSC
SQ REGION I RBI
TO

REFERENCE: By-Pass Maintenance

Dear Mr. Inloes:

The City of Tualatin will maintain the landscaped areas in the By-Pass. Included in this maintenance will be the furnishing and installing of any water meters necessary to irrigate the area as well as payment for the water used in irrigating the landscaped area.

I have enclosed a copy of the Agreement between the City and the County covering this item.

If you have any questions regarding this matter, please contact us at 638-6521.

Sincerely,

Michael A. McKillip

Michael A. McKillip
Public Works Director

MAM/jn

Enclosure

____Versteeg____
____Anderson____
____Christensen____
____Olson____
____Sullivan____
____Terpin____
____Trout____
____Wakerlig____

RECEIVED
MAY 11 1981
ROAD DESIGN
SECTION

Do Not File ☐
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Bring to ____/____
Action____

U

RESOLUTION NO. 731-80

A RESOLUTION AUTHORIZING EXECUTION OF AN AGREEMENT BETWEEN THE CITY OF TUALATIN, OREGON AND WASHINGTON COUNTY, OREGON PROVIDING FOR THE MAINTENANCE OF ROADWAY IMPROVEMENTS TO BE CONSTRUCTED BETWEEN THE INTERSTATE 5 FREEWAY AND S.W. 89TH AVENUE AND PROVIDING FOR THE TRANSFER OF JURISDICTION OF S.W. NYBERG STREET.

BE IT RESOLVED by the City Council of the City of Tualatin, Oregon, a municipal corporation, that:

Section 1. The Mayor and City Recorder be and they hereby are authorized to execute that certain agreement between the City of Tualatin and Washington County, Oregon, a political subdivision of the State of Oregon, which provides for future maintenance responsibility for a new roadway to be constructed between the Interstate 5 Freeway and S.W. 89th Avenue, and provides for the transfer of jurisdiction of a portion of S.W. Nyberg Street. Said agreement is attached hereto and marked Exhibit "A", and by this reference incorporated herein.

INTRODUCED AND ADOPTED this 12th day of May, 1980.

CITY OF TUALATIN, OREGON

BY ______________________
Mayor

ATTEST:

BY Yvonne L Addington
RECORDER

AGREEMENT

This Agreement, made this 15th day of April, 1980, by and between Washington County, a political subdivision of the State of Oregon, hereinafter called "County" and the City of Tualatin, hereinafter called "City".

WITNESSETH:

RECITALS

1. WHEREAS the City and County are currently processing an agreement to construct a subject bypass road as substantially described in the copy of the agreement in Exhibit "A", attached hereto and by this reference incorporated herein; and

2. WHEREAS, ORS 373.260 authorizes the City and County to agree as to repairs (including maintenance) of a street or County road within the subject City's incorporated area to their mutual satisfaction; and

3. WHEREAS, the intent of the City and County is that the subject bypass road will be a County road with the County being responsible for maintenance of the roadway between the curbs, the curbs, traffic signalization and drainage facilities along the road and that the City will be responsible for maintaining the balance of said bypass road including all vegetation thereon; and

4. WHEREAS, the intent of the City and County is that the previous route of Nyberg Road as described in Exhibit "B", attached hereto and by this reference incorporated herein, be a City street by the process of the County surrendering jurisdiction of the road;

NOW, THEREFORE, in consideration of the mutual promises and covenants herein contained; it is mutually agreed as follows:

THINGS TO BE DONE BY COUNTY:

1. The County will accept the new bypass route as a County road as per the agreement described in Exhibit "A", attached hereto, but only be responsible for maintaining the roadway between the curbs, the curbs, traffic signalization and drainage facilities along the subject bypass route.

2. The County will process the surrendering or jurisdiction to the City of the old Nyberg Road route, as described in Exhibit "B", attached hereto, promptly after receipt of the City's request.

THINGS TO BE DONE BY CITY:

1. The City will maintain all areas including the vegetation, trees, shrubs, grass and herbage of the subject bypass route described in Exhibits "A" and "B" attached hereto except for the roadway between the curbs, the curbs, traffic signalization and drainage facilities along said route.

2. The City will request the County to surrender the jurisdiction of the old Nyberg Road as described in Exhibit "B", attached hereto within 30 days of the completion of the bypass project described in Exhibit "A" attached hereto.

DATED at Tualatin, Oregon, this 12th day of May, 1980.

CITY OF TUALATIN

Mayor

Yvonne L Addington
City Recorder

DATED at Hillsboro, Oregon, this 15 day of April, 1980.

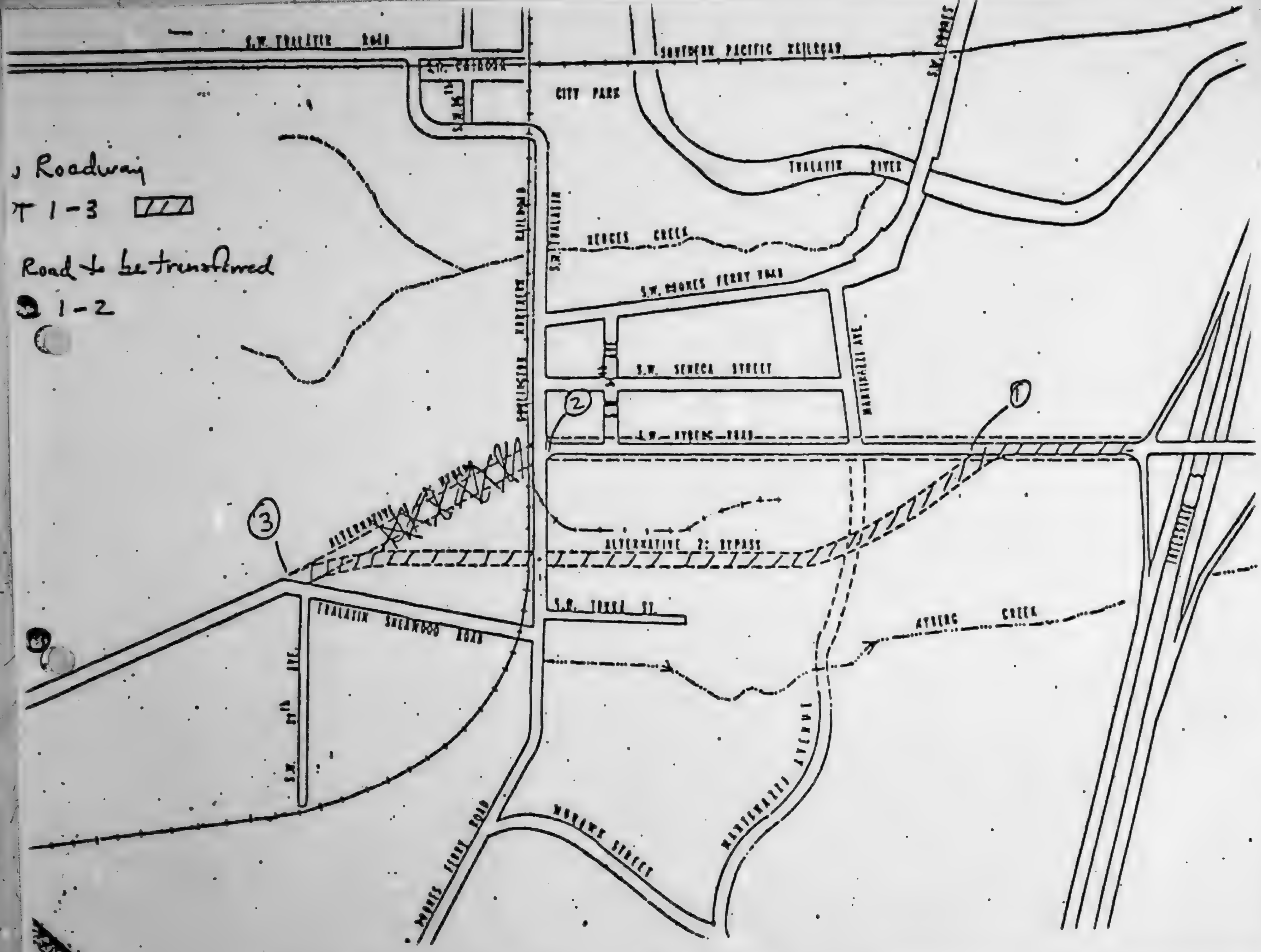
WASHINGTON COUNTY
By Board of County Commissioners
For Washington County, Oregon

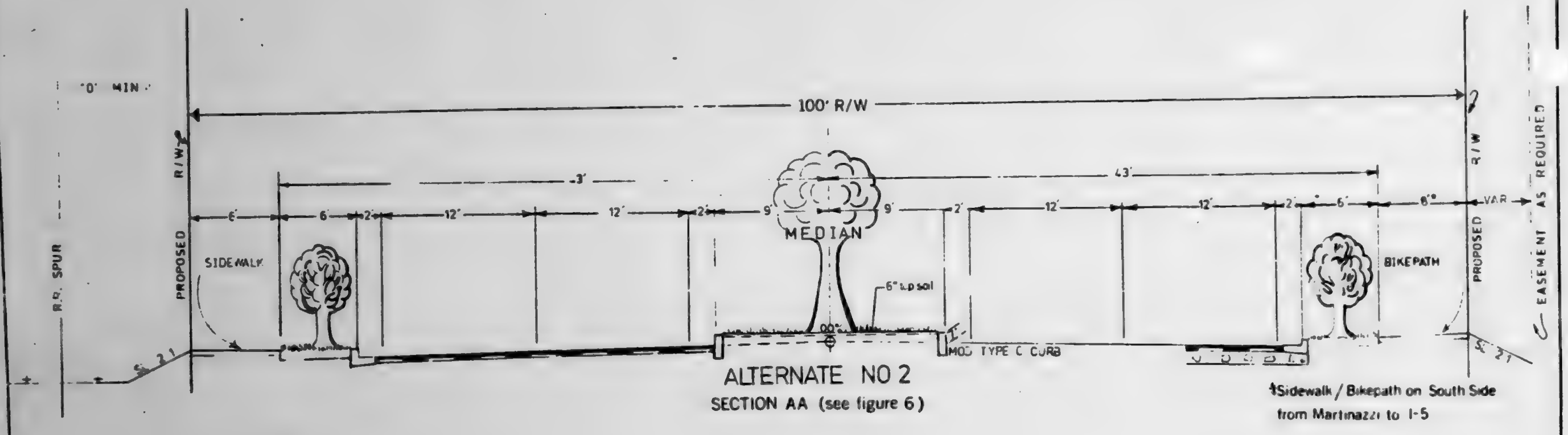
Miller M. Duris
Chairman

Jo Ann Johansen
Recording Secretary

APPROVED AS TO FORM
Alan I. Bachman
Assistant County Counsel
For Washington County, Oregon

APPROVED WASHINGTON COUNTY
BOARD OF COMMISSIONERS
MINUTE ORDER # 80-226
DATE 4-15-80
BY Jo Ann Johansen
CLERK OF THE BOARD


Roadway
T 1-3 ▨
Road to be transferred
1-2
S.W. TUALATIN ROAD
SOUTHERN PACIFIC RAILROAD
S.W. BOONES
CITY PARK
TUALATIN RIVER
HEDGES CREEK
S.W. BOONES FERRY ROAD
S.W. SENECA STREET
MARTINAZZI AVE
S.W. NYBERG ROAD
BURLINGTON NORTHERN RAILROAD
S.W. TUALATIN
ALTERNATIVE 2: BYPASS
S.W. TUALATIN SHERWOOD ROAD
S.W. 89th AVE
NYBERG CREEK
MARTINAZZI AVENUE
MOHAWK STREET
BOONES FERRY ROAD
INTERSTATE
①
②
③


R.R. SPUR
'0' MIN.
PROPOSED
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43'
43'
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2'
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9'
9'
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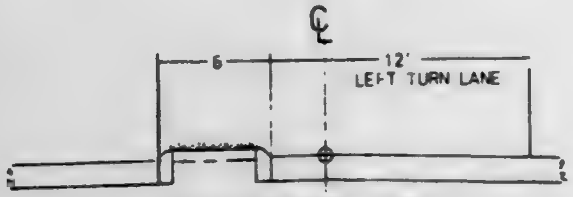
12'
12'
2'
6'
8'
VAR
SIDEWALK
MEDIAN
6" top soil
MOD TYPE C CURB
BIKEPATH
PROPOSED
R/W
2:1
2:1
EASEMENT AS REQUIRED

ALTERNATE NO 2
SECTION AA (see figure 6)

*Sidewalk / Bikepath on South Side from Martinazzi to I-5


℄
6
12'
LEFT TURN LANE

ALTERNATE NO.2
MEDIAN TREATMENT AT INTERSECTION

SOURCE: Oregon Department of Transportation, 1978.

no scale	FIGURE 5. ALTERNATIVE 2: TYPICAL CROSS SECTION (SELECTED ALTERNATIVE)

LANDSCAPE UNIT

SHEET .... OF .... SHI

S.W. 89TH AVE. - PACIFIC HWY. (TUALATIN) SEC.
FAU 9282 (S.W. NYBERG RD.)
WASHINGTON COUNTY

4-30-81
mwc

ESTIMATE OF COST

ITEM	UNIT	TOTAL	PRICE	AMOUNT	
ROADSIDE SEEDING & MULCHING	ACRES	3.0	800^{00}	2,400	00
FURNISHING & PLANTING TREES	EA.	85	50^{00}	4,250	00
FURNISHING & PLANTING SHRUBS	EA.	1,363	6^{00}	8,178	00
FURNISHING & PLANTING VINES	EA.	10,577	.65	6,875	00
BARK MULCH	UNITS	68	100^{00}	6,800	00
SOIL CONDITIONER	CU. YDS.	499	10^{00}	4,990	00
IRRIGATION	L.S.	—	L.S.	45,000	00
				78,493	00

9375

September 10, 1981

Board of County Commissioners
Washington County
Courthouse
Hillsboro, OR 97123   Attn: Roger Thomssen
                              Director of Records & Elections

AGR

City of Tualatin
City Hall
Tualatin, OR 97062   Attn: Yvonne Addington
                              City Recorder

MISC. CONTRACTS and
AGREEMENTS No. 15016

Gentlemen:

Attached for your records is a fully executed copy of an agreement for the traffic signal portion of the Tualatin Bypass.

We have retained a fully executed copy of this agreement for the Transportation Commission's files.

Sincerely,

Robert W. Gormsen
COMMISSION SERVICES

fkm

Att.

bc   Don Harwell (agree. att.)

9375

September 8, 1981

ACC

Michael McKillip
Director of Public Works
18880 S.W. Martinazzi
P.O. Box 369
Tualatin, Oregon 97062

Dear Mr. McKillip:

We have advertised the S.W. 89th Avenue-Pacific Highway (Tualatin) Section of S.W. Nyberg Road for bid letting on September 24, 1981.

To expedite award of the contract, we propose to accept 65% of the City's Advance Deposit, based on our engineer's estimate of project costs, prior to bid opening.

Based on our Agreement No. 7195, we anticipate the City's 65% Advance Deposit to be:

Estimated City Share of Bid Items	$1,508,706	
Plus Anticipated Items	191,250	
SUBTOTAL	$1,699,956	
4 1/2% Contingencies	76,498	
8% Engineering	135,996	
ESTIMATED COST	$1,912,350	
Less Federal Funds	1,625,582	
Less State Share	123,240	$1,748,822
ESTIMATED CITY SHARE	$ 163,528	
65% ADVANCE DEPOSIT	$ 106,290	

Immediately following award of the contract, we will request the remainder of the City's share.

If this proposal is acceptable, please submit your advance deposit prior to September 24, 1981, according to the instructions for the option of your choice listed on the attached.

Very truly yours,

For D. E. Swan
Operation Programming Engineer

GE2
~~KEM~~:pf
Attachment

bcc w/AD # 942: Jon Rose, Region M Federal Aid Engineer
Vern Skoog - Please return completed AD # 942 when advance deposit is received.

9375

2.

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

9-2-81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. IX-9282(4)

2. STATE PROJECT NO. See below

2A. COUNTY NAME Washington

3. FROM
Dale E. Wilken, Division Administrator
FHWA - Oregon Division

4. PROGRAM NO.

5. ITEM NO. 80112

6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE 9/2/81	8. FEDERAL ROUTE NUMBER FAU 9282	9. STATE ROUTE NUMBER County Road

10. GENERAL LOCATION:
SW 89th Avenue - Pacific Highway (Tualatin) Section

11. GENERAL DESCRIPTION OF WORK
Install flashing lights, automatic gates and a rubberized crossing at crossing #3E-036.2Q

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

- ☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
- ☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
- ☐ ACQUISITION OF RIGHT-OF-WAY
- ☐ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
- ☒ CONSTRUCTION PROCEED ON ~~[illegible]~~ FORCE ACCOUNT BASIS
- ☐ OTHER *(Specify)*

13. REMARKS

As requested in Mr. Swan's August 17, 1981 letter you are authorized to proceed with the work covered by the agreement with Oregon Electric Railway, approved by the Highway Division on 6/1/81 at a total estimated cost of $145,800 Federal Funds $123,930.

(The above costs are included in PS&E estimate for subject project and do not require additional obligation of funds)

orig to
9-4-81

RECEIVED
STATE HWY ENGR
SEP 4'81
REFER TO
Moehring
FOR
Info | Ans | ... | ... | Sign | Act | File

14. DATE 9/2/81	15. SIGNATURE OF APPROVING OFFICIAL G.K. Hossner	16. TITLE for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

9375

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

9-2-81

LETTER OF APPROVAL AND/OR AUTHORIZATION

1. FEDERAL-AID PROJECT NO. IX-9282(4)

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6. TO
Mr. H. S. Coulter
State Highway Engineer
State of Oregon
Salem, Oregon

7. DATE AUTHORIZATION EFFECTIVE	8. FEDERAL ROUTE NUMBER	9. STATE ROUTE NUMBER
9/2/81	FAU 9282	County Road

10. GENERAL LOCATION:
SW 89th Avenue - Pacific Highway (Tualatin) Section

11. GENERAL DESCRIPTION OF WORK
Grade, pave, signing, signals and landscaping

12. YOU ARE AUTHORIZED TO PROCEED WITH THE WORK CHECKED BELOW

☐ PRELIMINARY ENGINEERING TO DETERMINE LOCATION ONLY
☐ PRELIMINARY ENGINEERING FOR CONTRACT PLAN PREPARATION
☐ ACQUISITION OF RIGHT-OF-WAY
☒ CONSTRUCTION – ADVERTISE FOR RECEIPT OF BIDS
☐ CONSTRUCTION PROCEED ON AN AGREED PRICE AND/OR FORCE ACCOUNT BASIS
☒ OTHER *(Specify)*
R. R. Protective Services $12,000
Permanent Pavement Striping S.F $4,600
on the job training $800
Asphalt Cement Adjustment $15,000

13. REMARKS

RECEIVED
STATE HWY ENGR
SEP 3'81
REFER TO
Moehring
FOR
Sgn Act File

After concurrence in award you are authorized to proceed with those items listed above as shown in your Estimate.

Mr. Swan's August 31, 1981 request and certifying statements are accepted.

PS&E documents for the subject project have been reviewed and are approved at a total estimated cost of $1,890,788 Federal Funds $1,607,169.

A signed copy of the Title Sheet is returned herewith.

(Increase of TEC $281,888 Federal Funds $239,604 from FY 81 supplemental allocation)

orig w/att
9-3-81

14. DATE	15. SIGNATURE OF APPROVING OFFICIAL	16. TITLE
9/2/81	G. K. Hessner	for Division Administrator

FORM PR-1240 (Rev. 12-79) PREVIOUS EDITIONS MAY BE USED

STATE OF OREGON
MICROFILMED PUBLIC RECORD

(IN ACCORDANCE WITH THE PROVISIONS OF ORS 192.040 THROUGH 192.070)

NAME OF AGENCY
OREGON DEPARTMENT OF TRANSPORTATION

TITLE OF RECORD SERIES
CONSTRUCTION CONTRACTS

ARRANGEMENT OF RECORDS
CONTRACT NUMBER

INDEX
NONE

INDEXING BEGINS WITH : 9361 (Cont'd from Reel 226) (1980) ENDS WITH 9375 (1980) (To be cont'd on Reel 228)

FLASH CARDS:

REMARKS:

CAMERA: MAKE AND MODEL	FILM TYPE	REDUCTION RATIO	REEL NUMBER	PROJECT NUMBER
BELL AND HOWELL FILEMASTER	16MM AHU	21X	227	

CAMERA OPERATOR'S CERTIFICATION

I CERTIFY THAT I HAVE ON THIS 6th DAY OF December 1991 PHOTOGRAPHED THE DOCUMENTS APPEARING ON THIS ROLL OF FILM, THAT THEY ARE TRUE COPIES OF DOCUMENTS FOUND IN THE RECORD FILE DESCRIBED ABOVE, AND THAT THE INTEGRITY OF THE ABOVE DESCRIBED RECORD FILE HAS BEEN MAINTAINED ON THE FILM BY MICROFILMING EACH DOCUMENT IN THE EXACT ORDER IN WHICH IT WAS FOUND IN THE FILE WITH THE EXCEPTION, IF ANY OF DOCUMENTS OMITTED BECAUSE OF TECHNICAL DIFFICULTIES AND / OR BY ERROR, AS INDICATED ON THE FILM IN THE CROSS REFERENCE NOTES OR RETAKE CERTIFICATE.

I FURTHER CERTIFY THAT THE MICROFILM ON WHICH THESE DOCUMENTS ARE RECORDED WAS PROCURED AS PERMANENT FILM OF THE SLOW BURNING CELLULOSE ESTER OR POLYESTER TYPE KNOWN AS SAFETY PHOTOGRAPHIC FILM. THAT THIS FILM CONFORMS TO THE APPLICABLE STANDARDS OF THE AMERICAN NATIONAL STANDARDS INSTITUTE; AND THAT THE PROCESSING CONFORMS TO THE STANDARDS FOR PERMANENT FILM; AND THAT SAMPLES OF FILM PROCESSED BY THIS SERVICE ARE PERIODICALLY TESTED TO ASSURE CONFORMANCE WITH THESE STANDARDS.

Joan A. Cokeley
SIGNATURE OF CAMERA OPERATOR

731-0299 (4-90)